Continuous Quality Improvement: Retroactive application of death clearance best practices

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Acknowledgments

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http://mcr.umh.edu

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Background

Prior to publication of NAACCR’s *Resolving Death Clearance Issues, 2003*, clear guidelines for what constitutes a death certificate only (DCO) case did not exist.
Result:

- Differing interpretations of DCO
- Negative impact on:
  - quality control within central registries; and
  - comparability across registries.
What should we do?

MCR staff decided to apply retroactively “best practice” procedures to 1996 death records entered as DCO cases without review of death certificates.
Why no review?

- 1996 DCO cases = 2,956
  - 11% of total cases

- Lack of:
  - Time;
  - Resources; or
  - Legal authority.
Challenges: 1996 = Reference Yr

- Accuracy of data reported – primary focus.
- Completeness – hospital & data exchange cases.
- Timeliness – need to educate hospitals.
Legal authority

- Hospital – inpatient only 1996-99 cases
- Non-hospital – regulations pub. 12/2000
  - LTCFs
  - Path labs
  - Ambulatory surgical centers
  - Cancer treatment centers
  - Physicians
Follow-back to hospitals

- 1996 – first year death clearance & follow-back conducted
  - Procedures had to be developed.
  - Time-consuming – multiple contacts w/ hospitals needed.
Our Objective

- Improve quality of the MCR database
Why would DCO review improve database?

- DC follow-back from hospitals - only 13% missed cases for year.
- Estimated 50% of DCs had interval for ca.
- Most signed by MD.
- Best practice – convert to MDO 1996 or earlier.
Methods

Selected five sites/types

- Brain
- Leukemias
- Lymphomas
- Lung
- Prostate
Why these sites?

- Strong possibility that prostate cancers and chronic leukemias & lymphomas dx < 1996.
- Brain tumor v. brain cancer – some deaths might be miscoded.
- Large number of lung cancers – interval more likely to be noted.
- Five sites = 36.1% (N=1,067) of all DCOs.
Methods

- MCR staff reviewed 1,067 certificates.
- We applied guidelines:
  - Site must be specified;
  - Interval must be noted; and
  - Certificate must be signed by MD/DO.
- Each certificate classified as:
  - MDO, DCO or Non-reportable.
Results

- Less than half (44.8%) were still DCO cases.
- Over 50% (51.9%) became MDO cases.
- Remainder (3.7%) were non-reportable.
Results (cont’d)

- Of the MDO cases:
  - Slightly less than 1/3 (32.4%) were 1996 cases;
  - Over 40% (43.8%) were 1995 cases; and
  - More than 20% (23.9%) were earlier than 1995.
Conclusions

- Data quality and case completeness have been improved by applying these guidelines:
  - Information (e.g., length of time condition present) that was lost as DCO is now in database.
  - Cases have been assigned to specific years, not just current year.
Conclusions (cont’d)

- These procedures should be used on the remaining 1996 cases.
- Same procedures should be applied to 1997 cases (action taken, not reported here).
Recommendations

- Procedures contained in NAACCR’s *Resolving Death Clearance Issues 2003* are a vast improvement but some ambiguities (e.g., how should “years” be interpreted?) remain.

- Additional work is needed.
  - When abstract submitted, it seemed that only a few ‘tweaks’ were needed.
Vision – happy trails

We were ready to ride off into the sunset.
Surprise!!!!
There was a joker in the pack!

- Not everyone agrees that MDOs are a good thing.
Central Registries
## Certification

<table>
<thead>
<tr>
<th>Registry Elements</th>
<th>Gold Std</th>
<th>Silver Std</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completeness of Case</td>
<td>≥ 95%</td>
<td>≥ 90%</td>
<td>SEER Incidence to U.S. Mortality Ratio (CINA)</td>
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<tr>
<td>Ascertainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completeness of Information:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing “age at diagnosis”</td>
<td>≤ 2%</td>
<td>≤ 3%</td>
<td>Actual Data</td>
</tr>
<tr>
<td>Missing “sex”</td>
<td>≤ 2%</td>
<td>≤ 3%</td>
<td>Actual Data</td>
</tr>
<tr>
<td>Missing “race”</td>
<td>≤ 3%</td>
<td>≤ 5%</td>
<td>Actual Data</td>
</tr>
<tr>
<td>Missing “state/province and county”</td>
<td>≤ 2%</td>
<td>≤ 3%</td>
<td>Actual Data</td>
</tr>
</tbody>
</table>
## Certification (con’t)

<table>
<thead>
<tr>
<th>Registry Elements</th>
<th>Gold Std</th>
<th>Silver Std</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCO Cases</td>
<td>≤ 3%</td>
<td>≤ 5%</td>
<td>Must do complete death clearance</td>
</tr>
<tr>
<td>Duplicate Cases</td>
<td>≤ 1 per 1000</td>
<td>≤ 2 per 1000</td>
<td>CINA Protocol</td>
</tr>
<tr>
<td>Passing EDITS</td>
<td>≥ 99%</td>
<td>≥ 97%</td>
<td>CINA EDITS</td>
</tr>
<tr>
<td>Timeliness</td>
<td>1998 data submitted by 12/1/00</td>
<td>1999 data submitted by 12/1/01</td>
<td>Data submitted for review 23 months from the close of the diagnosis year.</td>
</tr>
</tbody>
</table>
Gold and Silver Level Certification Status of NAACCR US Cancer Registries for 2000 Data
MDO v. DCO
Give us your opinion

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Thank you!!!
Questions/Discussion

It's QUESTION TIME!!