ARKANSAS CENTRAL CANCER REGISTRY

Highlights in the Cancer Registry – Quarterly Newsletter Winter 2025

UPDATES

We would like to thank all Arkansas reporters for your continued support of the Arkansas Central Cancer Registry. This newsletter is focused on identifying quality issues within the cancer registry and provides tips for you to incorporate into your registry procedures as 'best practice'. As we continue into the new year, it is our aim to have high quality, complete, and timely data to assist with research, surveillance, and to promote a healthy Arkansas.

DATA QUALITY SPOTLIGHT: ERRORS

Below **are common, real-world errors** seen in cancer registry data, organized the way quality assurance (QA) auditors, the Commission on Cancer (CoC) surveys, the Surveillance, Epidemiology, and End Results (SEER) program and the National Program of Cancer Registries (NPCR) reviews, and how the North American Association of Central Cancer Registries (NAACCR) certification processes tend to encounter them. This reflects patterns seen across hospital, central, and research-use registry datasets.

We've also included **why they happen** and **why they matter**, since that's often the missing link.

1. Case-finding & Reportability Errors

Common Errors

- **Missed reportable cases**
  - Outpatient or non-hospital diagnoses
  - Cases diagnosed by hematology/oncology or other clinics
  - Pathology reports sent outside normal workflows

- **Incorrect reportability determination**
  - Misclassifying borderline or in situ lesions
  - Applying outdated reportability rules

- **Duplicate abstracts**
  - Same tumor abstracted twice under slightly different identifiers
  - Multiple primaries misinterpreted as recurrences (or vice versa)

Why This Happens
- Nontraditional diagnosis paths
- Inconsistent review of pathology, disease index, or consult files
- Rapid changes in reportability rules

Why It Matters
- Undercounts incidence
- Distorts site-specific statistics
- Can invalidate CoC analytic case counts

2. Demographic Data Errors

Common Errors
- Incorrect **race or ethnicity**
- Missing or outdated **address at diagnosis**
- Incorrect **date of birth**
- **Sex** inconsistencies

Why This Happens
- Demographics copied from old records
- Race/ethnicity inconsistently documented in electronic health records (EHR)
- Limited patient self-reported data

Why It Matters
- Undermines healthcare availability analyses
- Misclassifies geographic and population-level rates
- Affects funding and disparity assessments

3. Primary Site & Histology Errors

(Among the most frequent “major” audit findings)

Common Errors
- Wrong primary site due to:
  - Ambiguous provider documentation
  - Metastatic site coded as primary
- Incorrect histology:
  - Morphology not updated after final pathology
  - Coding words instead of International Classification of Diseases for Oncology (ICD-O) 3.2 rules
- Failure to apply correct **multiple primary rules**

Why This Happens

- Complex pathology terminology
- Interim diagnoses not updated
- Rule changes over time

Why It Matters

- Affects incidence rates by cancer type
- Impacts survival analyses
- Leads to miscoding of treatment expectations

4. Stage at Diagnosis Errors

(Consistently the highest-impact quality issue)

Common Errors

- Incorrect tumor, node, and metastasis (TNM) component assignment
- Using pathologic stage when surgery did not occur
- Mixing American Joint Committee on Cancer (AJCC) editions
- Summary Stage group inconsistent with TNM values
- Defaulting to "unknown" when information is available

Why This Happens

- Complex staging manuals
- Changes across diagnosis years
- Conflicting clinical documentation

Why It Matters

- Stage is central to:
  - Outcome evaluation
  - Quality metrics
  - Research studies
- Stage errors propagate into national datasets

5. Treatment Data Errors

Common Errors

- Missing systemic therapy
  - Especially oral, hormonal, targeted, or immunotherapy
- Incorrect treatment sequencing
- Radiation coded incorrectly or incompletely
- Surgery coded without appropriate dates or scope
- Treatment recorded that occurred after first course window

Why This Happens

- Treatment delivered outside the hospital
- Limited EHR visibility into oncology clinics
- Difficulty interpreting clinical plans vs. delivered therapy

Why It Matters

- Misrepresents patterns of care
- Undermines treatment effectiveness research
- Weakens quality assurance and benchmarking

6. Date Logic & Chronology Errors

Common Errors

- Treatment before diagnosis date
- Pathologic stage assigned with no surgery
- Follow-up date earlier than date of last contact
- Diagnosis date inconsistent across fields

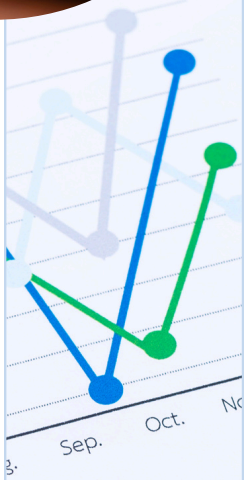
Why This Happens

- Manual date entry
- Multiple potential diagnosis dates in records
- Edits overridden without full review

Why It Matters

- Produces analytic contradictions
- Breaks survival calculations
- Triggers edit failures at submission

7. Class of Case & Facility Attribution Errors



Common Errors

- Incorrect class of case assignment
- Facility credited for diagnosis or treatment incorrectly
- Analytic cases misclassified as non-analytic (or vice versa)

Why This Happens

- Misinterpreting referral or consult scenarios
- Local policy differences
- Inconsistent registrar interpretation

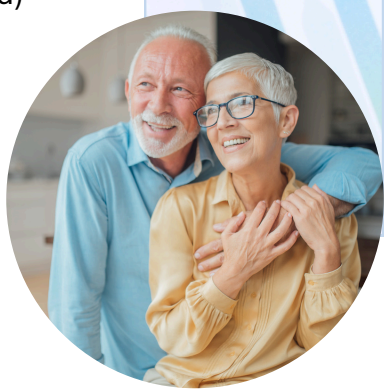
Why It Matters

- Affects CoC compliance
- Alters facility performance metrics
- Impacts benchmarking and comparison

8. Follow-Up & Outcome Errors

Common Errors

- Missing follow-up
- Incorrect vital status
- Lost-to-follow-up cases not documented adequately
- Inconsistent recurrence or progression notation (where collected)



Why This Happens

- Manual follow-up processes
- Limited access to external death data
- Competing workload priorities

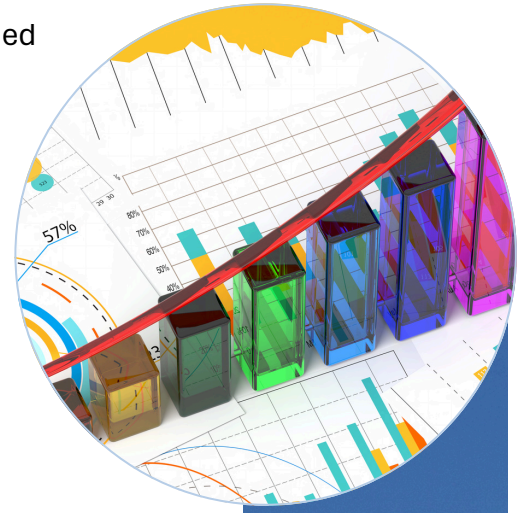
Why It Matters

- Biases survival estimates
- Reduces “fitness for use” of data
- Affects research credibility

9. NAACCR / Standard Compliance Errors

Common Errors

- Invalid or outdated codes
- Site specific data items (SSDI) left at default or miscoded
- Inconsistent use of new data items
- Fields populated despite being “not applicable”



Why This Happens

- Rapid standard changes
- Software updates lag training
- Incomplete understanding of new items

Why It Matters

- Submission rejections
- Certification challenges
- Downstream analysis exclusions

Patterns Seen Across Registries

The **same root causes** appear repeatedly:

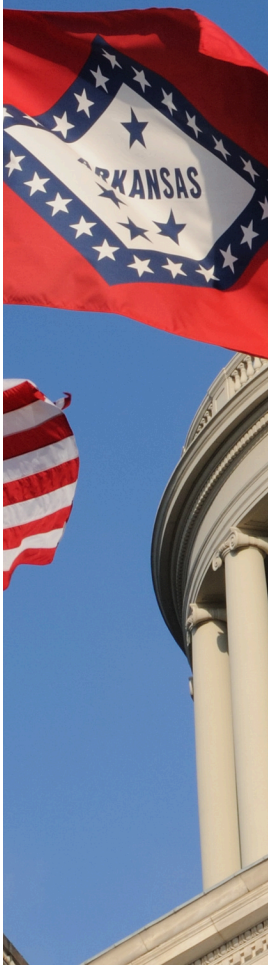
- Workflow gaps rather than individual mistakes
- Inconsistent interpretation of standards
- Overreliance on copy-forward data
- Insufficient feedback loops from audits

Key Takeaways

Most serious cancer registry errors fall into **four high-impact areas:**

1. Case-finding
2. Primary site & histology
3. Stage at diagnosis
4. Treatment completeness

These are also the areas where **targeted audits and training** produce the biggest improvements.



REMINDER - TEXT – TEXT – TEXT!

It is so important that you include complete descriptions of clinical history, diagnostic work-up, labs, imaging, scopes, diagnosis, and treatment information. The only way we can validate the accuracy of the data is by having that text available. Always include dates and succinct details of the information you’re entering in the abstract. If insufficient text is noted, we need to send the case back (follow-back) to you so you can complete the text fields. This requires a new and complete case to be abstracted and submitted back to us, as we do not have the ability to accept Modified Records (record type M). Ensuring text is included in the initial submission saves time!