The Step-by-Step Guide to Improving Trauma Data Accuracy With Ongoing Registrar Learning

a trauma registry management ebook from himagine solutions
A better approach to “on the job training” for trauma registrars

Most trauma registrars learn their job as they do it. New hires may attend a few classes, but they are largely expected to learn the ropes from other registrars.

The problem with this approach is that it perpetuates registry errors. New registrars pick up misconceptions from their predecessors and pass them on to their successors. The results are high variability between registrars and low overall accuracy in registry data.

This guide presents three practical strategies for providing trauma registrars with accurate and effective on-the-job education. It is based on the extensive experience of trauma registry experts at himagine solutions, a leading provider of trauma registry outsourcing solutions.

The goal of this guide is to help trauma program managers, data managers and registry leaders develop an ongoing learning program that:

- Helps trauma registrars develop strong abstracting and coding skills
- Targets the specific weaknesses that impact your trauma registry
- Leverages group dynamics to strengthen registrar learning and recall
- Involves registrars themselves in the process of registry improvement
- Increases registrar job satisfaction and improves staff retention

Each of the step-by-step strategies outlined in this guide attacks registry errors at their root. Registrars receive the tools to catch abstraction and coding mistakes on their own, so registry managers have to correct fewer data problems later. The end result is greater overall data accuracy, which will help turn your trauma registry into a powerful tool for driving trauma program performance.
Strategy #1: Fill Knowledge Gaps With Group Abstraction Sessions

Trauma registrars have limited opportunities for formal training. The few existing registry classes focus on general issues, not the specific problems that affect a particular registry team. And in many cases, a registrar’s actual knowledge gaps may be unknown. How can you provide trauma registrars with an education that is tailored to their particular needs?

One solution is peer learning. The following process harnesses group dynamics to strengthen and hone registrar knowledge:

**Step 1: Select charts that represent registry challenges**
The basic idea is to gather the entire registrar team once a month to review and abstract actual patient charts. Prepare for each session by selecting one or more charts for group review. Avoid the easiest cases. Instead, pick charts that provide an opportunity to examine a wide range of data fields.

*Example:* Focus on patients who were hospitalized at least three days. You may also want to choose patients with less commonly seen injuries, such as burns.

**Step 2: Have registrars abstract the charts**
Email the charts to every registrar a week or two before the scheduled meeting, and ask that each team member abstract the chart ahead of time. Schedule an hour and a half for each monthly session.

**Step 3: Meet to review and discuss**
During the meeting, go through the selected registry account and review the group’s coding choices. Many data fields will be coded correctly by the entire team. Other fields will display a variance. Use any variances to start a conversation.

*Group abstraction gives registrars the opportunity to identify abstraction errors, clarify coding requirements and get the entire team on track.*
**Example:** In a four-person team, three registrars code an exploratory laparotomy one way and the fourth registrar codes it another way. This provides the opportunity not only to correct this specific coding error, but reinforce proper ICD-10 logic.

This strategy helps identify hidden problems—misconceptions held by only one member of a registry team. But group abstracting can also reveal wide disagreement among registrars.

**Example:** During the monthly meeting, you find that registrars have assigned several different codes to describe a head injury. This is a good opportunity to clarify the descriptors in the Abbreviated Injury Scale (AIS) manual. Registrars may also share tips on how to interpret the head injury terminology used by different specialties.

**An alternative approach**
A variation on this strategy is to review a specific section of several registry accounts. For instance, one monthly session could focus on pre-hospital data for three different patients. Individual sessions could also concentrate on ED data, injury diagnoses, procedures or other account sections.
Strategy #2: Close the Loop With Logic Error Worksheets

In many trauma programs, report writing is a relatively low priority. This is unfortunate, because reports can be a powerful tool for educating registrars. The following process will help you use reporting to identify and correct your registry team’s shared weaknesses:

Step 1: Run key registry reports on a regular basis
If you are not already running regular registry reports, begin by focusing on data fields that are critical to performance improvement, national database reporting and other priorities. (For more information, see How to use registry reports to increase trauma data accuracy.)

Step 2: Track errors while reporting
As you work with registry reports, you will identify abstraction and coding mistakes that occur frequently. Track errors to identify trends. The most common errors represent education priorities for your registry team.

Step 3: Maintain error worksheets
Build reports focused on your team’s high-frequency errors. Within each data field report, create a worksheet where you explain the error and indicate the correct approach.

Example: Registrars are consistently entering ED discharge time as the time the patient left the emergency department. In the worksheet, add a note explaining that the correct National Trauma Data Bank (NTDB) definition is “the time the order was written for the patient to be discharged from the ED.” Include any instructions on how to locate that record.
Step 4: Incorporate worksheets into registrar workflows
Share the error worksheets with the entire registry team. As registrars abstract charts, they can use the worksheets to validate their own data.

*Example:* After a registrar completes a chart, he or she runs the team’s error reports. The reports flag several transfusion data fields, which have been trending recently for high-frequency errors. The worksheet notes prompt the registrar to double-check the fields for the proper use of null values.

**Effective visual learning**
This strategy facilitates loop closure. Instead of just telling registrars they made a mistake, you can use report worksheets to illustrate the problem. Error worksheets provide a visual learning experience. The registrar can view the error-prone data field within the registry software, and then review the worksheet notes directly below.

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**Do you have the expertise your registry needs?**

Many trauma centers do not have a dedicated registry manager or lead registrar.

And most trauma program managers do not have the background to provide guidance on registry issues.

One advantage of working with an outsourcing provider like himagine solutions is that we provide expert registry leaders.

Our consultants can help you establish solid registry processes, build your registry team’s skills and keep your registry up to date. To find out more, [contact us](#) today.
Strategy #3: Reinforce Learning With Personalized Issue Reports

In addition to closing the loop on team problems, it is also important to provide focused feedback to individual registrars. The key is to create a reporting-based system that makes registrars both aware of their issues and accountable for their performance.

**Step 1: Identify individual error trends**
As you review and clean up data on the back end, identify the abstraction errors that consistently need to be fixed. Keep track of frequent errors by individual registrar.

**Step 2: Develop ad hoc reports**
For each registrar, build ad hoc logic reports within the registry software for each team member’s high-frequency error fields. Include any specific instructions in an accompanying spreadsheet. One approach is to create four or five issue reports per registrar, with each report focusing on a different area of the patient account.

**Step 3: Train registrars to self-monitor**
Incorporate the issue reports into the registry workflow. The registrars now have the ability to run reports on their own accounts and correct any errors at their own pace.

**Example:** A registrar consistently misses comorbid conditions that are evident in physician notes and other sources. The registrar’s individual issue report flags these data fields. The accompanying spreadsheet prompts the registrar to double-check care notes and flow sheets for pre-existing health factors that should be included in the registry.
Registrars can use their issue reports in different ways. Some will run the reports on each account as they go. Others will prefer to check accounts in batches.

**Step 4: Review and update**
Data managers should periodically review and update registrar issue reports. Add new problem data fields as they become apparent, and “retire” issues once the registrar has demonstrated mastery.

**A morale builder**
This strategy is effective because it enables you to provide feedback to registrars in a way that does not damage morale. Personalized issue reports allow registrars to find their own mistakes, correct their own errors and continuously develop their skills.

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**Effective PI for trauma registry teams**

Like all the approaches described in this guide, this strategy helps improve data accuracy by addressing the root causes of error. It increases registrar knowledge while allowing registry team members to perform data validation as they work.

Because more errors are caught and corrected on the front end, registry leaders have fewer problems to clean up on the back end. The entire process helps reduce inter-rater variability and increase the overall accuracy of your trauma registry.
About himagine solutions

himagine solutions is a leading healthcare outsourcing solutions provider with the largest team of inpatient and outpatient coders in the U.S. We provide short-term and long-term resources for a full range of trauma registry needs, including:

- Data abstracting, entry and analysis
- Data validation and M&M reports
- Comprehensive education and training for registrars
- Creation and coordination of a trauma registry
- Establishment of a performance improvement program
- Preparation for trauma center designation and/or verification

himagine solutions can support your trauma center with experienced and certified registrars who are experts in trauma data management. Our disciplined recruiting process delivers highly qualified trauma registrars who are proficient in all major trauma registry software programs. We exclusively employ registrars with at least three years of experience in a Level 1 or 2 trauma center, and many are certified professionals (CSTR, CAISS or RN) with more than ten years of registry experience.

Do you need more out of your trauma registry?
To find out how himagine solutions can help, contact us today.