

Introduction

- Cause-of-death (COD) on death certificates (DCs) impacts:
 - Epidemiology tracking
 - Research
 - Public health interventions
 - Insurance payout
 - Justice
- National resources but no formal training for physicians
- 24-hour time period
- Reviewing hospital records best method to determine errors

Methods

- Retrospective sample, one institution, 1/1/2019 - 12/31/2019
- Exclusion criteria:
 - Final DC could not be obtained
 - Limited medical record
- Minor errors: do not affect interpretation of COD
 - Typographic errors (abbreviations, typos)
 - Omitted intervals
 - Multiple entries on Line A
- Major errors: affect interpretation of COD (according to CDC)
 - Non-specific COD
 - Omitted significant conditions
 - Inaccurate underlying sequence of events

References



Scan for my selected reference list

Funding

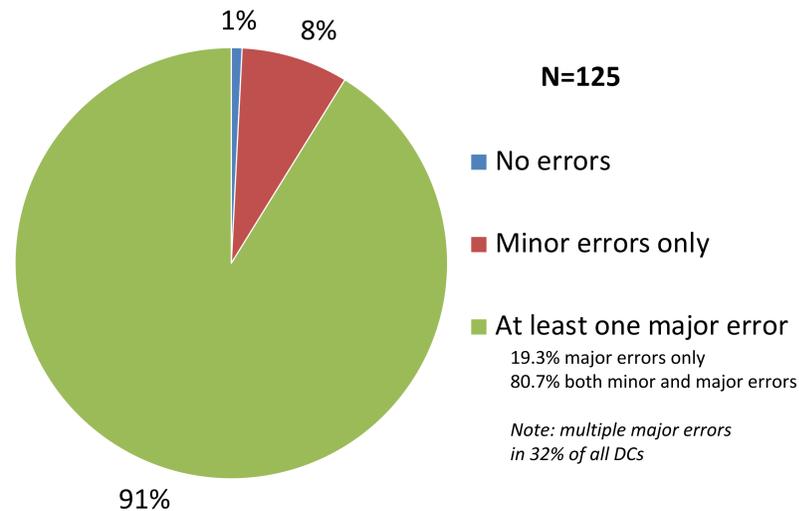
Special thank you to the Sargent Foundation for funding my work!

More information needed if:

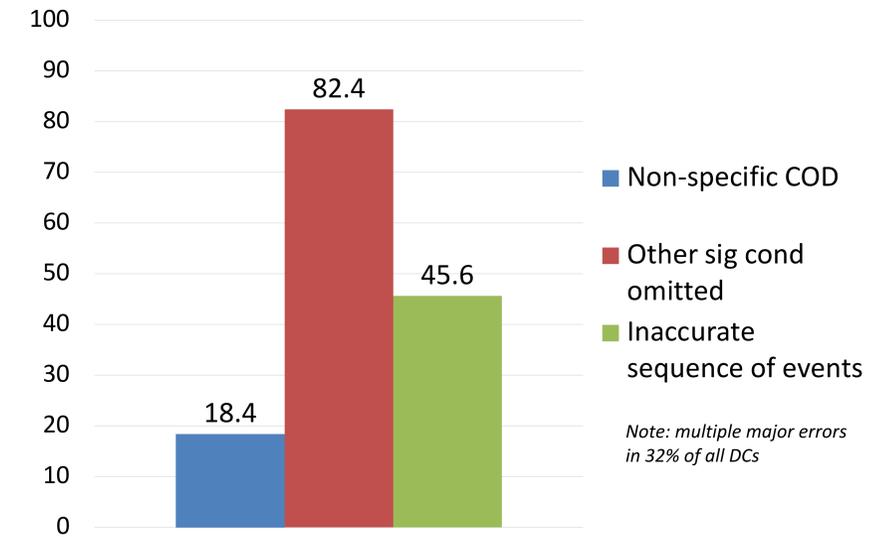
- Abscess, ascites, infection
- Altered mental status, dementia, seizure
- Anemia, anoxia, aspiration
- Arrhythmia, atrial/ventricular fibrillation, ventricular tachycardia
- Ascites
- Sepsis, shock
- Bowel obstruction/perforation
- Brain injury, stroke
- Cancer
- Dehydration, diarrhea, failure to thrive
- Hemorrhage
- Hyperglycemia, hyperkalemia
- Hyponatremia, hypotension
- Immunosuppression
- Myocardial infarction
- Organ disease, failure
- Old age, trauma, paralysis, sudden death
- Pleural effusion
- Pulmonary edema, pulmonary embolism

Results

Frequency and Types of Errors



Percentage of Major Error Types



Discussion + Future Direction

- Current educational initiatives are lengthy + outdated → create condensed learning module with summary sheet

CAUSE OF DEATH (See instructions and examples)		
<p>32. PART I. Enter the <u>chain of events</u> – diseases, injuries, or complications – that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.</p>		
<p>IMMEDIATE CAUSE (Final disease or condition resulting in death)</p> <p>a. _____</p> <p>Due to (or as a consequence of):</p>	<p>Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST</p> <p>b. _____</p> <p>Due to (or as a consequence of):</p> <p>c. _____</p> <p>Due to (or as a consequence of):</p> <p>d. _____</p>	<p>Approximate interval: Onset to death</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>PART II. Enter <u>other significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I.</p>		<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
		<p>34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>35. DID TOBACCO USE CONTRIBUTE TO DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>36. IF FEMALE:</p> <p><input type="checkbox"/> Not pregnant within past year</p> <p><input type="checkbox"/> Pregnant at time of death</p> <p><input type="checkbox"/> Not pregnant, but pregnant within 42 days of death</p> <p><input type="checkbox"/> Not pregnant, but pregnant 43 days to 1 year before death</p> <p><input type="checkbox"/> Unknown if pregnant within past year</p>	<p>37. MANNER OF DEATH</p> <p><input type="checkbox"/> Natural <input type="checkbox"/> Homicide</p> <p><input type="checkbox"/> Accident <input type="checkbox"/> Pending Investigation</p> <p><input type="checkbox"/> Suicide <input type="checkbox"/> Could not be determined</p>

MAJOR ERROR: list specific COD

Minor error: include interval (general term or "unknown" acceptable)

MAJOR ERROR: make sure sequence is accurate

MAJOR ERROR: include other significant conditions

Also:

Minor error: check spelling

Minor error: eliminate abbreviations



Scan to see the CDC's recommendations on completing DCs!