

**2026
DEFENSE HEALTH INFORMATION
TECHNOLOGY SYMPOSIUM**

**AUGUST 11-13, 2026
HYATT REGENCY NEW ORLEANS
NEW ORLEANS, LA**

Discharged to Hospice

How a Two-Letter Change Broke Our Data

Lt Col David Alt, MD

Dr. Daniel Brooks, PhD



Agenda

- 1** Background
- 2** Anatomy of a Data Quality Failure
- 3** Downstream Consequences: From Bad Reports to Flawed AI
- 4** Framework for Data Integrity: From Repair to Prevention
- 5** Conclusion: Building a Data-Ready Force

Speaker Introduction



Daniel Brooks, PhD

DAD-Medical Affairs
DHA



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Learning Objectives

- 1** Identify the root causes of data quality problems by exploring the intersection of system design, user workflows, and human factors in a clinical setting.
- 2** Explain how seemingly minor data capture errors create cascading inaccuracies in enterprise reporting, affecting strategic decisions and patient care metrics.
- 3** Recognize the critical dependency between data integrity and the successful, trustworthy implementation of artificial intelligence initiatives.

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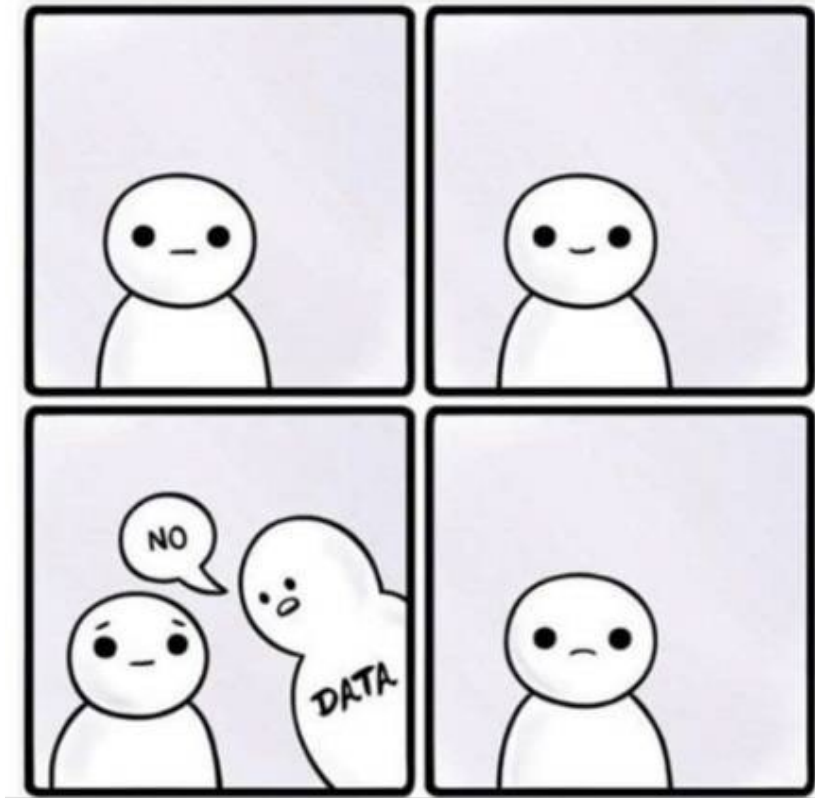
Background



Healthcare is a Data-Driven Enterprise

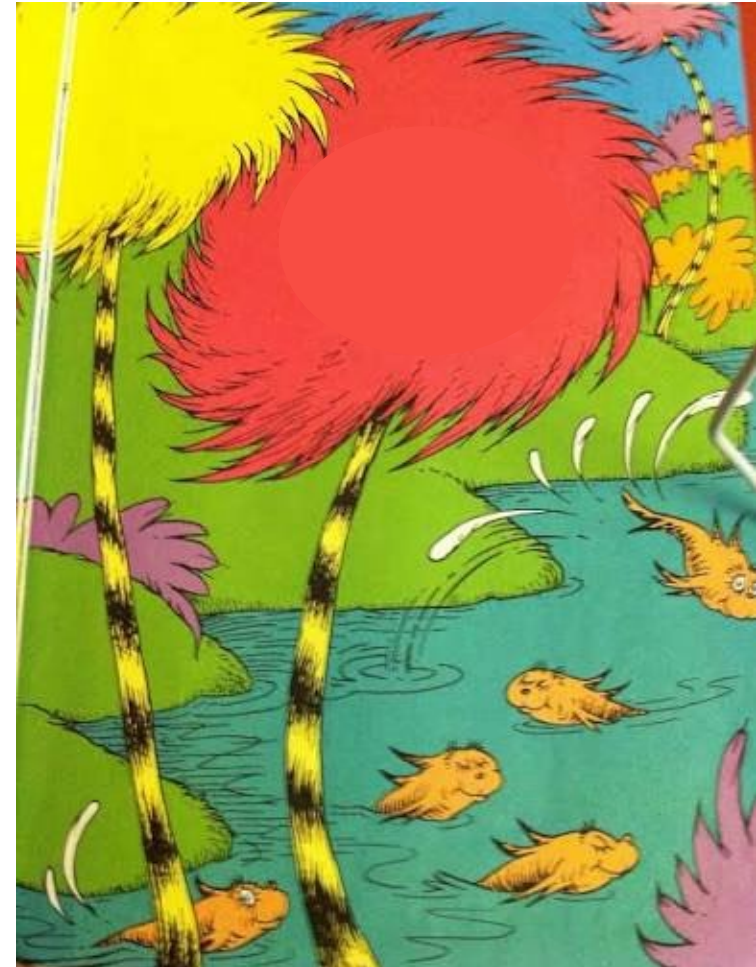
- All decisions are informed using information from the EHR.
 - Resourcing
 - Staffing
 - Strategy
 - Quality
 - Cost
- As our data pipeline and analytic capabilities grow, **downstream analytics become more reliant on high-quality, upstream data.**

The (real) scientific method.



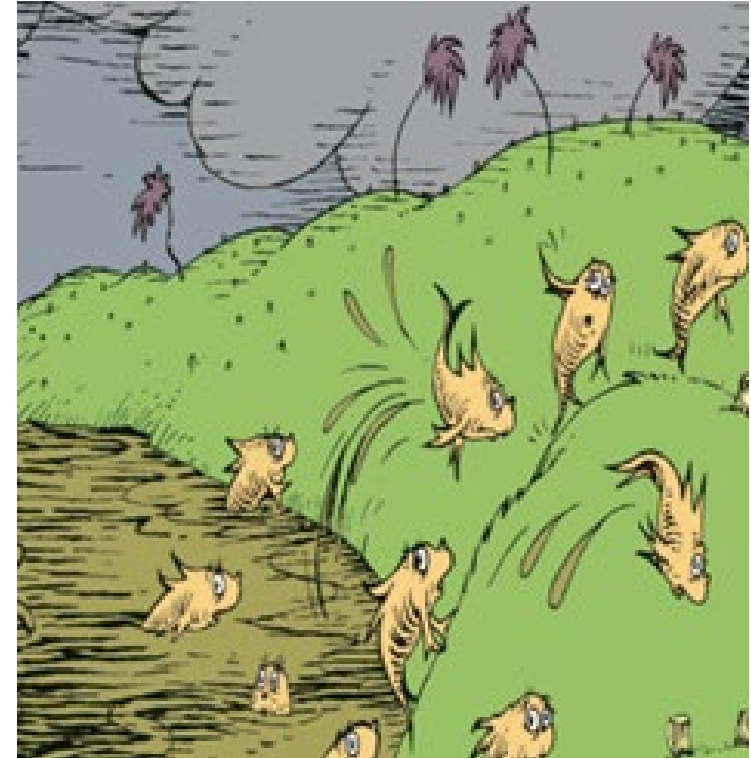
DHA Data Ecosystem (Notional)

- Notional data in its natural habitat.
- Free from user interaction.
- It produces beauty and inspires calm.



DHA Data Ecosystem (All Too Often)

- Actual data in its natural habitat.
- Covered in schloppity schlop.
- It produces anxiety and inspires difficult questions.

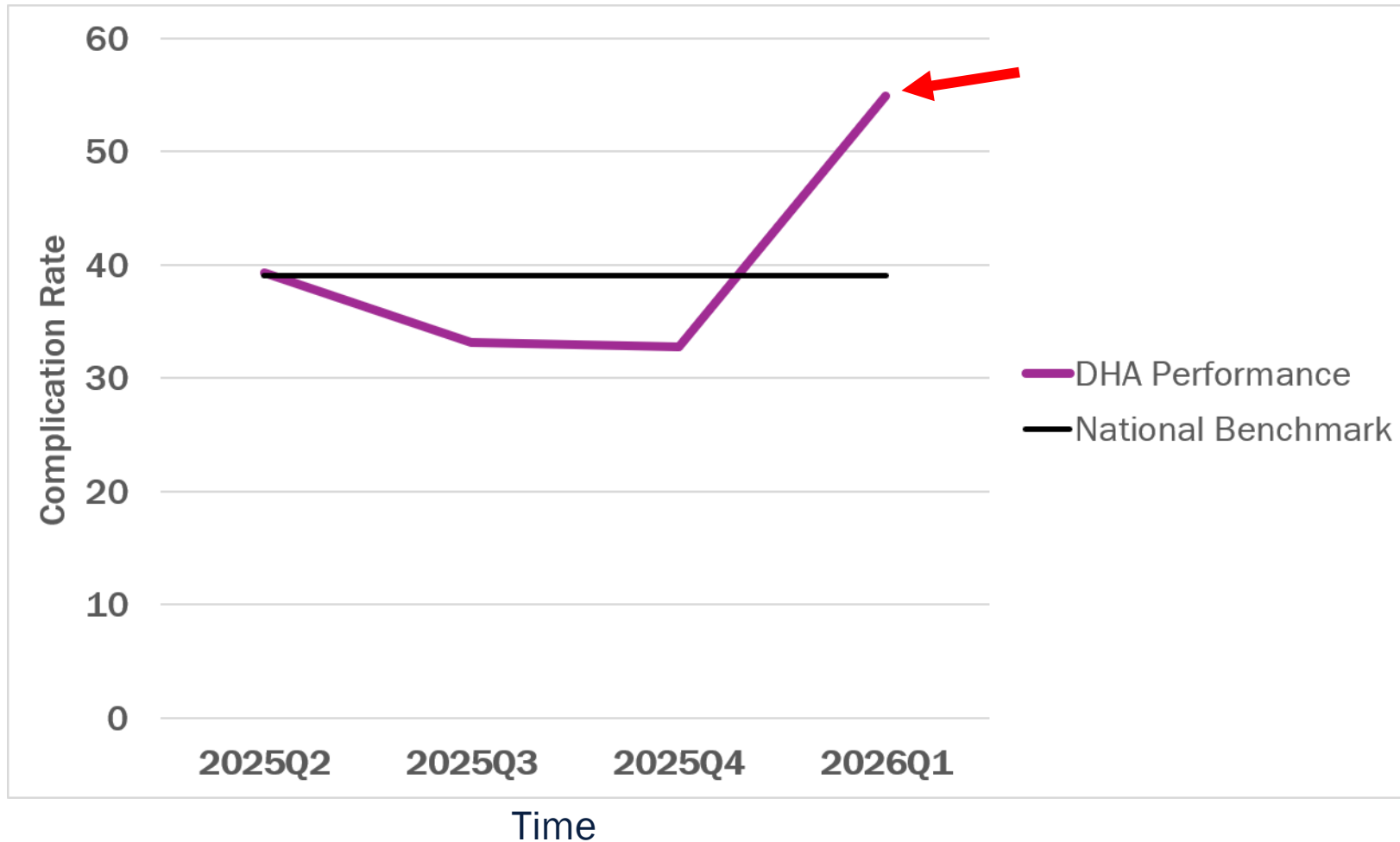


Understanding the Upstream Process

- Often, our jobs are not about understanding the fish, but about the source of the schlop.
- This presentation is about tracing back the root cause of a data quality issue.
 - Discussing the impact.
 - Mitigating future issues.

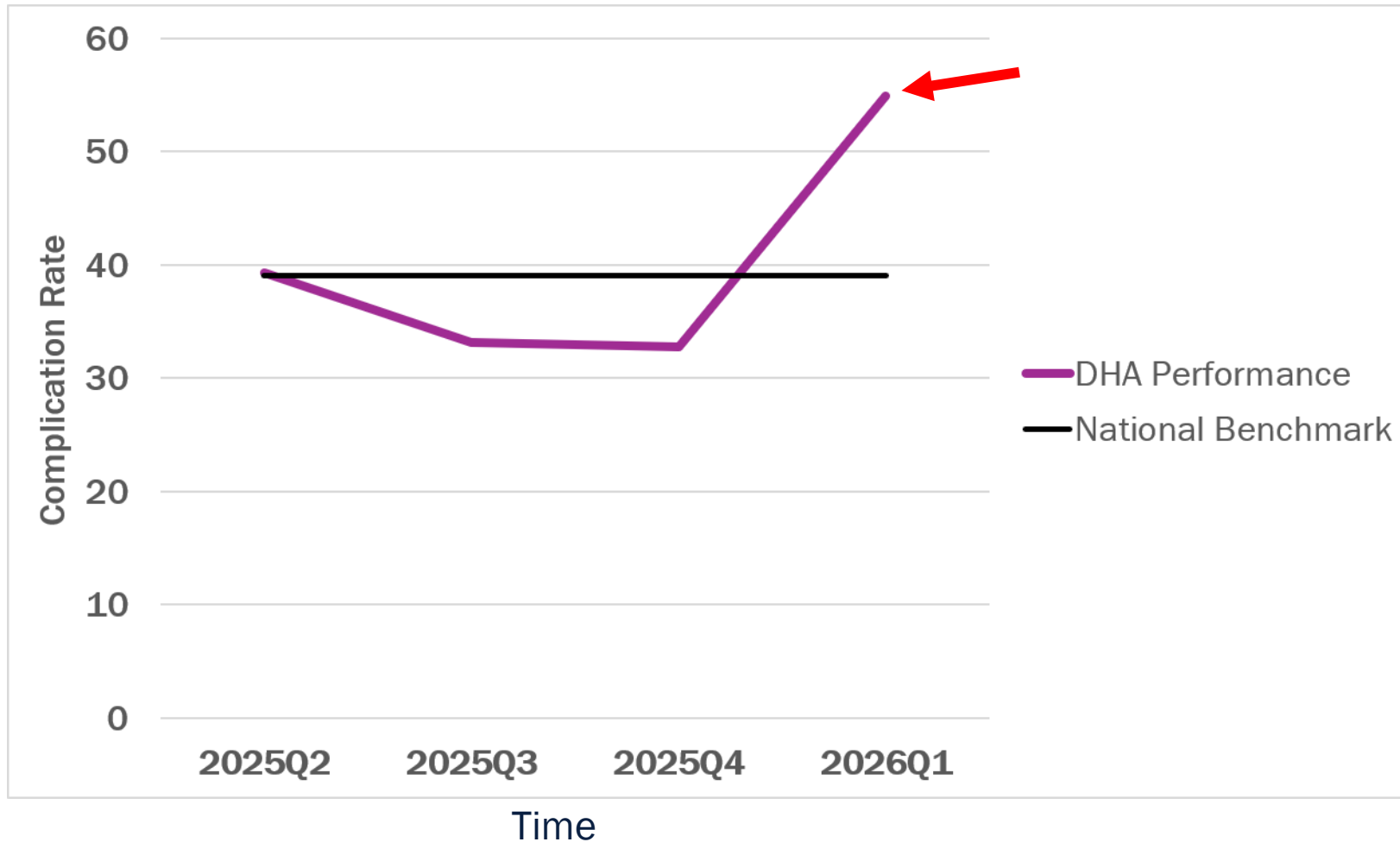


How Do We Measure the Quality of DHA Healthcare?



- TJC ORYX has an in-development electronic clinical quality measure to assess newborn outcomes.
- Q1 2026 saw a massive increase in numerator events for this measure.

How Do We Measure the Quality of DHA Healthcare? *cont.*

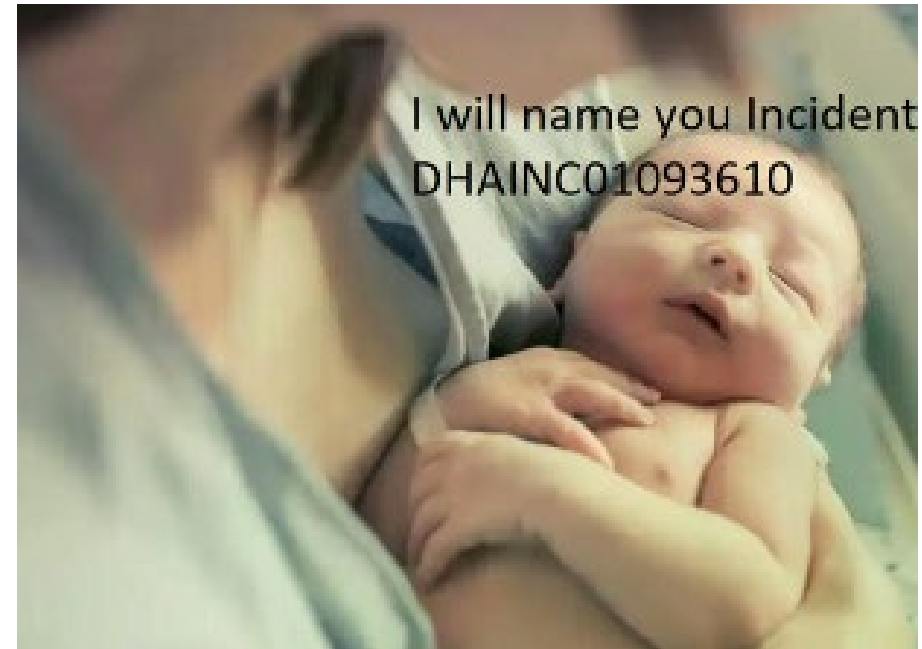


- Closer examination of this massive spike revealed that over 100 newborn infants in Q1 2026 were discharged to *hospice care*.

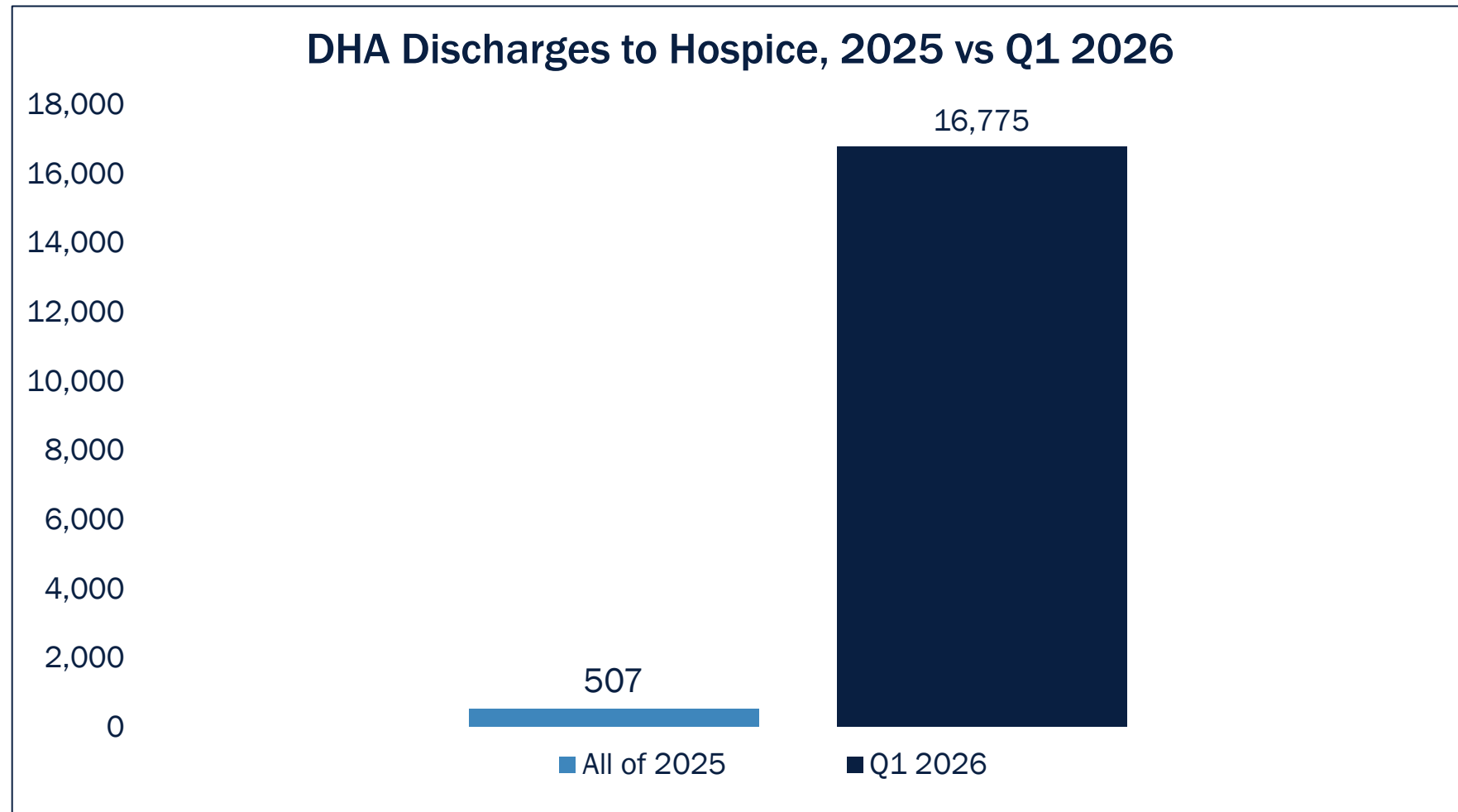
What Could Be the Cause?

Newborns *can* be discharged into hospice care for unexpected complications, but it's not common.

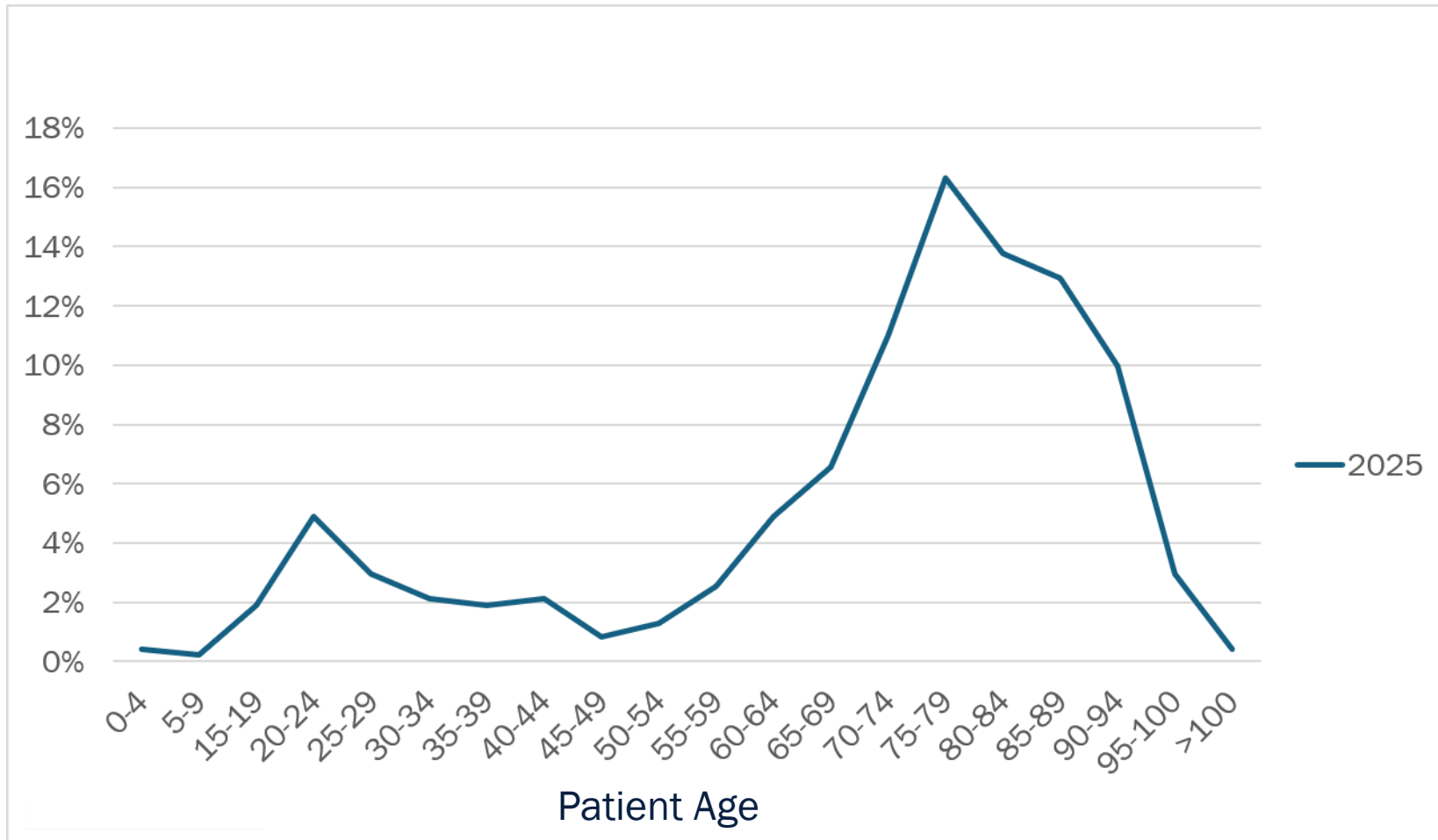
- Is this a **clinical** crisis?
- Is the **measure** broken?



A 3,209% Increase Can't Be Right

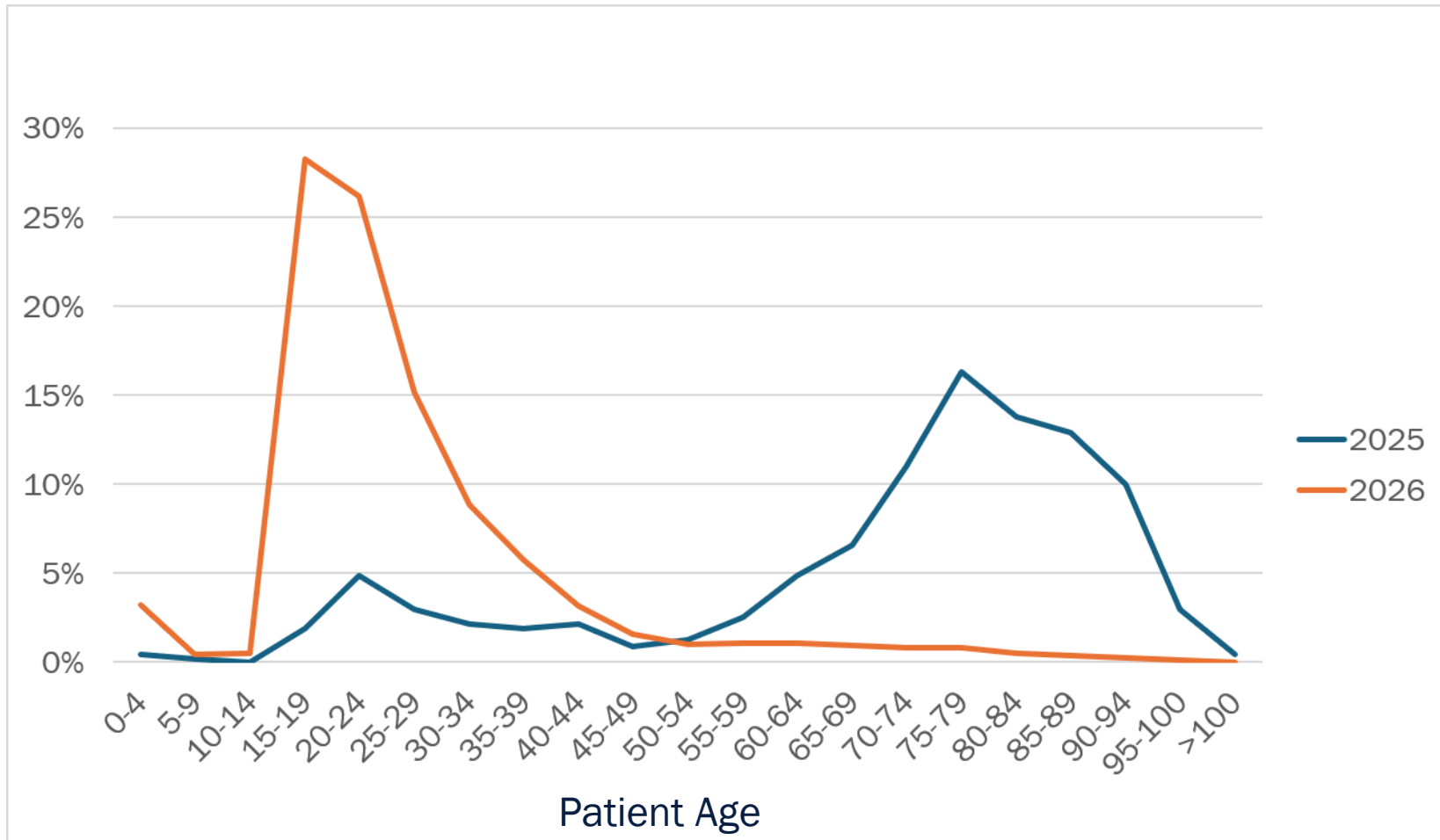


Who Did We Discharge to Hospice?



Unsurprisingly, patients discharged to hospice tend to be much older.

Who Are We Now Discharging to Hospice?



2026 hospice patients are mostly active duty or younger patients.

By Medical Service

- 8,395 Occupational Medicine
- 2,429 Mass Readiness
- 1,748 Allergy & Immunology
- 850 Initial Entry Processing
- 106 Newborns

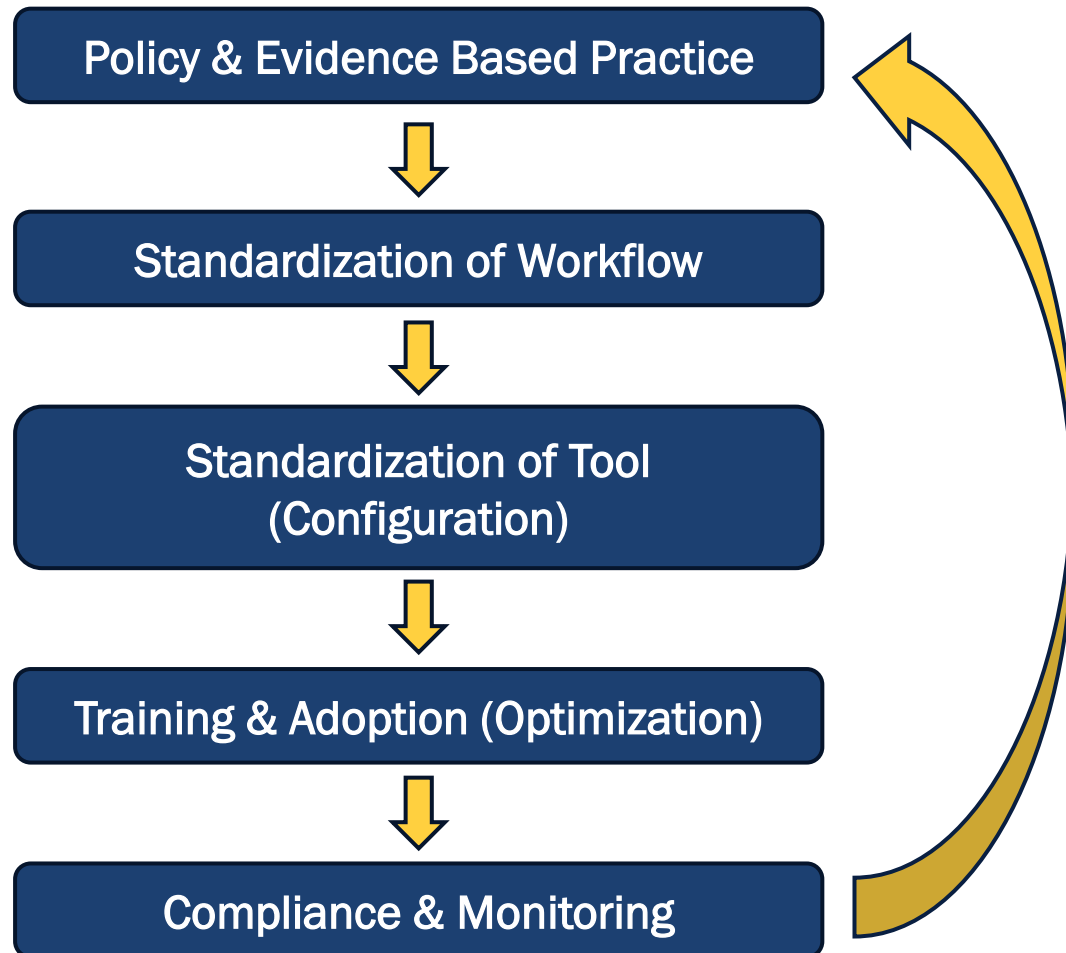
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Anatomy of a Data Quality Failure



Holistic View of Processes at DHA



- Completely optimized processes have high quality products at every step.
- Each stage supports and contributes meaningfully to data quality.

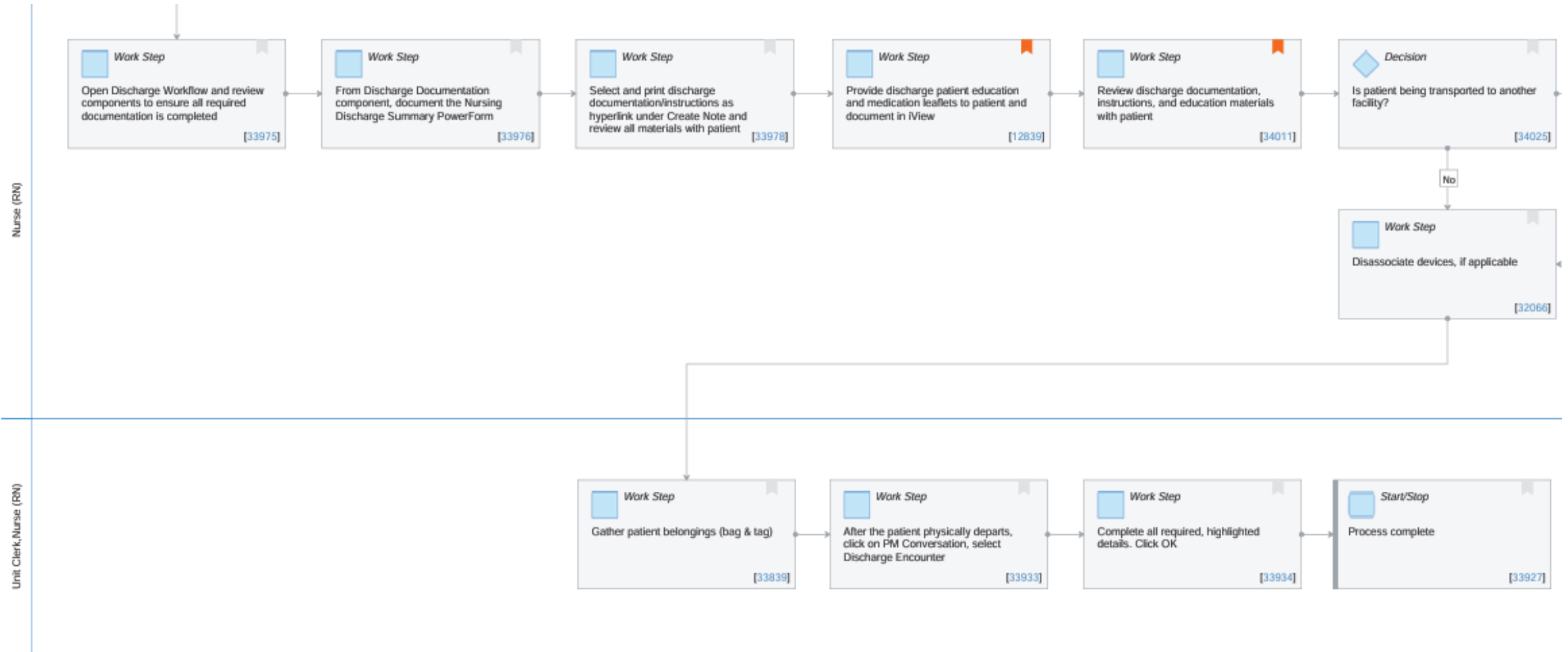
Anatomy of a Data Quality Failure Explained



Data quality – good or bad – is determined by the intersection of workflows, configuration, and users.

- System design *influences* workflows.
- Technology *implements* workflows.
- Users *execute* workflows (or don't).

The Discharge Workflow



Discharge Configuration

		Female			
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Modify Encounter: Discharge Encounter - DoD

Discharge Encounter - DoD

Patient Information

Complete Reg? Yes	Last Name 	First Name 	Admin Sex Female	Birth Sex Female	Date of Birth 	Age
SSN 	MRN 	FIN NBR 				

Facility 0125A	Building 0125A MAMC	Nurse Unit 0125A-EM-ER	Room ED Waiting Room	Bed
Encounter Type Outpatient	Medical Service Pathology	Isolation 	LPE Created? No	

Attending Physician ALT, DAVID A, M.D.	Attending Assigned? 	Registration Date/Time
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Discharge Information

Discharge Disposition ★ To home or self-care 01	Discharge To Location 	Discharge Date/Time ★	User ID
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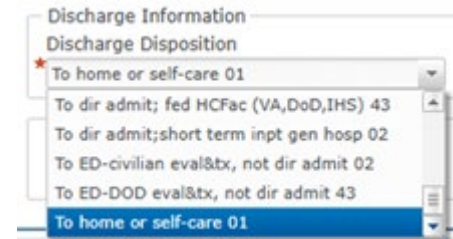
- To dir admit; fed HCFac (VA,DoD,IHS) 43
- To dir admit;short term inpt gen hosp 02
- To ED-civilian eval&tx, not dir admit 02
- To ED-DOD eval&tx, not dir admit 43
- To home or self-care 01

Save and Close Cancel

The Configuration Change

- VA and DoD did a joint review of the Discharge Disposition Code Set. They changed these codes to align with Centers for Medicare & Medicaid Services (CMS) standard values.
- When this change occurred, no workflow changes were supposed to take place. It would simply be a two-digit code added to the discharge disposition.

...except it wasn't.



The Configuration Change cont.



Old code: Home or Self Care



New code: To home or self-care 01

So when you type "H" from muscle memory in the new system...



Discharge Disposition

Admitted as inpatient to this hosp 09

- Admitted as inpatient to this hosp 09
- Arrange alt care: advice assessment 01
- CRO - DOA (dead on arrival), not KIA 20
- CRO - ED death, civ/not die-of-wounds 20
- CRO - DOA, military KIA of battle inj 20
- CRO - ED death, military die-of-wounds 20
- To skilled nursing facility (SNF) 03
- To custodial or supportive care fac 04
- To ED-DOD eval&tx, not dir admit 43
- To dir admit; fed HCFac (VA, DoD, IHS) 43
- VA: Domiciliary 04
- Elope; no AMA convo, unauth depart 07
- Expired, alive at arrival 20
- Plan readmit; To fed HCF (incl AE) 88
- Plan readmit; To home/self-care 81
- **Hospice patient; to home 50**

Hospice Discharges Skyrocketed Because of this Change

16,500+ patients were discharged to hospice in *two months*.

~11,600 Mass Readiness

~2,000 Clinic

~1,100 Day Surgeries

~100 Newborns



Why Discharge Disposition Matters

- **At the moment of data entry:** the importance of this data element is low.
 - The patient is leaving. *Who cares why?*
- **But** discharge disposition informs dozens of downstream data products.
 - It's used to judge outcomes like, "Did the patient live or die?"
- Registering and discharging patients is a fundamental part of how we measure hospital supply and patient demand.

The Cost of “Data Debt”

- Each of those 16,000 records accrues “interest” over time, causing
 - Inaccurate reporting.
 - Difficult analysis.
 - Decisions that can’t be trusted.
- These issues endure and compound, resurfacing in every query on every platform until fixed in the EHR.
 - (Or a downstream, non-operational system).



Data Debt Accrues in Operational Systems

- A different discharge disposition, CRO, is often inaccurately applied, **leaving us unsure if patients lived or died.**
- Thousands of professionally coded medical records have **inaccurate present-on-admission diagnosis indicators.**
- Thousands of term babies were **inadvertently coded as preterm** due to mis-mapped terminology.

Current features of patient medical records.

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Downstream Consequences From Bad Reports to Flawed AI



Clinical Impact of Erroneous Hospice Discharge

- Patients disenrolled from clinical registries.
- Ironical result of being discharged from a vaccine encounter: DHA no longer tracked your vaccination status.
 - Subsequently fixed, sort of... we just disabled checking for hospice.
 - This also means that hospice patients are erroneously part of the registries.
- The hospice registry itself was also broken.

Decision-Making Impact of Erroneous Hospice Discharge

- Quality of analysis varies due to analyst data literacy.
- Leaders make decisions on bad data and then learn to distrust future analysis.
- Problem compounds as everyone starts distrusting fundamental, core assumptions.



Organizational Costs

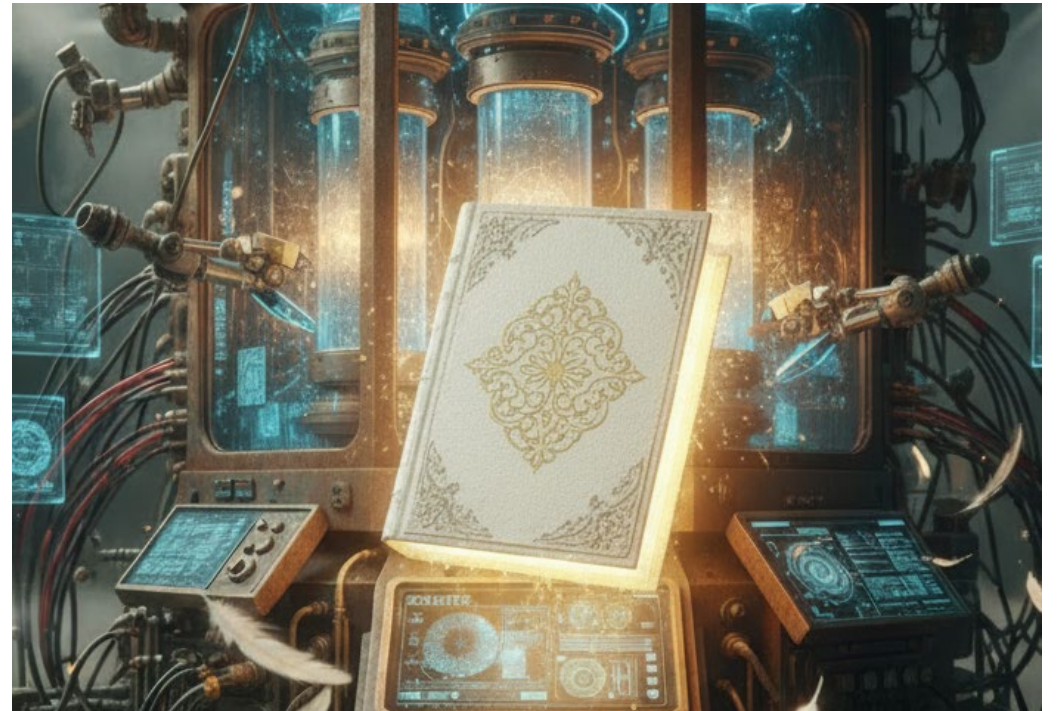
- Data debt increases training burden.
 - Teaching all of the existing data quality problems as we onboard.
 - Communicating status of ongoing fixes as they occur.
- Time and effort validating untrusted sources.
 - How can you be sure that the data you're looking at is real?
 - Not just this data, but any data?
- Additional personnel required to meet reporting targets
 - Hiring abstractors for chart review instead of using automation.
 - This is a real solution to real quality measurement problems (and it is extremely costly).

Future Impacts to an “AI-Enabled Force” (1 of 3)

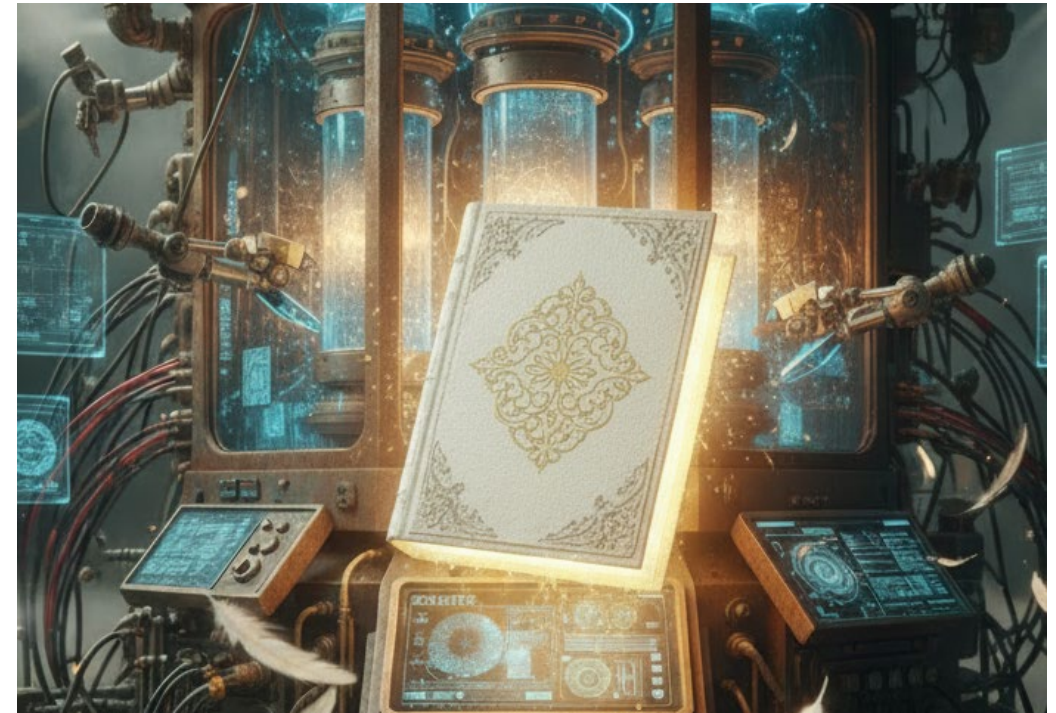
- AI-driven analytics require consistent data.
- AI amplifies everything in your data – both good and bad.
- “Black box” methodology will make underlying data quality issues harder to spot and track.
 - AI algorithms are less deterministic and more opaque.

Future Impacts to an “AI-Enabled Force” (2 of 3)

?



Future Impacts to an “AI-Enabled Force” (3 of 3)



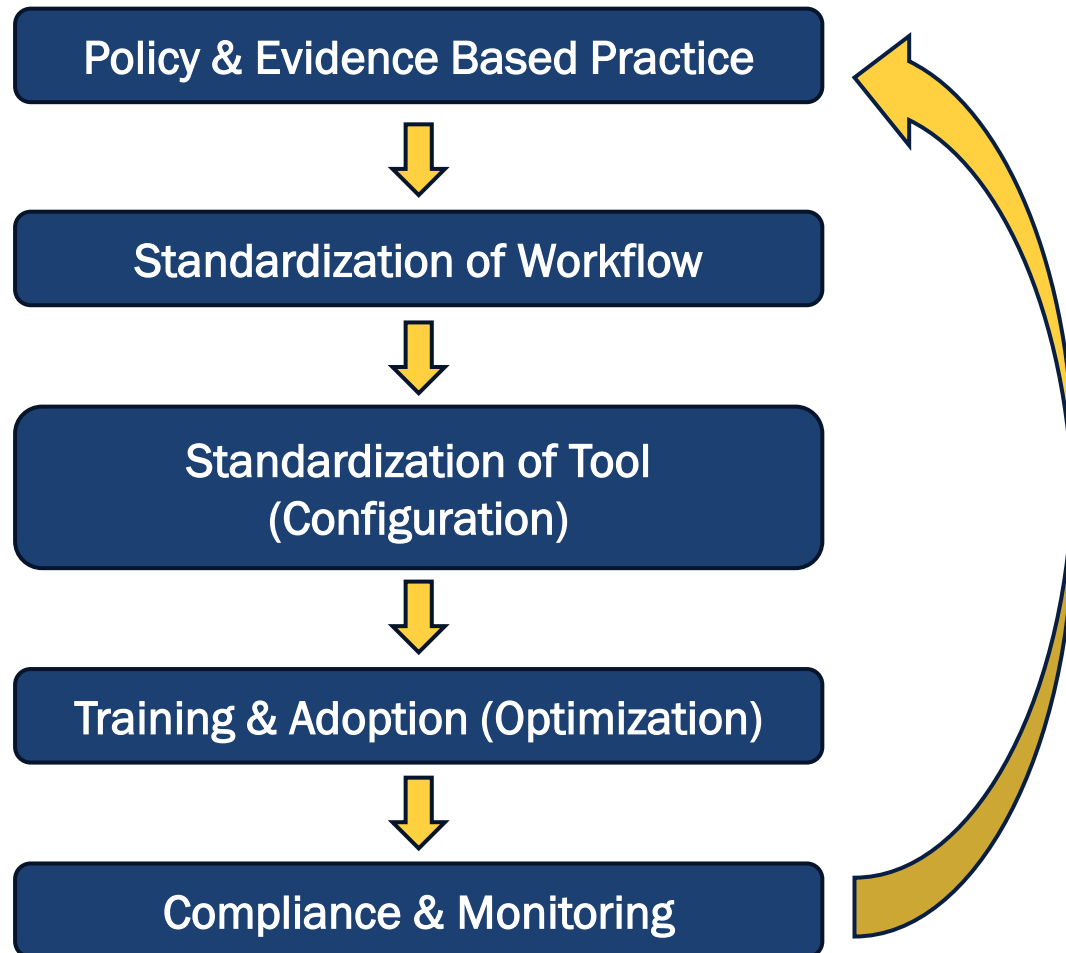
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Framework for Data Integrity From Repair to Prevention

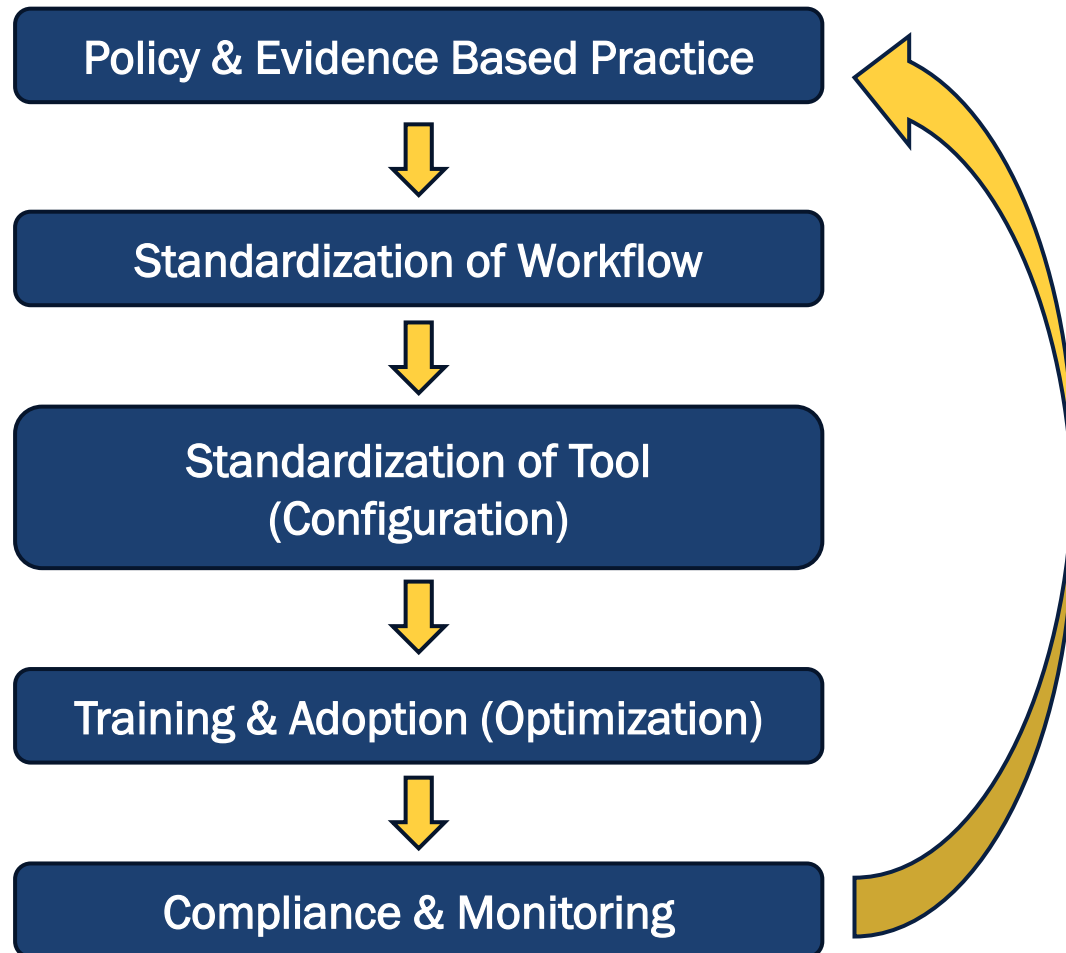


The Pathway that Generates Quality Data



- Good data quality is influenced by each of these steps
 - Including two we haven't discussed: policy and reports.
- Finding the root cause is critical.
 - Policy conflict?
 - Workflow design?
 - Configuration error?
 - Training gap?
 - Report problem?

How do we fix data quality problems?

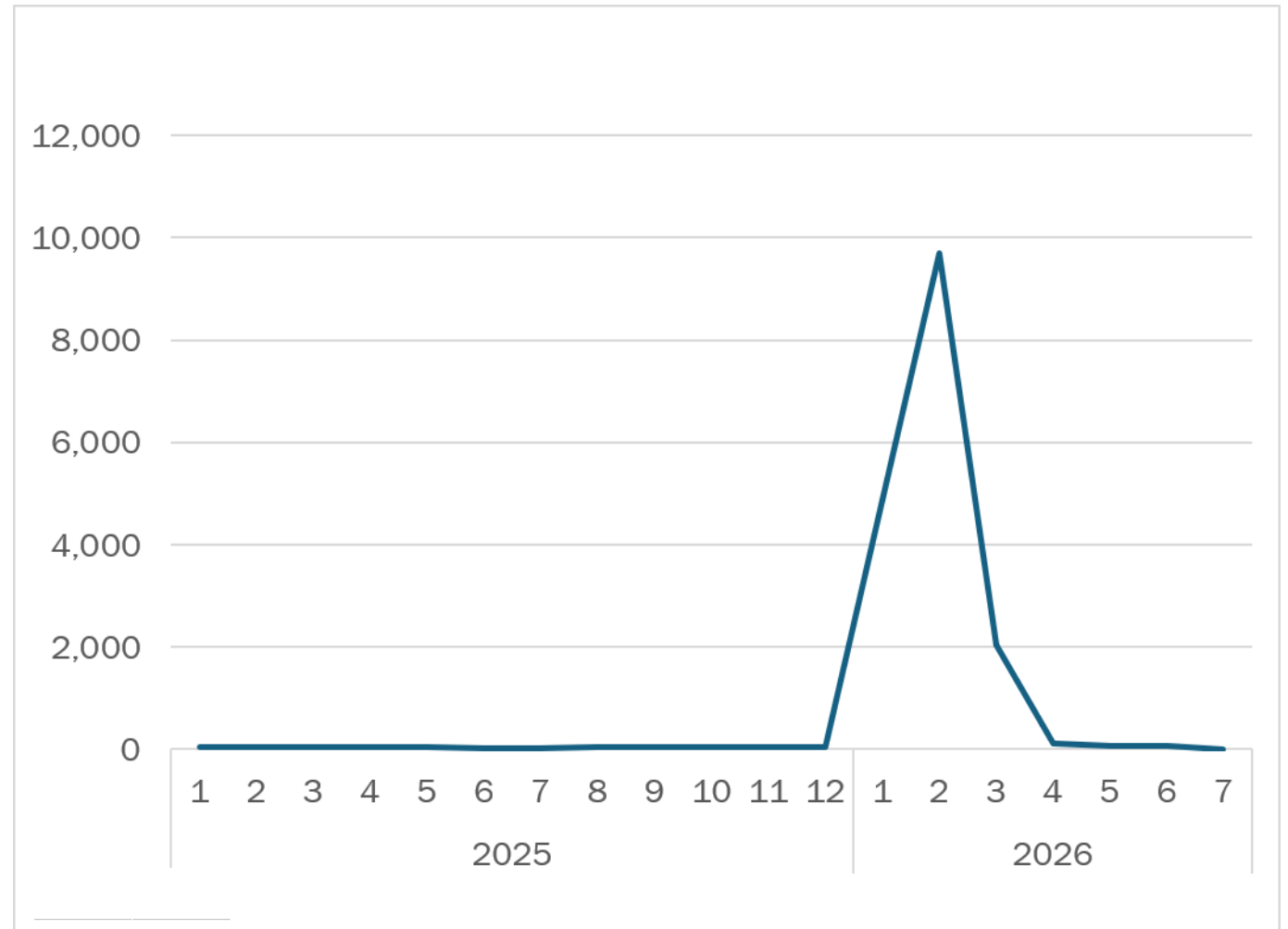


This is a complicated question!

- Problems might exist at all stages.
- The goal is to fix the system, not punish the user.

Did we fix this problem?

- Well, maybe.
- The configuration change was reverted.
- So, providers stopped discharging patients to hospice.
- But **the bad data is still there**, accruing interest by the day.



Fixing Data Systems in Clinical Processes

- “Fixes” must align with clinical workflow.
- Remember, the original change was also a “fix.”
- Correct stakeholder involvement is vital.



“Operational Data is Messy”

- This is true!
...to a point.
- But non-operational data systems where we perform analysis are also costly.
 - Incorporate bad information
 - May not be timely
 - Do not respond to changing practices
 - Require extensive training and maintenance

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Conclusion: Building a Data-Ready Force



Data Governance is a Team Sport

- Data quality is not an IT problem.
 - Requires collaboration between IT, informaticists, clinical staff, and leadership.
- Everyone has a duty to report data quality concerns.
- The best time to prevent issues is the design phase!

Consider the Interconnected Enterprise



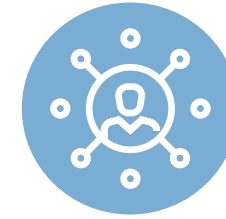
Executives

- Before decision-making, solicit feedback from every impacted party.



Clinicians

- Think about the second order impact.
- Who might read or use this documentation later?



IT / Informatics

- Make sure that every impacted group reviews the change.

A Call to Action – A Culture of Data Quality



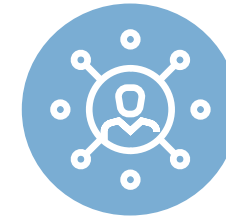
Executives

- Champion a culture of data quality.
- Ask for the story behind the data, not just the report.



Clinicians

- You are the first line of defense. If you see something, say something!



IT / Informatics

- Prioritize human-factors design.
- Build systems that make it easy to do the right thing and hard to do the wrong thing.

Enterprise Standards for Identifying and Reporting Issues

- DHA has been implementing improvements in data quality and data governance.
- We need better mechanisms in place to fix existing data quality issues.
 - Once we know and correct the root cause, we also need to correct the historical records.

Contact

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Thank You!



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