The aggressiveness of cancer care near the end of life: Is it a quality of care issue?

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Identifying potential indicators of the quality of end of life cancer care from administrative data - J Clin Oncol 2003;21(6):1133-8

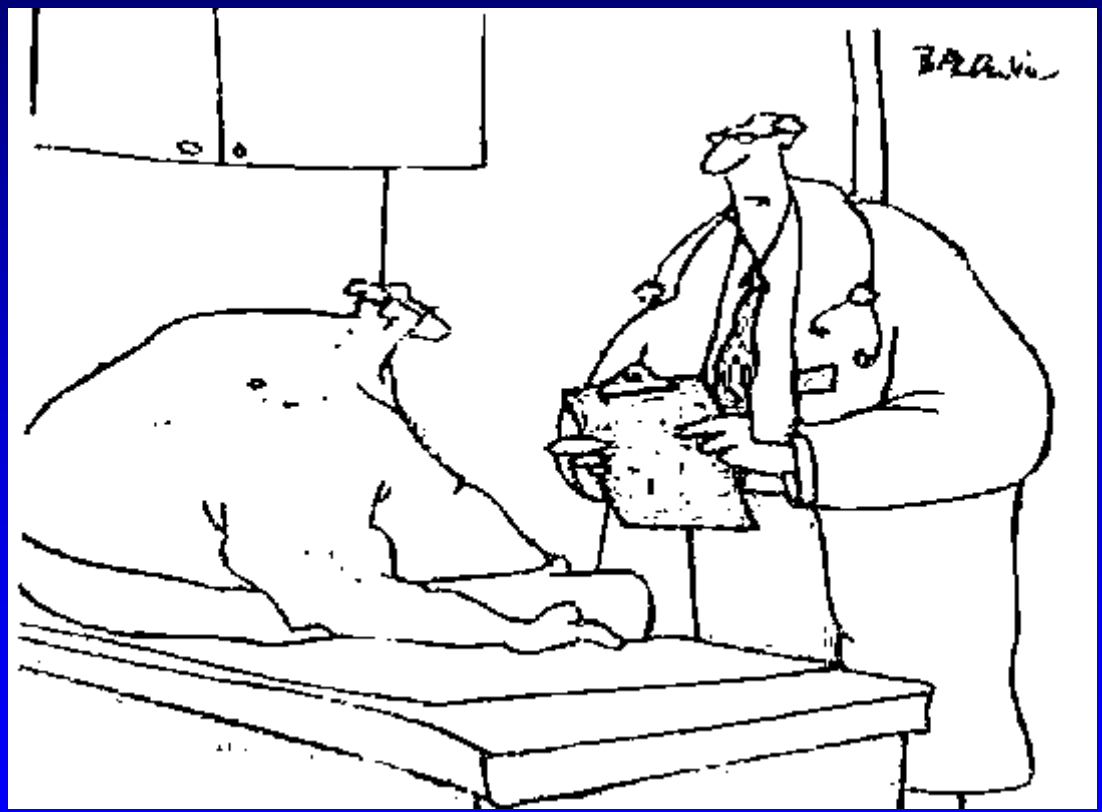
Objective:

- To identify feasible indicators that could use existing administrative data to evaluate the quality of end-of-life cancer care for patients with incurable malignancies.

Qualitative Methods

- Literature Review
- Focus groups
  - Patients
  - Families
- Expert Panel of health care providers
  - Modified Delphi approach to approve and rank indicators

“You’ve got six months, but with aggressive treatment we can help make that seem much longer.”



Major Themes

- *Overuse* of chemotherapy near death
- *Underuse* of hospice services
- *"Misuse"* of interventions, causing high rates of complications that result in Emergency Room visits, hospitalization, or intensive care admissions

Institution of new anti-cancer therapies or continuation of ongoing treatments very near death may indicate overuse

"We can treat with many lines of chemotherapy in appropriate patients, but there's a time to stop." (medical oncologist)

A high number of emergency room visits, inpatient hospital admissions, and days spent in the ICU near the end of life may indicate poor quality care

- “I’ve come to terms with dying from my cancer. I don’t want to die from complications of the treatment.” (patient)
- “For most of our patients, a visit to the ICU is kind of a failure.” (medical oncologist)

A high proportion of patients never referred to hospice or only referred in the last few days of life, or death in an acute care setting, may indicate poor quality care

"I think the earlier the doctor mentions (hospice), the better it is for the patient because the patient could plan for things ahead, rather than to spend so much time doing the treatment."

(family member)

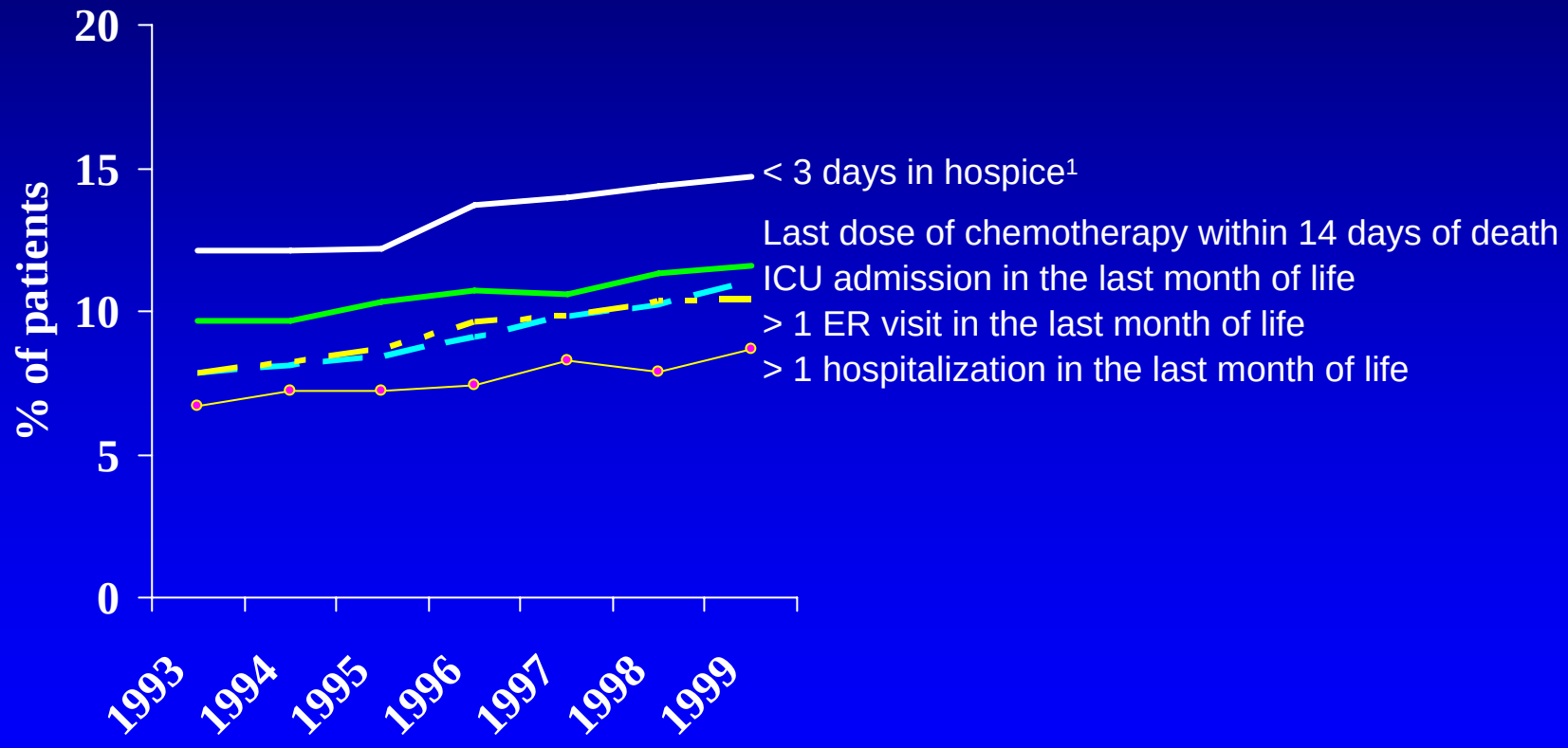
Methodologic Evaluation

- Int J Qual Health Care 2005;17(6):505-9

- Medicare claims (> 65 yo) linked to SEER tumor registry
- Indicators operationalized and performance evaluated
  - Accuracy
  - Variation
  - Reliability
  - Achievable benchmarks
  - Beginning of validity testing

In the course of these exercises, secular trends became apparent

Trends in the aggressiveness of cancer care near the end of life [J Clin Oncol 2004;22(2):315-21]

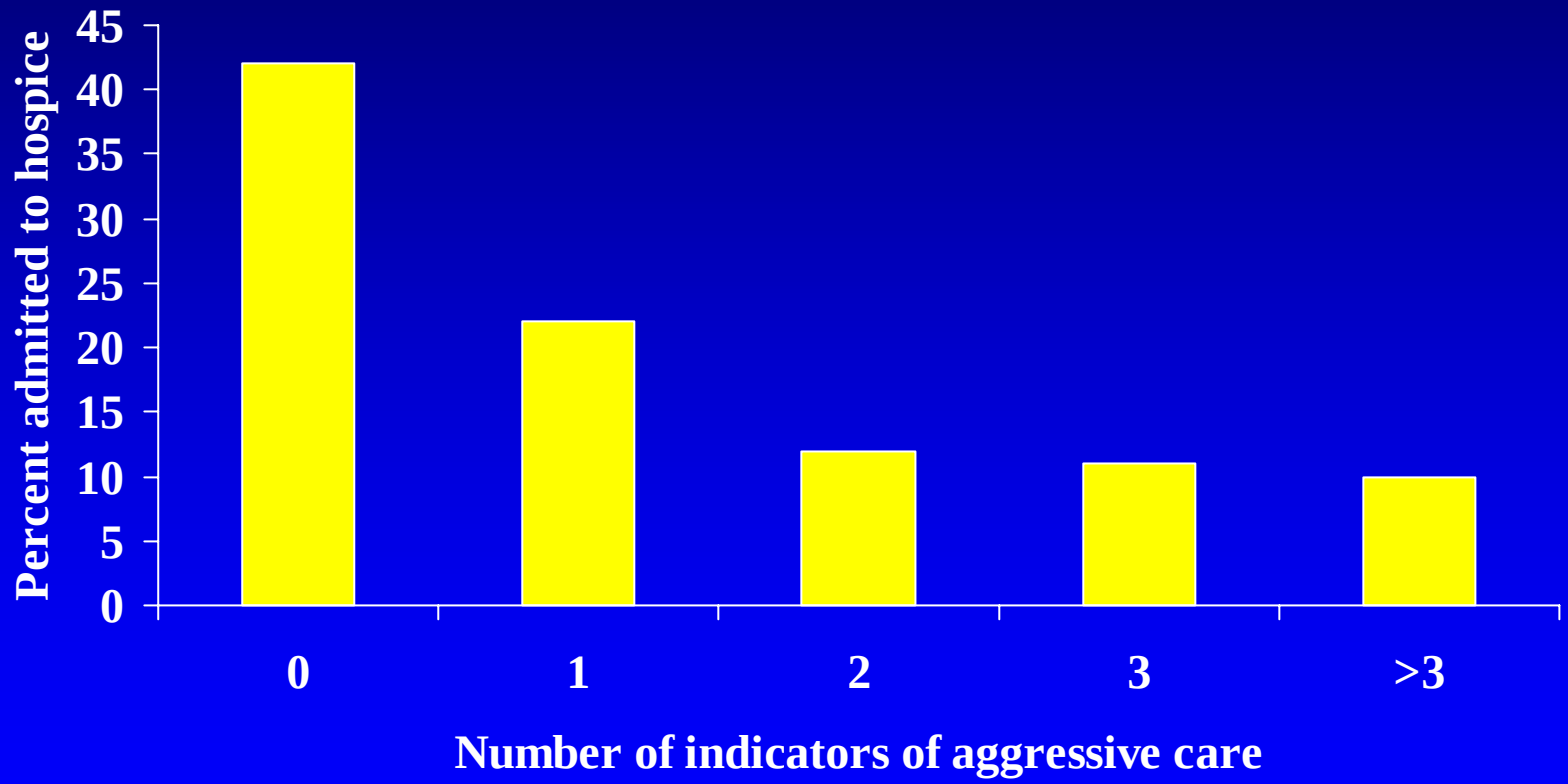


[1]Among patients admitted to hospice

Associations with aggressive care

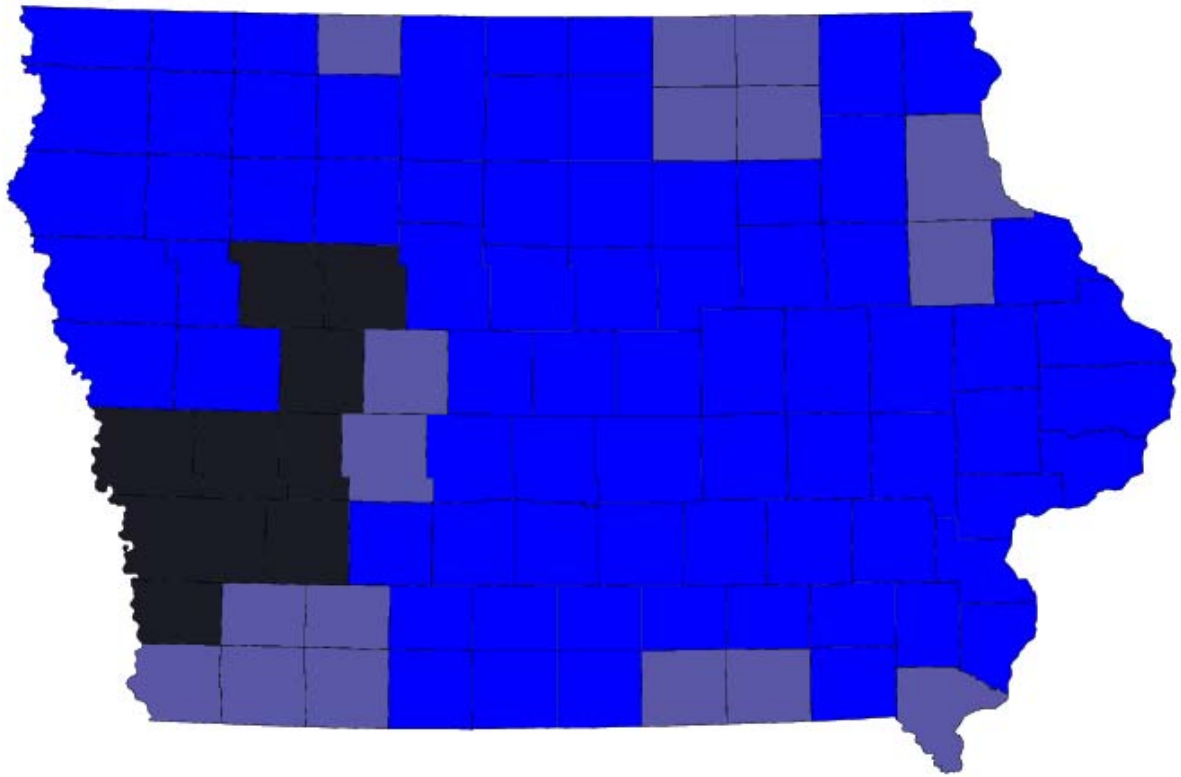
	OR	95% CI
Year of death	1.06	(1.02, 1.10)
Age	0.98	(0.97, 0.99)
Female	0.80	(0.73, 0.87)
Comorbidity	1.14	(1.06, 1.23)
Teaching hospital	1.24	(1.12, 1.38)
Black race		
Teaching hospitals	0.80	(NS)
Non-teaching hospitals	1.25	(1.01, 1.55)
Teaching hospital density	1.10	(1.04, 1.17)
Density of hospices	0.93	(0.88, 0.98)

Relationship between the aggressiveness of cancer care and hospice utilization



Iowa HSAs 1991 – 2000

Most Recent Chemo/2 Weeks of Death



Least Aggressive
Moderate
Most Aggressive

QOPI : Quality Oncology Practice Initiative

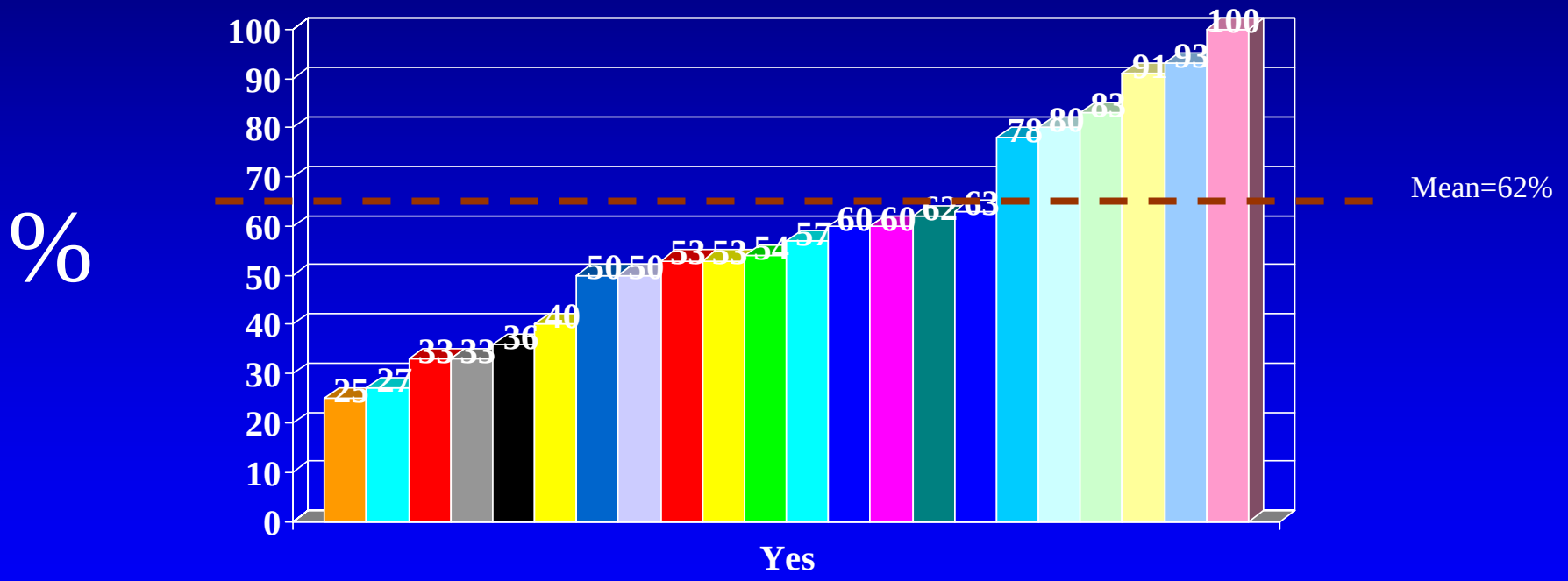
- 125 practices, > 2000 MDs, 10,000 patients
- Chemotherapy use within 14 days of death ranged from 0 to 53% in participating practices
- Strongly correlated to admission to hospice < 1 week before death (p=.03)

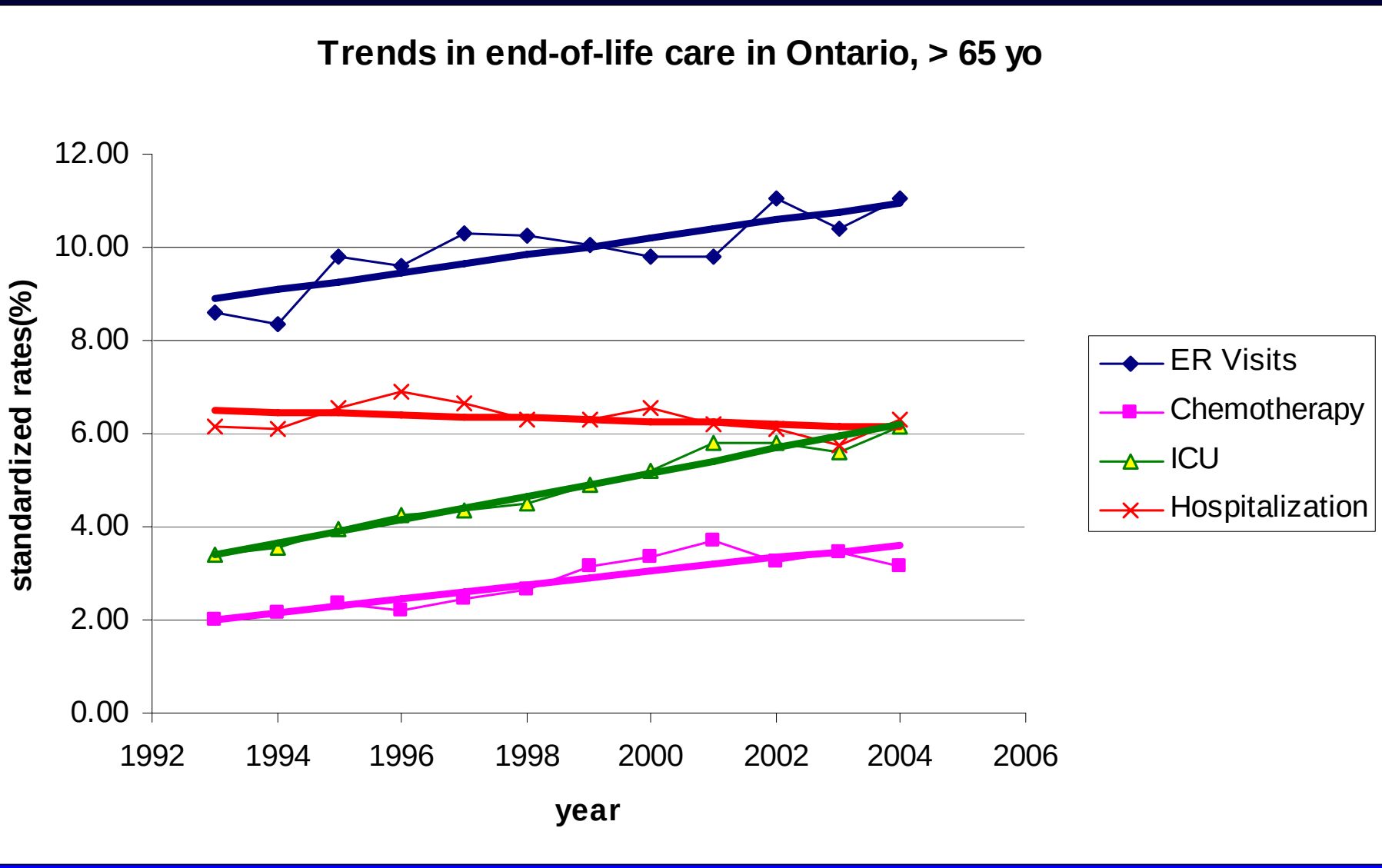
(Proc Am Soc Clin Oncol Abstr. 8573)

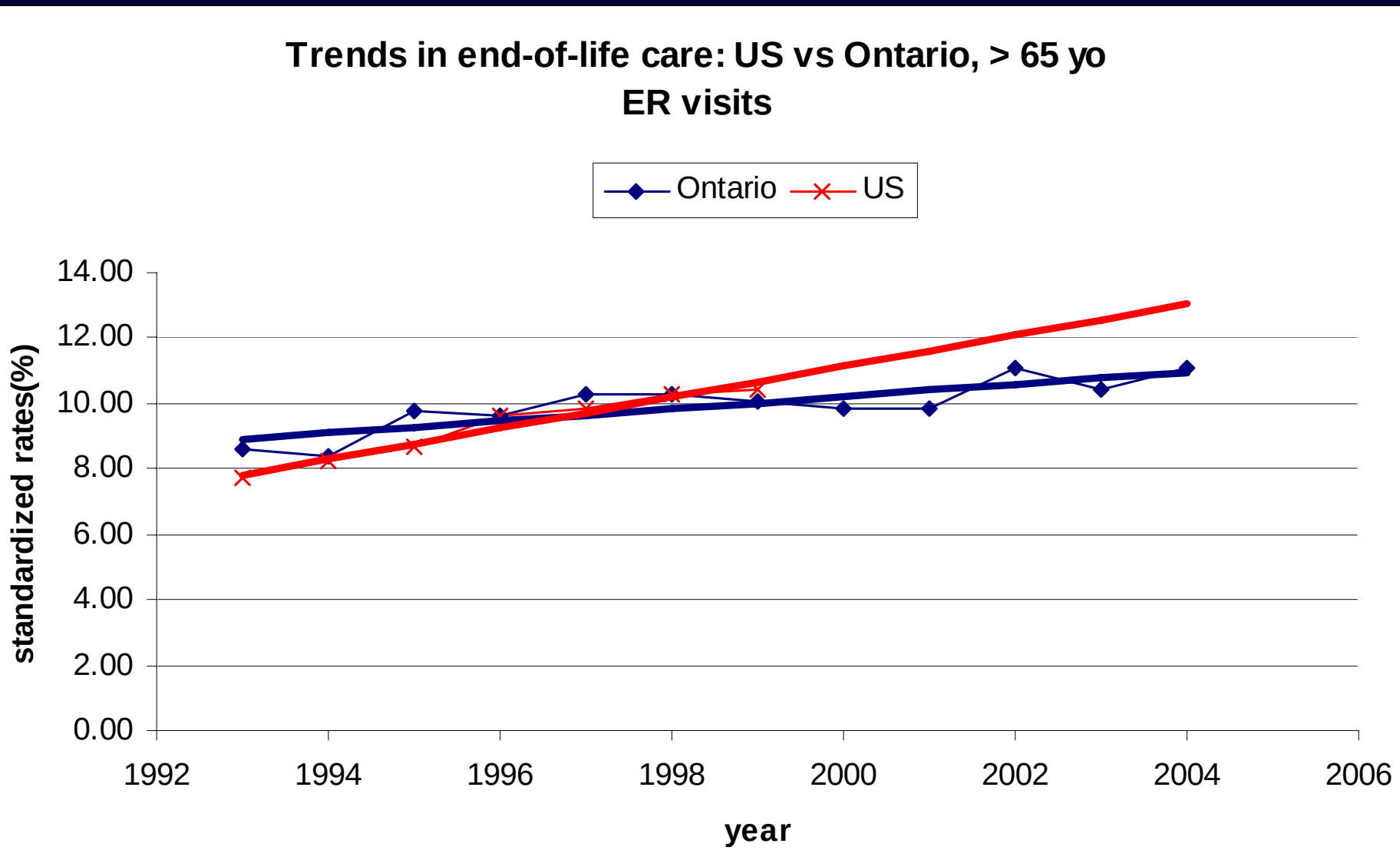
…why do they put nails in coffins?

Quality Oncology Practice Initiative (QOPI)

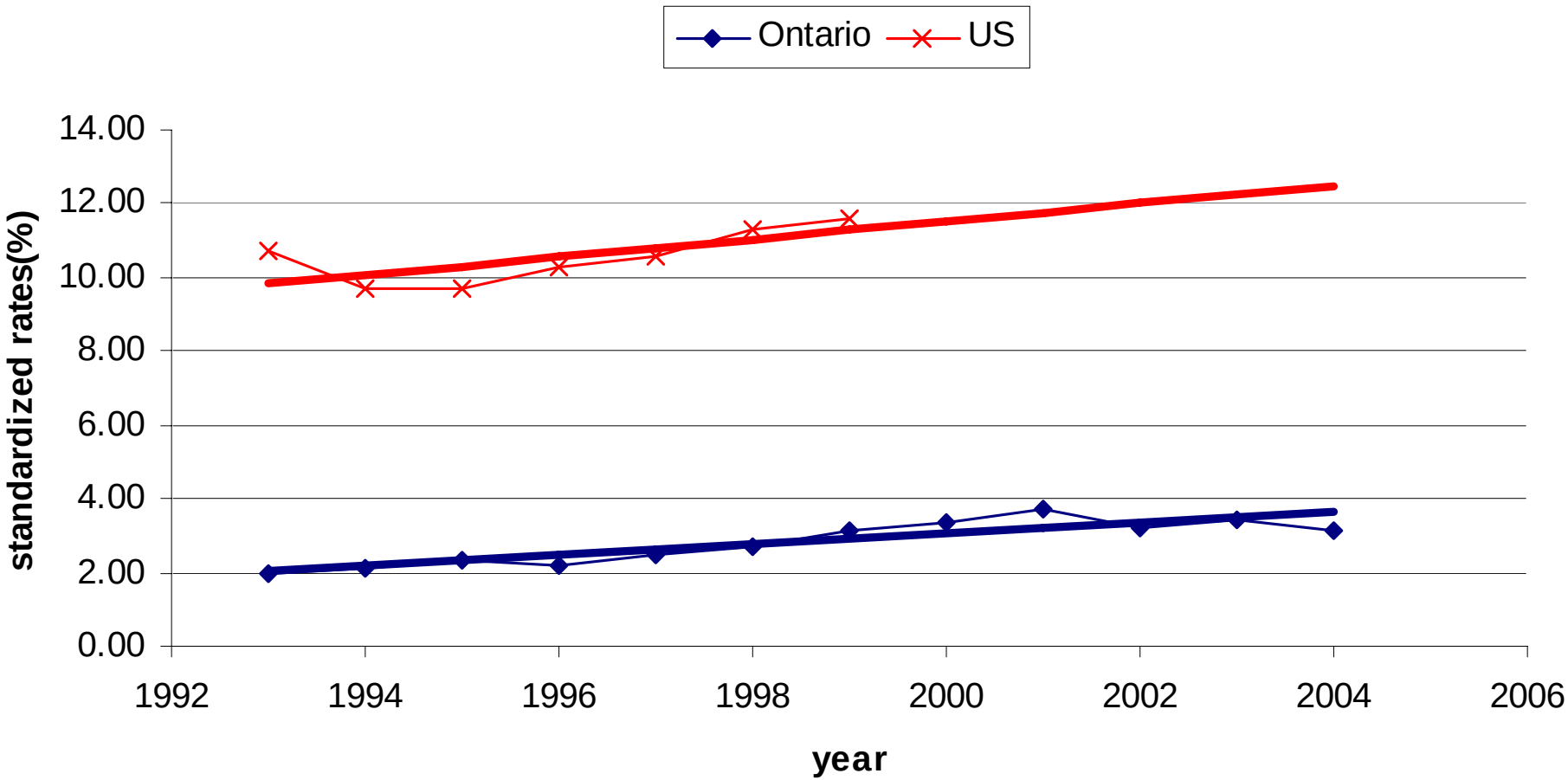
Patient enrolled in hospice before death



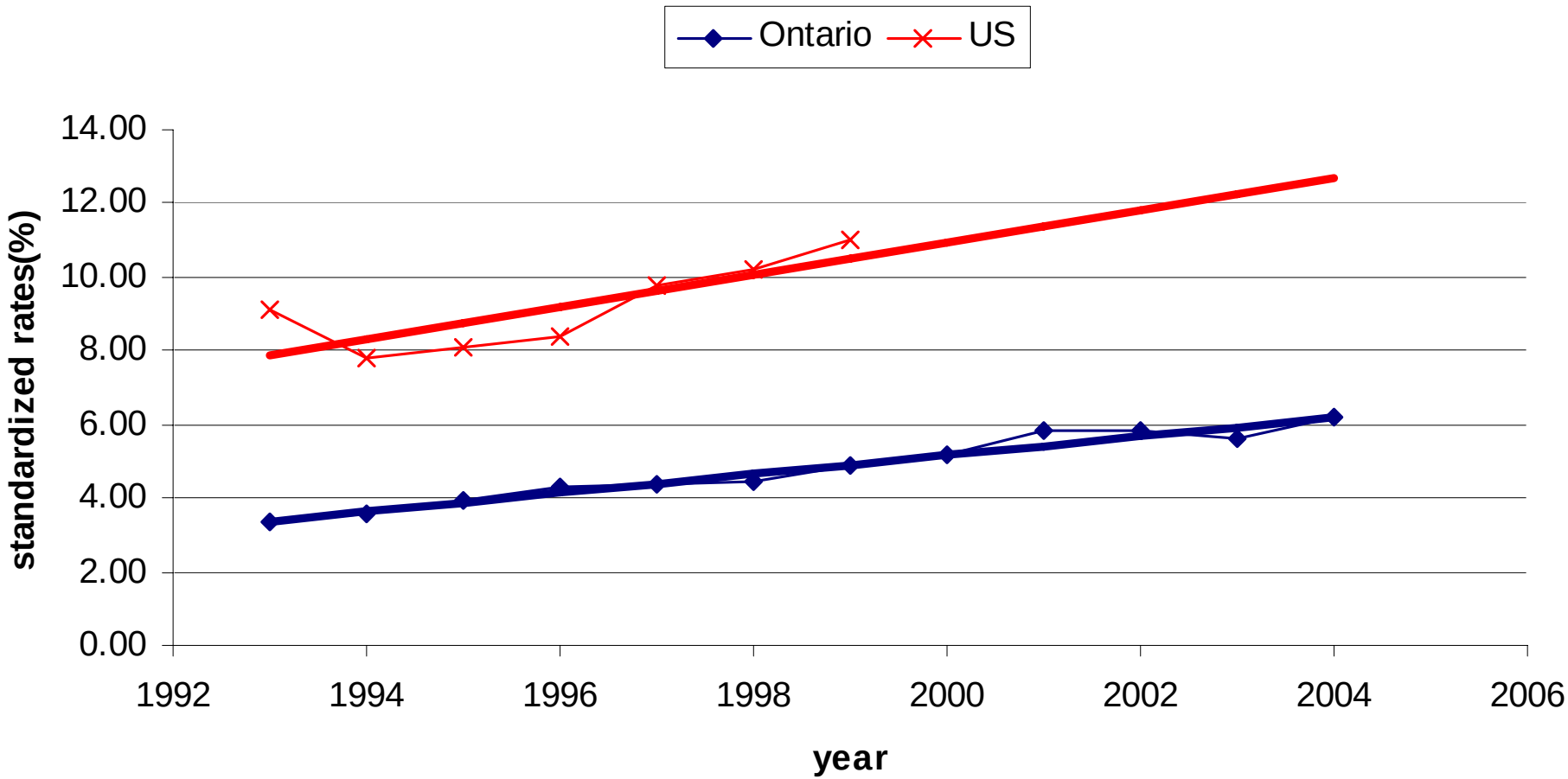

Trends in end-of-life care in Ontario, > 65 yo
standardized rates(%)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1992
1994
1996
1998
2000
2002
2004
2006
year
ER Visits
Chemotherapy
ICU
Hospitalization


Trends in end-of-life care: US vs Ontario, > 65 yo
ER visits
Ontario
US
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
standardized rates(%)
1992
1994
1996
1998
2000
2002
2004
2006
year

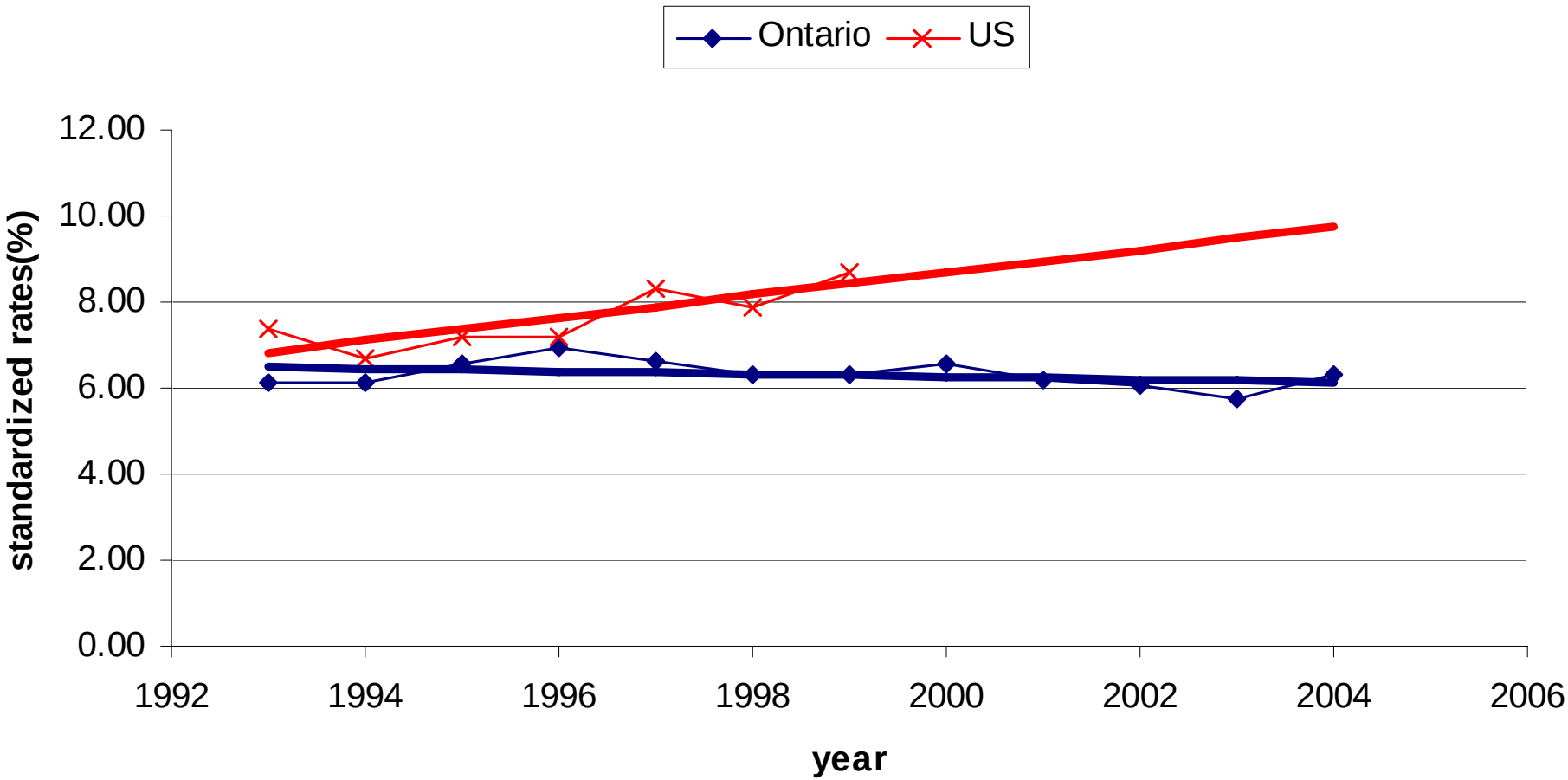
Trends in end-of-life care: US vs Ontario, > 65 yo
Chemotherapy in the last 2 weeks of life



Trends in end-of-life care: US vs Ontario, > 65 yo
ICU admission in the last month of life



Trends in end-of-life care: US vs Ontario, > 65 yo
>1 hospitalization in the last month of life



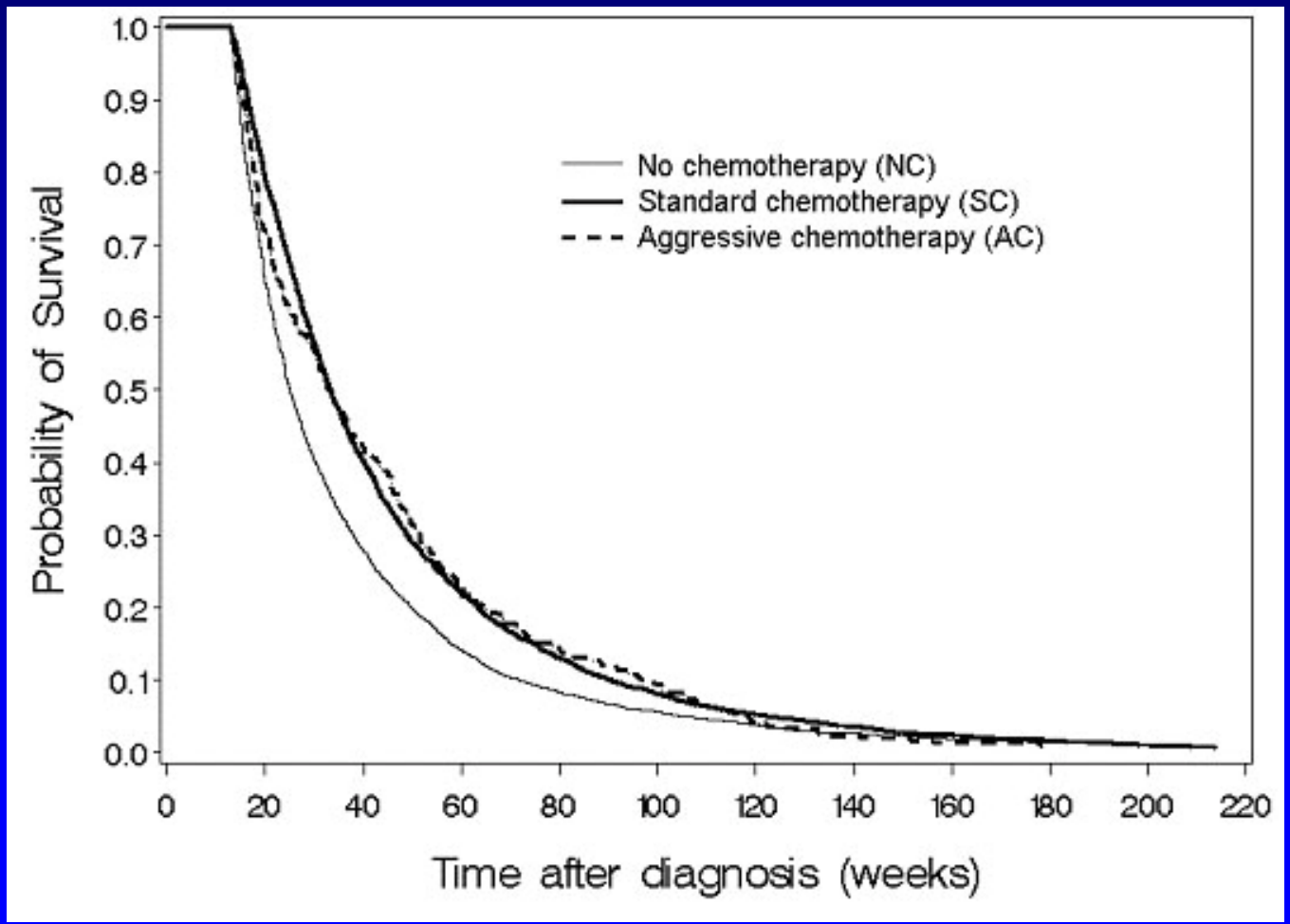
Validity testing: Do these issues affect family satisfaction with care?

Patient and Caregiver Study (E. Grunfeld, PI)

- Small (51 patient) validation study related these measures to family member's satisfaction with care (FAMCARE instrument) as death approached for 51 women that died of breast cancer
- Trends: worse satisfaction associated with:
  - Chemotherapy overuse
  - Death in hospital or ICU
  - No hospice admission or shorter LOS in hospice
- 'Information giving' and 'physical care' subscales drove the results

Does aggressive treatment improve survival?

(Stage IV NSCLC, IVA & PS)



Rationales for futile chemotherapy

Evidence shows aggressiveness of chemotherapy near death is unrelated to the likelihood of success of treatment, however:

- Patients often request it
- Seen as preserving ‘hope’, being a ‘fighter’ or ‘winner’
- ‘Doing something is better than doing nothing’
- It’s easier (for us)
- Occasional patients respond & have meaningful palliation
- Patients will accept much more toxicity for less benefit than health care providers would
- Financial incentives?

"You've come to the right place, Ms. Colburne. I specialize in futile treatment"

Is this a quality of care issue?

- The utility of any of these measures depends on whether the concept of overuse near death is acceptable to the various stakeholders as a valid quality issue
- How easy is it to identify the end-of-life period prospectively?
- Is it possible to both achieve patient satisfaction and avoid futile care?