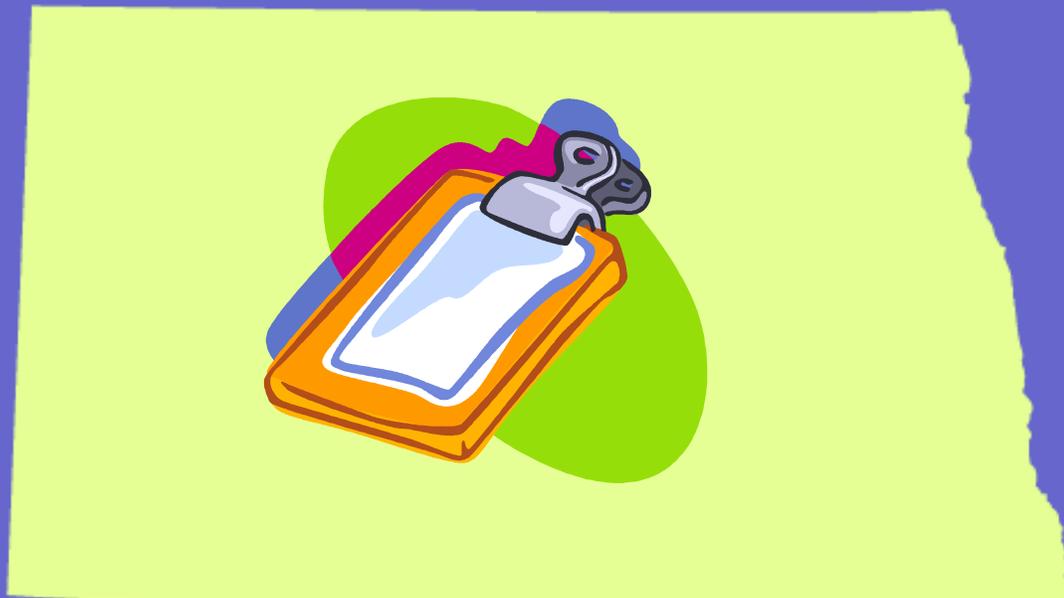


HOW WELL IS YOUR TRAUMA PROGRAM DOING?



PERFORMANCE IMPROVEMENT TOOL KIT
FOR LEVEL IV AND V TRAUMA CENTERS

THE NORTH DAKOTA TRAUMA SYSTEM ACKNOWLEDGES

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This tool kit is designed for informational and educational purposes only.

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WHY Should You Care About PERFORMANCE IMPROVEMENT?

With the ongoing consolidation and regionalization of health-care in rural North Dakota, trauma centers continue to be a vital part of the rural health-care system with an increasing role in ensuring evidence-based practices and appropriate transfers to definitive care. **As a trauma center, you owe your community the highest quality service possible** no matter where you are within the state of North Dakota.



YOUR PATIENTS EXPECT IT!

Most people don't think about trauma care until they need it. But **when an injury does occur, they assume that a hospital will be equipped to meet their needs and care for them in a timely manner** – even in the most rural and remote parts of North Dakota. This expectation assumes that someone within the trauma center is monitoring to ensure that necessary equipment is available for any age, providers and nurses are appropriately trained, and everything is ready in a moment's notice.

IN TRAUMA, BEST POSSIBLE CARE IS THE ONLY OPTION!

Performance improvement is the word we use to talk about ensuring that the right patient gets the right care, in the right amount of time, whatever the injury may be. Performance improvement is about knowing how good your trauma center is and exactly why, and how, you can make the claim that your care is optimal.

Trauma Center DEMANDS

- ✓ RIGHT LEADERSHIP
- ✓ RIGHT PEOPLE
- ✓ RIGHT COMMUNICATION
- ✓ RIGHT ATTITUDE
- ✓ RIGHT EQUIPMENT
- ✓ RIGHT PROCEDURES
- ✓ RIGHT SKILLS
- ✓ RIGHT TIME

QUALITY IS...

DELIVERING THE SERVICE your patients want and need, **EVERY TIME.**

PERFORMANCE IMPROVEMENT Is Not Just a Buzzword

For some people, performance improvement is just a buzzword used by statisticians, MBA types and CEOs. This may be because quality is difficult to define. Most of us can easily describe the differences between good quality and poor quality when it comes to daily living things, such as driving skills or cooking. But what about your trauma program? How do you know if you are providing good quality or poor quality trauma care?

ABOUT THIS KIT

This performance improvement kit was designed to help you identify some of the basic attributes that will contribute to a good quality trauma program. It also is designed to get you thinking about how to ensure that your trauma center consistently is providing the care that your trauma patients want and need.

WHY Should PERFORMANCE IMPROVEMENT Be an IMPORTANT Part of Your Trauma Program?

Current health-care imperatives emphasize doing more with less and doing it better and faster. Although this may be difficult to translate to the care of some trauma patients, an evidence-based approach presents more meaningful criteria against which our trauma care can be measured. Three recommendations to begin this process are:

1. **Determine performance indicators.**
2. **Measure performance.**
3. **Disseminate performance information.**

Rural hospitals in North Dakota should use these three recommendations as the basic elements for building a Performance Improvement Program.

When applied as a continuous process, the rewards can be great!

American College of Surgeons; Committee On Trauma; Resources For Optimal Care of the Injured Patient, 2006.

**A PERFORMANCE IMPROVEMENT PROGRAM IS
THE SIMPLE COMMITMENT TO ENGAGE IN ACTIVITY TO:**

- **IDENTIFY** what's important.
- **MEASURE** what's important.
- **INFORM** others about how you are doing with what's Important.

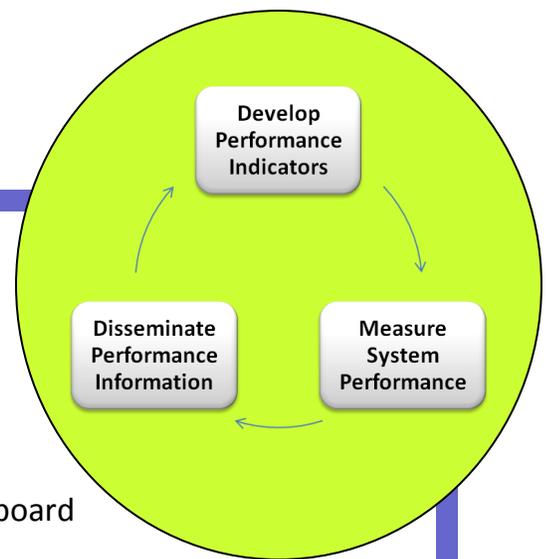
Performance INDICATORS

WHAT IS A PERFORMANCE INDICATOR?

A performance indicator is simply something you can measure that gives you information about how well you are doing. For example, when a trauma code is activated what is expected? First and foremost, providers should be available 24/7 to take care of the trauma patient and respond in a reasonable amount of time. This can simply be measured by documenting on the trauma flow sheet the time the trauma code was activated, the time the provider was notified, and the time the provider arrived.

Performance Indicators are often described as goals

For example, a performance indicator and goal may be as simple as “Trauma Leader/Provider response time is \leq 20 minutes after notification of Trauma Code Activation.”



SUGGESTED PERFORMANCE INDICATORS

Prehospital

Initial Trip Ticket: Was the initial EMS trip ticket present on the chart?

Scene Time: Was the EMS scene time \leq 20 minutes?

Appropriate Spinal Immobilization: Was a c-collar and backboard applied when indicated?

Airway: Was the airway maintained during transport to trauma center?

Trauma Code Activation: Was a trauma code activated by EMS when patient met trauma code activation criteria?

Hospital

Trauma Code Activation: Was the trauma code activated when patient met criteria?

Team Leader Response: Was the response time \leq 20 min after notification of trauma code?

Vital Signs: Was there at minimum two sets of VS including the GCS?

Transfer: Was the patient transferred in $<$ 2 hours from arrival to ED?

Airway: Was a definitive airway established in patient with a GCS of \leq 8?

ET Tube: Was the ET tube placement confirmed?

CT Scans: Were the CT scans necessary and did they delay transfer?

Level V Trauma Center: Was there documentation of an ATLS review for midlevel provider?

MEASURING Performance

HOW DO YOU MEASURE PERFORMANCE?

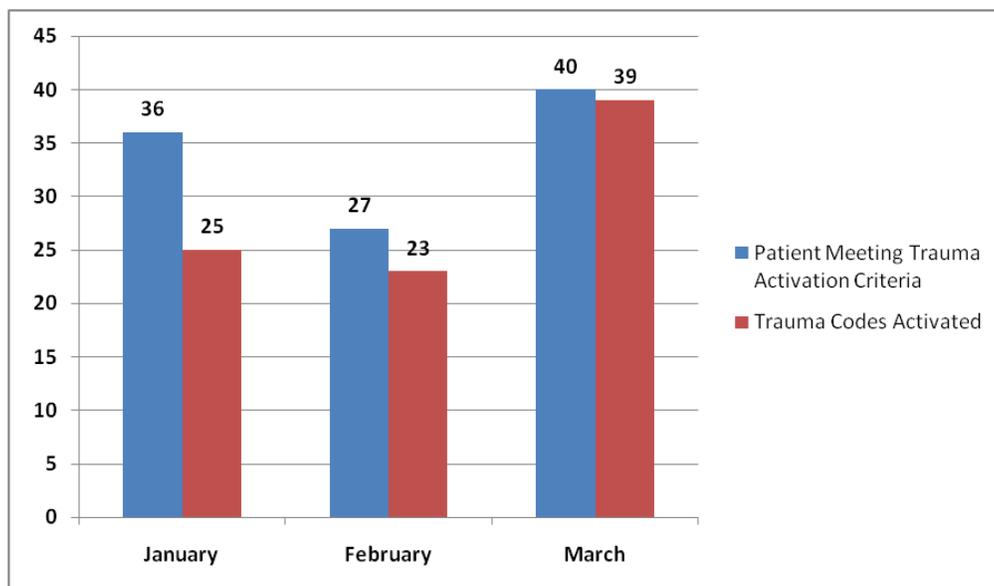
Measuring performance and keeping track of those measurement numbers allow you to compare how you are doing today with how you did in the past. Measuring performance also helps measure how you are doing in comparison to other trauma centers. Most importantly, measuring performance helps you see how you are doing with a goal you may set. If your goal is to activate all trauma codes that meet activation criteria 100 percent of the time, measuring and recording helps you see how you are doing — especially over time.

How would you measure whether or not trauma codes are being activated 100 percent of the time? For most rural trauma centers, this would be measured on a monthly or quarterly basis and would require two pieces of information:

1. **The total number of patients that met trauma code activation criteria.**
2. **The total number of trauma codes activated.**

These numbers could be obtained from your trauma flowsheet. To calculate your performance, divide the second number into the first number. For example, if you had 36 patients that met trauma code activation and activated 35 of them, it would be 35 divided by 36, or 97 percent. This is 3percent short of your goal. By looking at this number for a specific time period and over time, it can provide a clear numerical picture of your performance.

Performance information can be illustrated with simple graphs to show how well you are or are not doing over time. This trauma center measured trauma code activation (see graph below). The graph shows activation for the first quarter.



DISSEMINATING Performance Information

HOW DOES DISSEMINATING INFORMATION HELP YOUR TRAUMA PROGRAM?

If someone asks about your performance, you can specifically state how well you are doing. If you want to improve your performance, you know exactly how much you have to improve to meet the performance indicators.

WHO MAY BE INTERESTED IN PERFORMANCE IMPROVEMENT?

- EMS Services/Providers and their Medical Directors
- Hospital Administration
- Local Government Officials
- The Division of EMS and Trauma
- Neighboring Trauma Centers
- The General Public

A CAUTION:
Sharing performance improvement information does not include sharing patient information or the details of how your trauma program is addressing specific clinical issues. ALL patient information and detail of care that is provided should ALWAYS BE KEPT CONFIDENTIAL.

HERE IS HOW COLLECTING AND DISSEMINATING SPECIFIC DATA ABOUT YOUR TRAUMA PROGRAM CAN HELP

- If your performance is below what is expected, having concrete numbers can help you know what you have to do to improve.
- By informing stakeholders, the responsibility can be shared in making sure the appropriate care can be provided. This could be in the form of funding, staffing, education/training or equipment needs.
- When collection of data and reporting occurs continually, you are practicing continuous performance improvement.

WHAT CAN YOU DO When a Performance Goal Is Not Being Met?

What should you do if you find that trauma codes are not being activated when patients meet the activation criteria.? Here is a simple four-step process.

1. INVESTIGATE THE ISSUE

Make the issue a topic of exploration. **Learn all the facts!!!** Talk to EMS, providers and nurses and ask for input on the issue. Do not make the investigation about blaming or pointing fingers. **Seek to truly understand the issue.**

2. IDENTIFY SPECIFIC ISSUES IMPACTING PERFORMANCE

Specifically identify issues that may be impacting performance. For example, the issue may be that EMS, providers and nurses have not had the appropriate education or training on the criteria for activating trauma codes and do not recognize the importance of activating the codes. Make sure you look at how issues are impacting how people respond and behave.

3. TAKE APPROPRIATE ACTION

If you discover the performance problem is a system or process issue, **involve all EMS, providers and nurses in changing the system or process.** Provide necessary information, counsel or education and training to **ensure that necessary resources are available to meet the expected performance.**



4. CLOSING THE LOOP

After taking action and giving the action time to be incorporated, **measure the performance again and see if the action improves the performance.** If performance is improved, document and continue the actions. If performance is not improved, once again investigate, identify issues and take appropriate action.

How Can You BUILD a PERFORMANCE IMPROVEMENT PROGRAM Within Your Trauma Center?

To consistently know and report on how well you are doing, you need to make performance improvement part of your regular trauma program. Here is how you can build a performance improvement program.

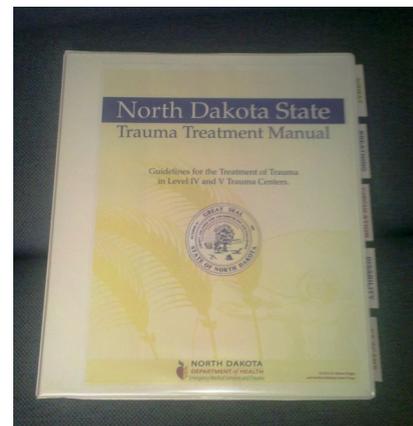
1. IDENTIFY WHO IS RESPONSIBLE

Appoint a specific person, whether it be the trauma coordinator or a performance coordinator to oversee the performance improvement process. **A dedicated physician should also be involved.**

Helpful Hint: This is a great reference for identifying areas of performance improvement

2. IDENTIFY AREAS OF PERFORMANCE

Charge the responsible person with identifying areas of performance that are important to the trauma program. The responsible person should be given access to any information or tools needed to evaluate the areas of performance such as EMS trip tickets, patient charts and the trauma registry.



3. START WITH A SIMPLE CHECKLIST

A checklist should be very simple and ask YES or NO questions about performance. Areas of performance may be, but not limited to those included on the following performance improvement checklist. As the performance improvement program is developed, the checklist can be refined and tuned to the individual needs of the trauma program. To get you going, a sample performance improvement checklist is provided on the next page.

THE PERFORMANCE IMPROVEMENT CHECKLIST

Chart #: _____ Physician/PA/NP: _____ Date: _____

PREHOSPITAL

- Initial trip ticket present on chart: Yes No NA
- Scene time \leq 20 minutes: Yes No NA
- Appropriate spinal immobilization: Yes No NA
- Airway maintained on arrival to hospital: Yes No NA
- Trauma code activated in field: Yes No NA

HOSPITAL

- Trauma code activated when met criteria: Yes No NA
- Team leader response time \leq 20 minutes: Yes No NA
- Transfer $<$ 2 hours from arrival: Yes No NA
- GCS \leq 8 and airway established: Yes No NA
- ET tube placement confirmed: Yes No NA
- Spinal precautions: Yes No NA
- No transport delays due to CT scans/x-rays being done: Yes No NA
- Documentation of review midlevel supervisor within 72 hours: Yes No NA

Comments:

Actions Taken:

Follow up:

Can you consistently answer YES to ALL QUESTIONS on the checklist?

PERFORMANCE IMPROVEMENT TRACKING FORM

North Dakota Level IV/V Trauma Centers PERFORMANCE IMPROVEMENT Tracking Form 2010

This form can help you track trends that may be occurring with certain indicators. It can be filled out on a monthly or quarterly basis depending on the number of trauma patients entering your ED.

Indicator below:	Patient Initials: Chart #:												
PREHOSPITAL													
<i>Initial trip ticket on the chart</i>													
<i>Scene time < 20 minutes</i>													
<i>Appropriate spinal immobilization applied</i>													
<i>Airway maintained enroute to trauma center</i>													
<i>Trauma Code activated in the field</i>													
HOSPITAL													
<i>Trauma Coded Activated when patient met criteria</i>													
<i>Trauma Team Leader response time ≤ 20 minutes</i>													
<i>Transfer time < 2 hours from arrival to ED</i>													
<i>GCS ≤ 8 and airway established</i>													
<i>ET tube placement confirmed</i>													
<i>Appropriate spinal immobilization applied/maintained</i>													
<i>No transport delays due to CT scans/x-rays</i>													
<i>ATLS physician review of midlevel provider within 72 hours</i>													

Performance Improvement Is a CONTINUOUS PROCESS

Remember, performance improvement is a continuous process that involves identifying the indicators that are important to the quality of the care you provide, measuring those indicators and reporting on them.

TALK TO OTHER TRAUMA CENTERS

Each trauma center has its own way of finding solutions. **MUCH CAN BE LEARNED FROM COMMUNICATING WITH OTHER TRAUMA CENTERS.**

The North Dakota Trauma System encourages communication between EMS, Trauma Centers, Trauma Coordinators, Physicians and Midlevel Providers to share successes and challenges.

Learning from each other often **PROVIDES IDEAS, SHORTCUTS AND BEST PRACTICES FOR IMPROVING YOUR OWN PERFORMANCE.**

FOR ADDITIONAL ASSISTANCE WITH YOUR PERFORMANCE IMPROVEMENT PROCESS,

CONTACT:

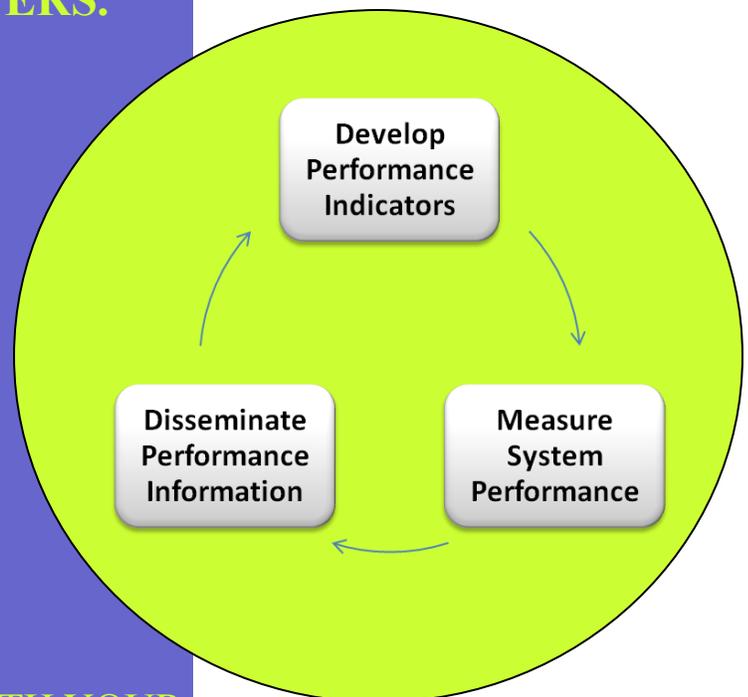
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