

# CAN YOU EFFECTIVELY SUPERVISE WHAT YOU DO NOT KNOW?

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PATCHOGUE NY





# SOCIETY OF TRAUMA NURSES

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THANK YOU FOR THE  
OPPORTUNITY

# OBJECTIVES

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1

Define critical terms

- Mapping, submission, concurrent collection, validation, Data dictionary

2

Utilize SWOT to assess registry functioning

3

Identify key resources to enhance performance

**NO FINANCIAL DISCLOSURES**

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OF COURSE I CAN!

I'M A TRAUMA NURSE!

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CAN YOU EFFECTIVELY SUPERVISE WHAT YOU  
DO NOT KNOW?



# WHAT GOT ME HERE

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- 25 years as TPM at Level I Trauma Center
- Currently at a Level III
- Maintained CSTR for 10+ years
  
- Faculty for the American Trauma Society's Trauma Registry Course
- Co-chair of the ATS CSTR Leadership group
- Conference planner for an annual trauma registry conference
- Talk to a lot of people about trauma registry

# WHAT I'VE HEARD

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- “They” don’t understand
- I don’t understand
- “We” got a ‘bad’ TQIP report
- The registry doesn’t have what I need, so I keep a spreadsheet
- I have no idea why this data is collected



# WHAT I'VE SEEN

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RANGE OF COMPLETE  
DISINTEREST TO  
MICROMANAGING

what's the  
opposite of  
supervise?



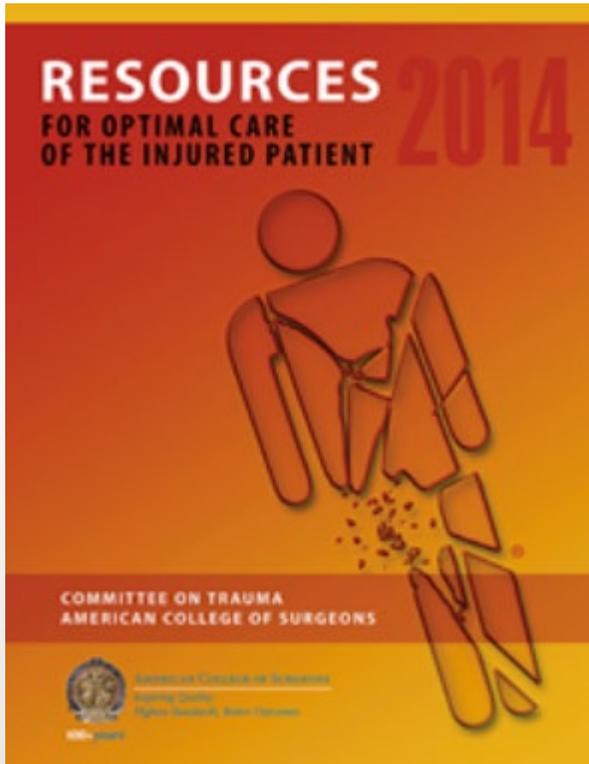
neglect, mismanage, follow,  
serve, abandon, disregard,  
forget, ignore, pass over



 Thesaurus.plus

# WHAT THE ACS SAYS

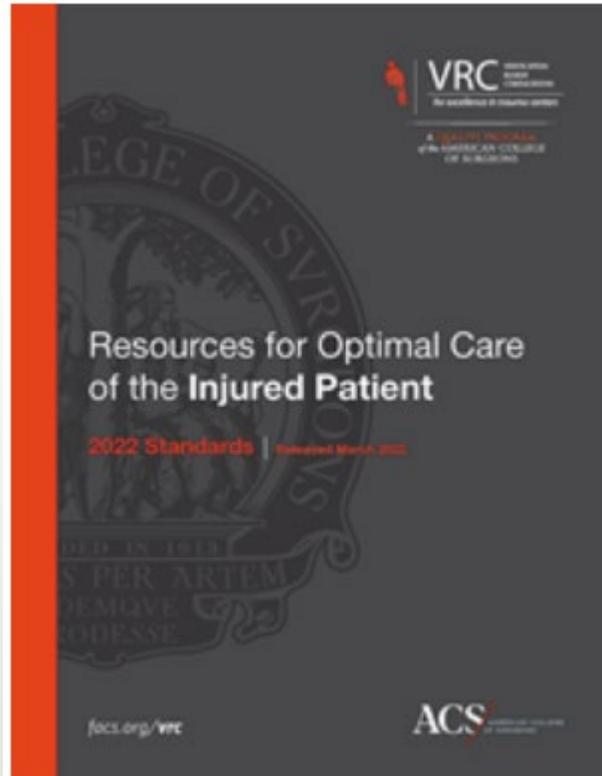
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Resources for Optimal Care of the Injured  
American College of Surgeons 2014

- TPM 'should' supervise
- ..collection, coding, scoring and developing processes for validation of data
- Design registry to facilitate PI, trend reports and research
- Annual field review
- 8 hours/year of CEU
- Amount of time and effort to maintain....should not be underestimated

# AND NOW THE GREY BOOK



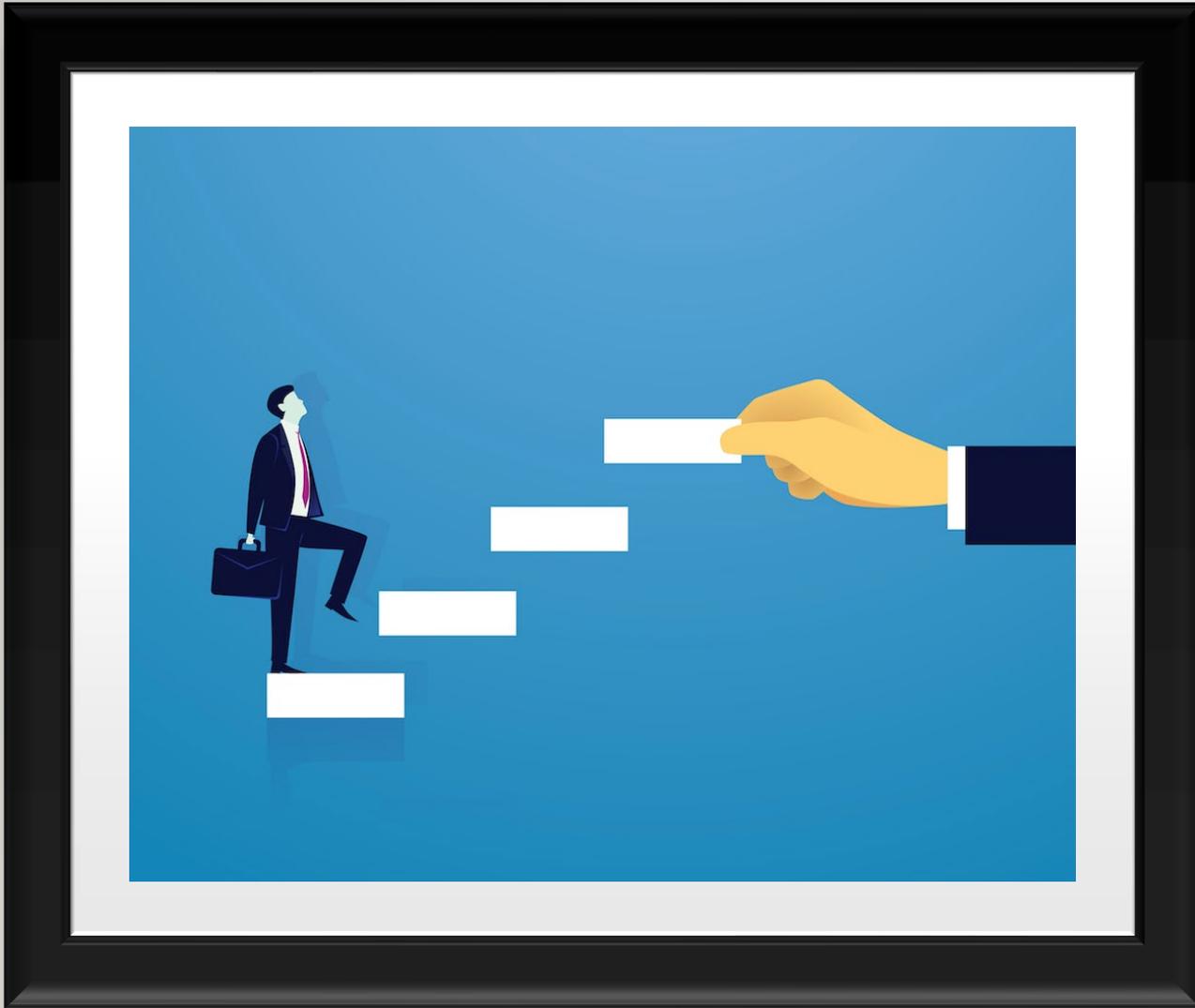
Resources for Optimal Care of the Injured  
American College of Surgeons 2022

- High-quality data are critical to inform quality improvement and measure the performance of trauma programs. This is dependent on having well-trained registry personnel working closely with trauma leadership. High-quality data also allow for focused quality improvement activities and maximize the value of trauma benchmarking programs.

## KEEP IN MIND

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- No direct career path to TPM role
- No direct career path to Trauma Registrar role

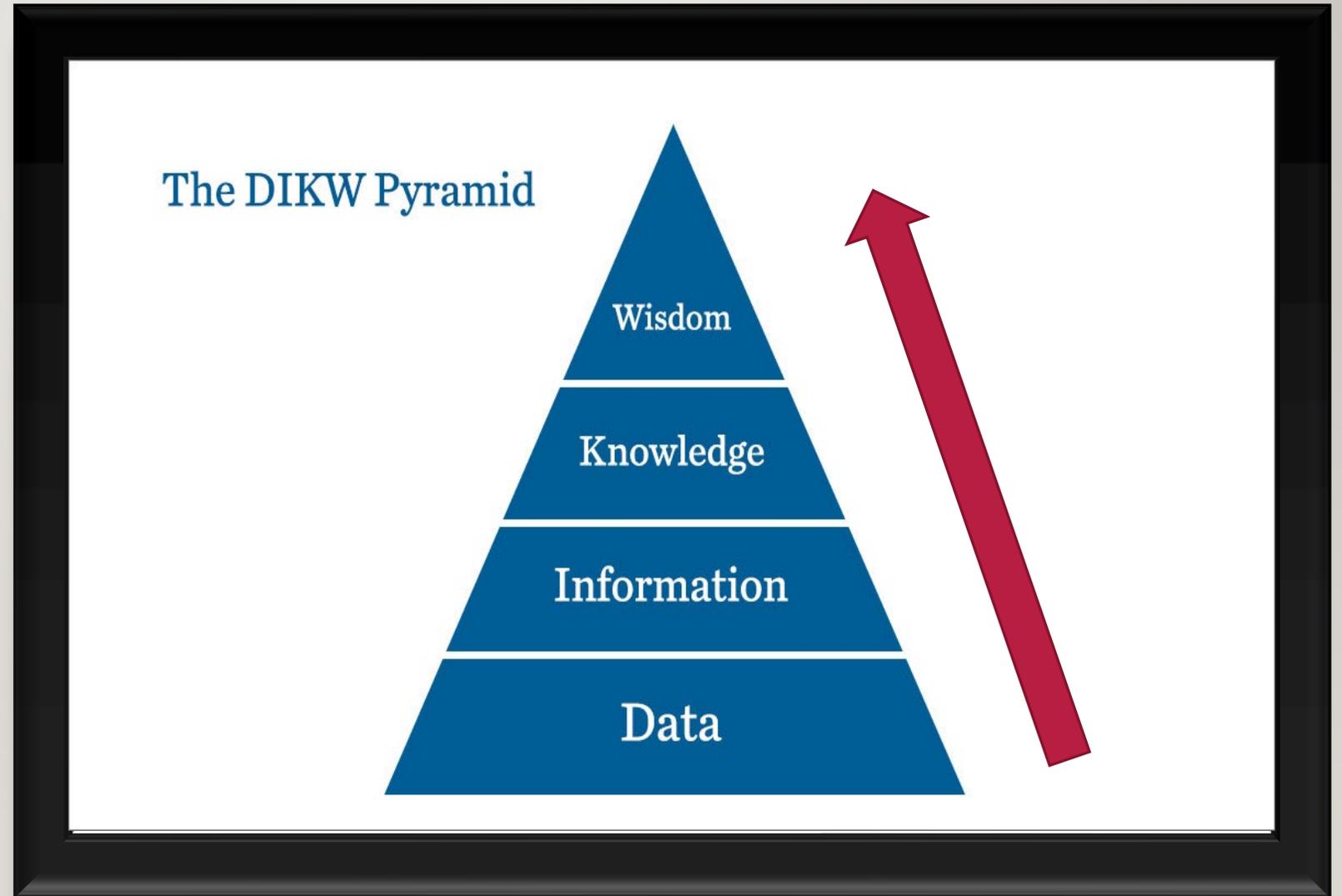


# TRAUMA REGISTRY STAFF

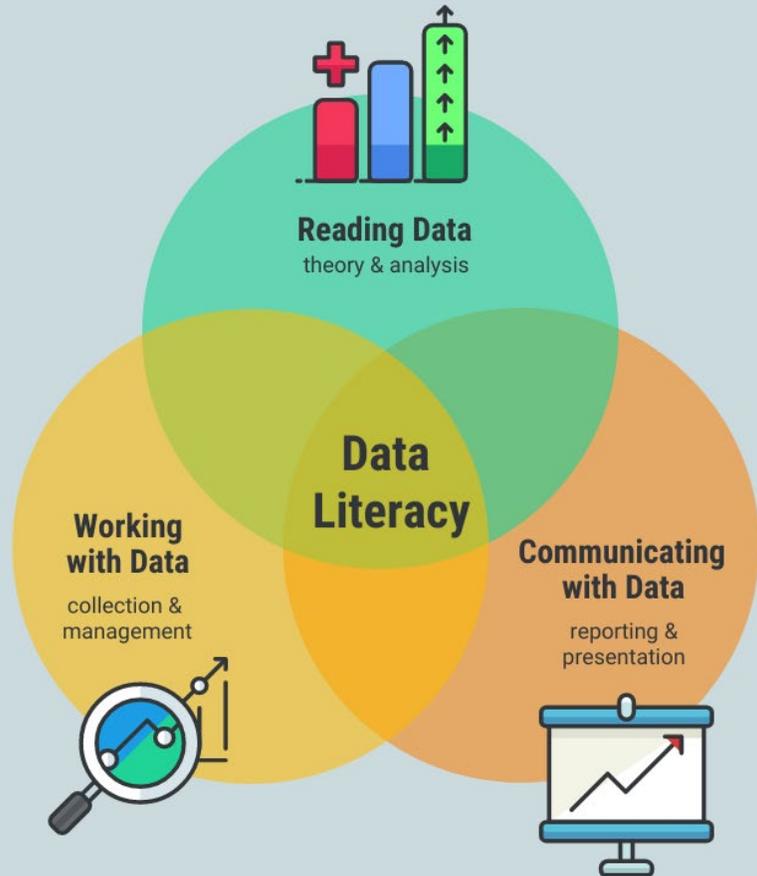
- Varying backgrounds and educational preparation
- Varying ages, work expectations, etc.
- Varying registry software programs
- Varying responsibilities
  - Case inclusion
  - Assignment of hospital events
- Varying work situations
  - Remote or on-site or hybrid
  - Solo or part of a team
  - Only registry or involved in other aspects of the trauma center



WHERE WE  
SHOULD BE  
HEADING



## What is Data Literacy?



Read full blog post at: [venngage.com/blog/data-literacy](https://venngage.com/blog/data-literacy)

 VENNGAGE

## DATA LITERACY

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- The ability to read, write and communicate data in context (Gartner)
  - Understanding data sources and constructs
  - Analytic methods and techniques applied
  - Ability to describe use, application and value

# DATA LITERACY

## TRAUMA REGISTRY

Ability to engage with data

it exists

it is stored

it has rules (governance)

Willingness to learn

see the value

Confidence to engage

Acquire and construct meaning

Communicate meaning

- 80% completion within 60 days of DC
- Secure storage
- NTDS standards
- Willingness to learn
- Confidence in the data
- Ability to construct and communicate meaning



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TEN TIPS TO GET THERE

# TEN TIPS TO GET THERE

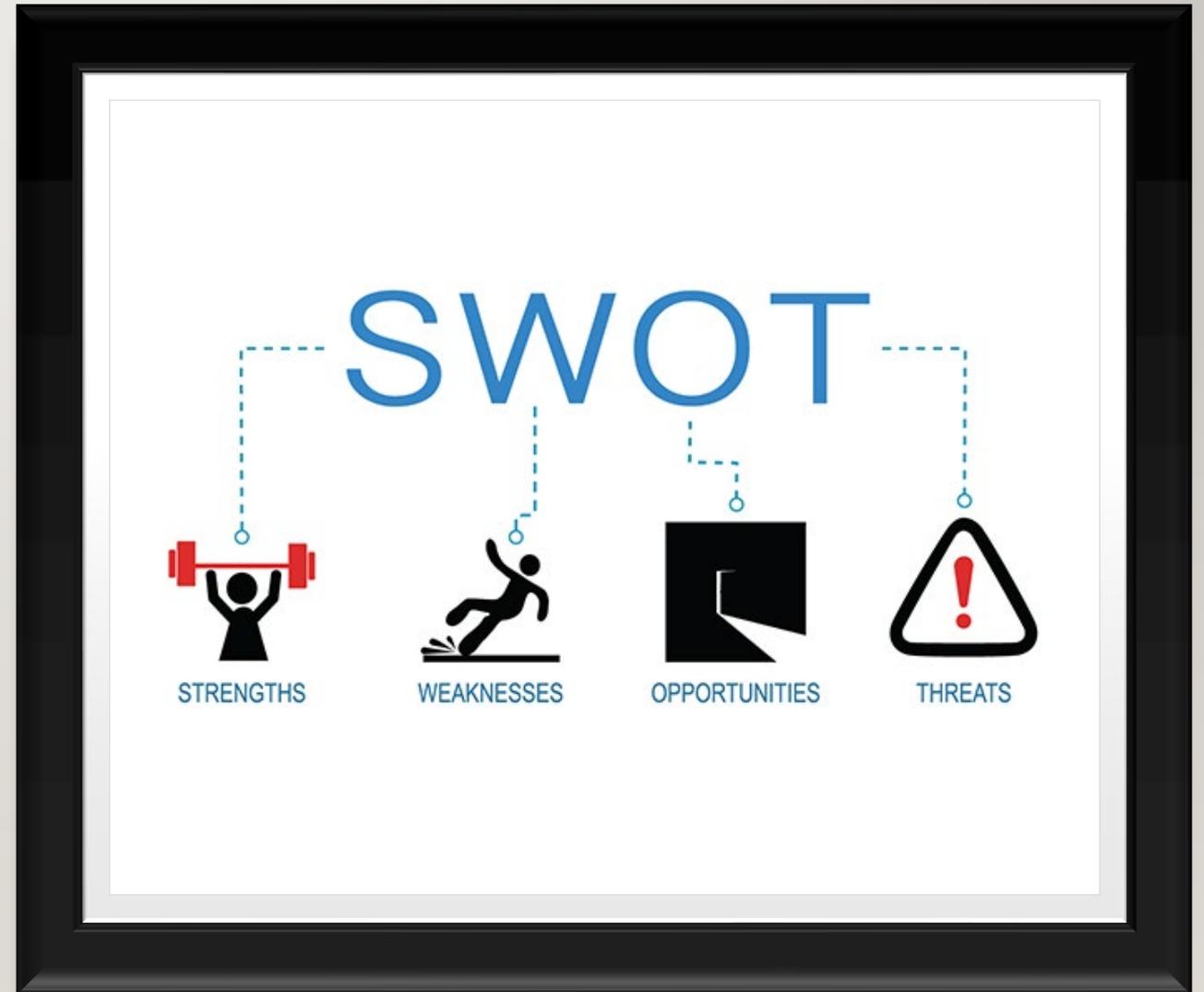
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## I. SWOT Analysis

# THE GOOD, THE BAD AND THE UGLY

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- INTERNAL
  - Strengths
  - Weaknesses
- EXTERNAL
  - Opportunities
  - Threats



# CHECK THE ACS STANDARDS

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- Running on time?
  - 80% within 60 days of discharge
- Staffed correctly
  - 0.5FTE per 200-300 annual patient entries
- Trained and credentialed
  - At least one registrar with current CAISS certification
  - ICD10CM Course
  - Registrar Course
  - 8 hours per year of continuing education
- Quality data
  - TQIP data reports show little missing
  - Validation plan in place

<u>Strengths</u>	<u>Weaknesses</u>
<u>Opportunities</u>	<u>Threats</u>

Strengths

Registrars are well trained in AIS  
Staffed with 3.0 FTE for 1750 records

Weaknesses

Inadequate clinical documentation  
to accurately code injury  
  
No staff with CAISS certification

Opportunities

Electronic data transfer

Threats

New ACS certification/education  
requirements  
  
Under reporting of injury/pre-  
existing conditions



Strengths

TQIP data quality reports are good

Weaknesses

Staff turnover  
Case volume  
Running 5-6 months behind

Opportunities

Hire and train new staff to a new model

Threats

Recruitment and retention of staff



# TEN TIPS TO GET THERE

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1. SWOT Analysis
2. Educate yourself

# NEED TO STEP OUTSIDE

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Fear

of looking silly,  
of the registrar  
knowing more than  
you,  
of not knowing the  
answer



# NEED TO KNOW

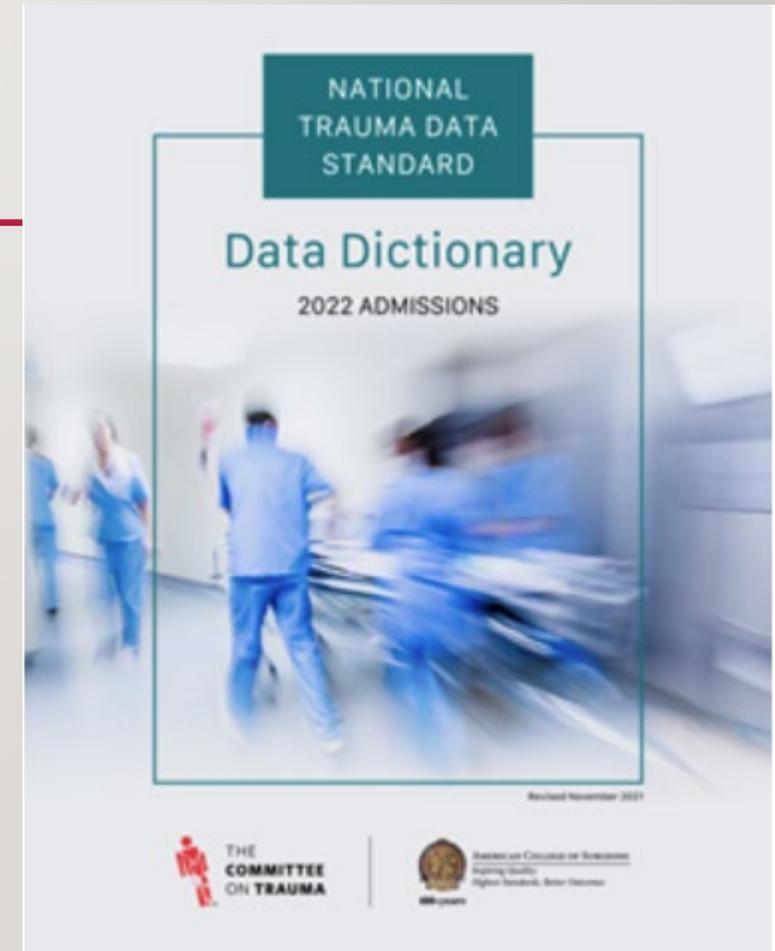
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- National Trauma Data Standard (NTDS)
- National Trauma Data Bank (NTDB)
- Trauma Quality Improvement Program (TQIP)

# NEED TO KNOW

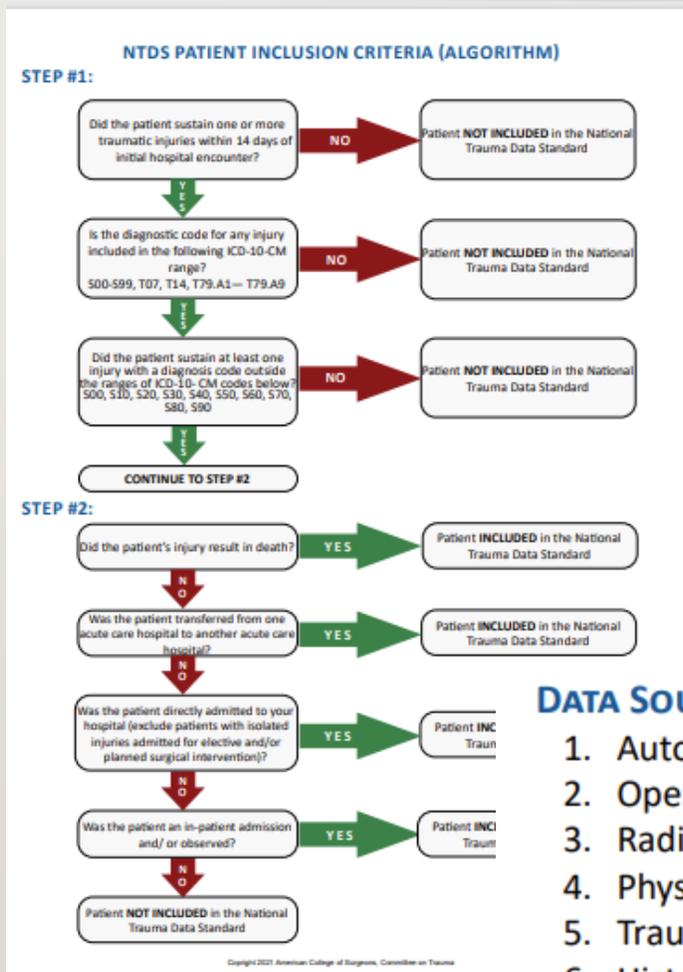
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- National Trauma Data Standard (NTDS)
  - Annual release of fields
  - Field definitions
  - Data hierarchy
  - The RULES
- National Trauma Data Bank (NTDB)
  - Data bank of registry records
- Trauma Quality Improvement Program (TQIP)
  - National benchmarking program
  - Process of care measures



# NEED TO KNOW

- Data inclusion criteria
  - Not as clear cut as it sounds
- Data hierarchy
  - Where do **we** find this information?
- Data rules
- Data mapping



## DATA SOURCE HIERARCHY GUIDE

1. Autopsy/Medical Examiner Report
2. Operative Reports
3. Radiology Reports
4. Physician's Notes
5. Trauma Flow Sheet
6. History & Physical
7. Nursing Notes/Flow Sheet
8. Progress Notes
9. Discharge Summary

# NEED TO KNOW

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- Data inclusion criteria
- Data hierarchy
- Data rules
  - Definitions
  - Details
- Data mapping
  - I=Male=M

## ADDITIONAL INFORMATION

- Patients who have undergone a surgical and/or hormonal sex reassignment should be reported using their current assignment.

## DESCRIPTION

The patient's sex.

## ELEMENT VALUES

1. Male

2. Female

3. Non-binary

# TEN TIPS TO GET THERE

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1. SWOT Analysis
2. Educate yourself
- 3. Volume expectations**

# THE QUESTION ALWAYS IS:

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- How many records a day? A week? An hour?
- What is 'your' volume expectation?
- I get it, really I do
- But, no two records are the same.
  - Go back to your SWOT analysis, and think about your cases, and your registrars



# ALL CHARTS ARE NOT CREATED EQUAL

- Careful when setting standards
  - Pre-hospital
  - Transfers
  - Complications
  - Length of stay
  - Injury severity
  - Surgical procedures
  - Particular practitioners
- Know your center

*“There is no such thing as an 8-hour chart”*

*.....Jane McCormack*

# CASE VOLUME

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- 80% within 60 days
- 0.5 FTE per 200-300 records
- How is their day being spent? What is the quality of the completed work?

# TEN TIPS TO GET THERE

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1. SWOT Analysis
2. Educate yourself
3. Volume expectations
- 4. Provide the resources**

# REGISTRARS NEED:

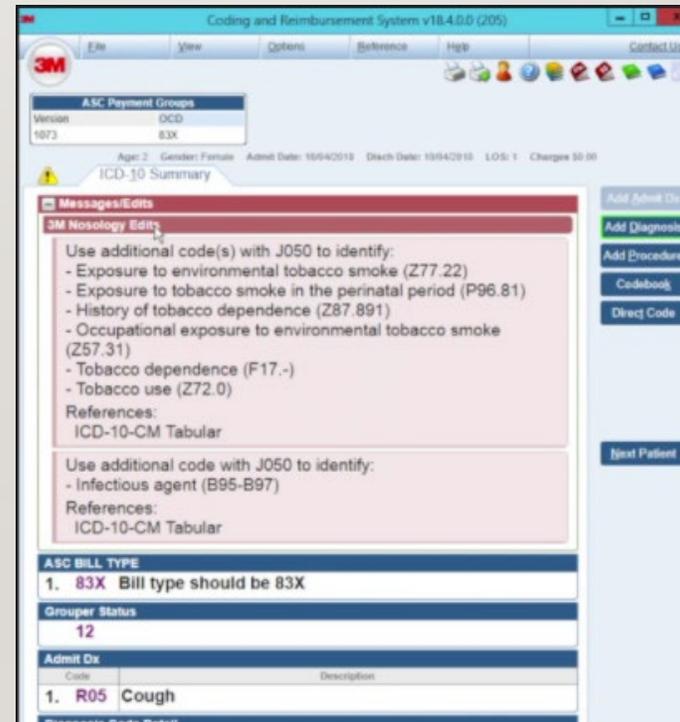
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- Adequate work-space
- Large dual monitors
- Access to every system within your center
  - Radiology reports, pathology reports, ED records, EMS records, etc.
- High speed internet

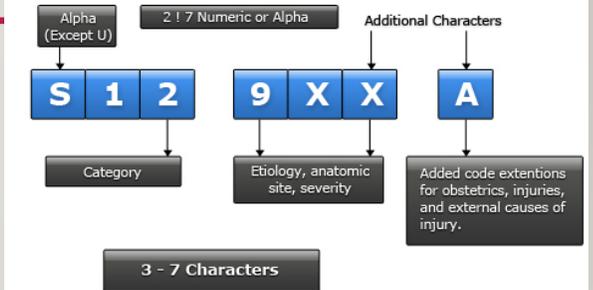


# CODING REFERENCES

- AIS
- ICD-10 CM
- ICD-10 PCS
- Books and/or electronic
- NTDS



## ICD-10-CM Diagnosis Structured Format



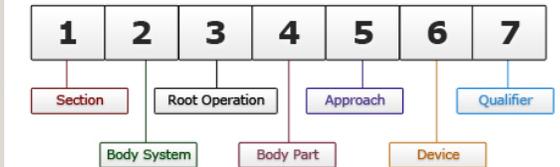
## ICD-9-CM Procedure Structured Format



## ICD-10-PCS Procedure Structured Format



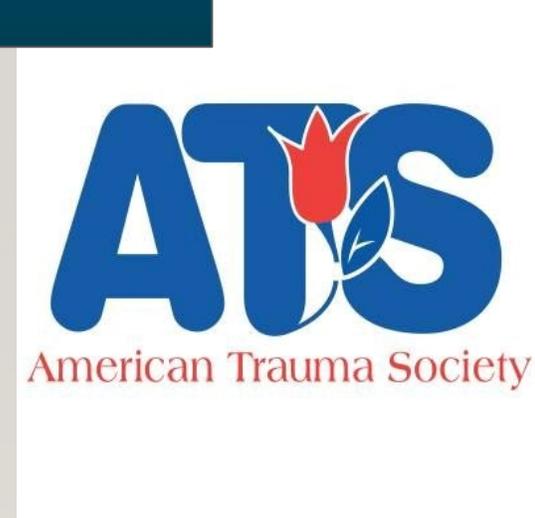
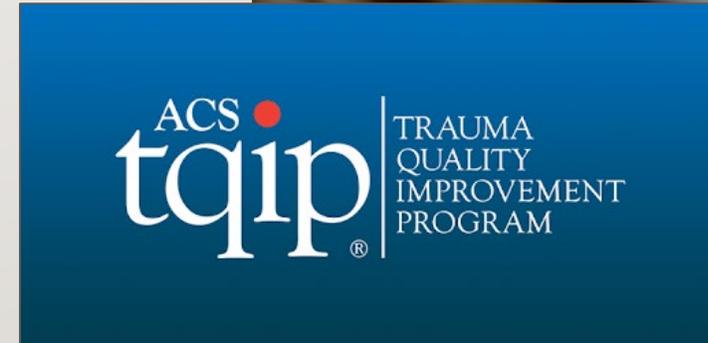
## ICD-10-PCS - Structured Format Characters (Medical/Surgery)



# ACCESS TO EDUCATION

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- Registrar course
- ICD-10-CM course
- AIS course
- Ongoing continuing education
  
- Grand rounds, annual conferences, virtual programs
  
- Google



# TEN TIPS TO GET THERE

---

1. SWOT Analysis
2. Educate yourself
3. Volume expectations
4. Provide the resources
- 5. Realistic validation**

# TQIP REPORT: NOT WHERE YOU WANT TO BE

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YES, the first step is data validation



BUT, understand how that sounds to a registrar



CONSIDER, data validation to include clinical documentation

# DATA VALIDATION

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- Critical process for trauma center
  - Ongoing processes
- Set realistic expectations for validation
  - Focus on 'key' fields
  - Ensure that the process is 'fair' and 'reasonable'
  - Factor it into workload

# TEN TIPS TO GET THERE

---

1. SWOT Analysis
2. Educate yourself
3. Volume expectations
4. Provide the resources
5. Realistic validation
- 6. Electronic data transfer**

# ELECTRONIC DATA TRANSFER

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- It is 2022
- We need to get there
- Some reluctance from registrars??
- “Role change from hunter gatherer to data validator.”  
.....Garrett Hall



# TEN TIPS TO GET THERE

---

1. SWOT Analysis
2. Educate yourself
3. Volume expectations
4. Provide the resources
5. Realistic validation
6. Electronic data transfer
7. **Clinical liaison**

# DID YOU KNOW?

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- Length of unconsciousness after TBI affects injury severity?
  - Must be documented by a physician/extender
- Grade of solid organ injury, number and location of rib fractures, displacement of fractures, all affect injury severity??
- Estimated blood loss, size of hematoma, length and depth of lacerations affect injury severity?

# FOLLOWING THE RULES

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- Access to the clinical team
- Ability to ask questions
  - Have a conversation
  - “Could someone please document the number of ribs fractured?”
  - “Yes, ‘so and so’ will.”

# THE EMR CONTAINS CONFLICTING INFORMATION

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Cutting and pasting  
don't help to clarify  
things

You can help by  
having clear data  
hierarchy guidelines  
for registrars

# TEN TIPS TO GET THERE

---

1. SWOT Analysis
2. Educate yourself
3. Volume expectations
4. Provide the resources
5. Realistic validation
6. Electronic data transfer
7. Clinical liaison
- 8. Respect the time**

# THERE ARE ONLY 8 HOURS IN A DAY

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Review admit logs  
for cases  
1 hour

Clinical rounds  
1-2 hours

Attend a meeting  
1-2 hours

Data  
Validation/correction  
1 hour

You stop in to chat  
1 hour

Case Completions  
1.5 to 4.5 hours

# EVERY FIELD ADDS TIME

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- It's easy. It's right there.
- Yes but,
  - Adds to error, download issues, validation problems



# ANNUAL REVIEW OF EVERY FIELD

- Screen shots
- Highlighter pens
- What are we doing with this field?
- Why are we collecting it?
- Is it duplicative?

The screenshot shows a medical record form titled "Injury Details and First PCR/Vital Page". The form is divided into several sections:

- Medical Record No.:** Includes fields for Last, First, and City of Residence.
- Admission Date / Time:** Fields for date and time.
- PCR No. / First PCR:** Fields for PCR No., Transport Agency, Transport Mode, Date Called, Time Called, Time Left (Disp-) for Scene, Time Arrived at Scene, Time Departed Scene, Destination Time, Actual Destination, and Transport Type.
- Injury Details:** Fields for Injury Date, Injury Time, State, Country, Zip of Injury, City of Injury, County of Injury, Cause of Injury, Fall Height, and Injury Class.
- E-Codes:** A table with columns for ICD-10 E-Code, ICD-10 E-Code Text, Activity ICD10, ICD M01, and ICD.
- Location of Injury ICD10:** A dropdown menu.
- Work Related Injury?** A checkbox.
- Time between Injury and ED:** A dropdown menu.
- Protective Devices:** A dropdown menu.
- Airbag Deployment:** A dropdown menu.
- Child Specific Restraint:** A dropdown menu.
- Cardiac Arrest?** A dropdown menu.
- Field Treatments:** A table with columns for Treatment, PCR Form, and Type.
- Vitals No. / First Vitals:** Fields for Which PCR Form?, Time of Vitals, Respiratory Rate, %SAT O2, Pulse Rate, Systolic BP, Diastolic BP, Eye, Verb, Motor, GCS, Scene Vitals?, and EMS Status?.

The form is annotated with yellow and pink highlighter pens, indicating specific areas of interest for the annual review.

# DOING DOUBLE WORK

- PI filter for times that are already collected and can be obtained in a report
  - Laparotomy >2 hours after arrival
  - Antibiotics >60 minutes for open fracture cases
  - GCS <8 without endotracheal tube

# TEN TIPS TO GET THERE

---

1. SWOT Analysis
2. Educate yourself
3. Volume expectations
4. Provide the resources
5. Realistic validation
6. Electronic data transfer
7. Clinical liaison
8. Respect the time
- 9. Respect the role**

# WORDS MATTER

- Trauma Registry Professional
  - ‘ they review the EMR to assign injury severity, code treatments, and complications and report outcomes to national organizations’
- Start reports with Data Quality
  - “Very little missing data”, “Registry running on-line”
- Include registry data validation on quality dashboards

# PROFESSIONALISM

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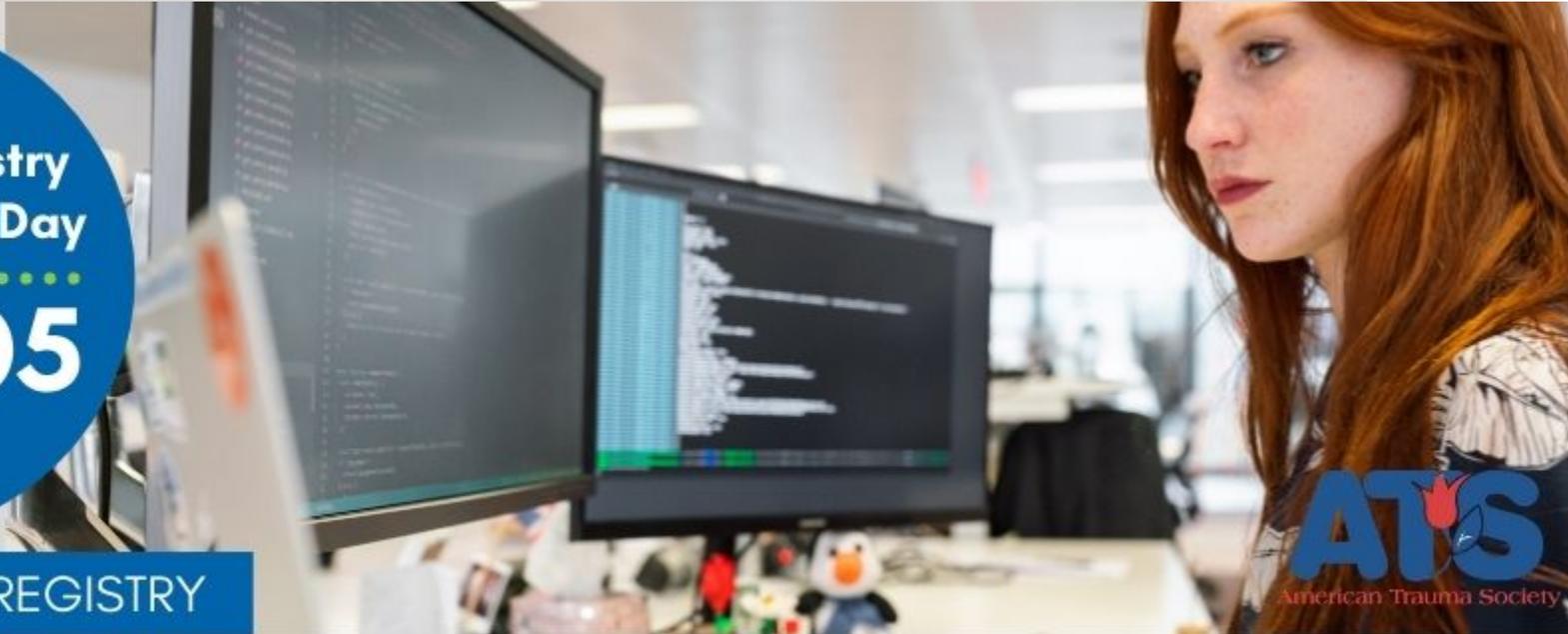
- National Certification
- Career path for advancement



Trauma Registry  
Professionals Day

.....  
**May 05**

#THISISTRAUMAREGISTRY



**ATS**  
American Trauma Society

# RECOGNIZE EMOTIONAL TOLL

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- Burnout
- Compassion Fatigue
- Isolation
- Heightened awareness of injury (paranoia)

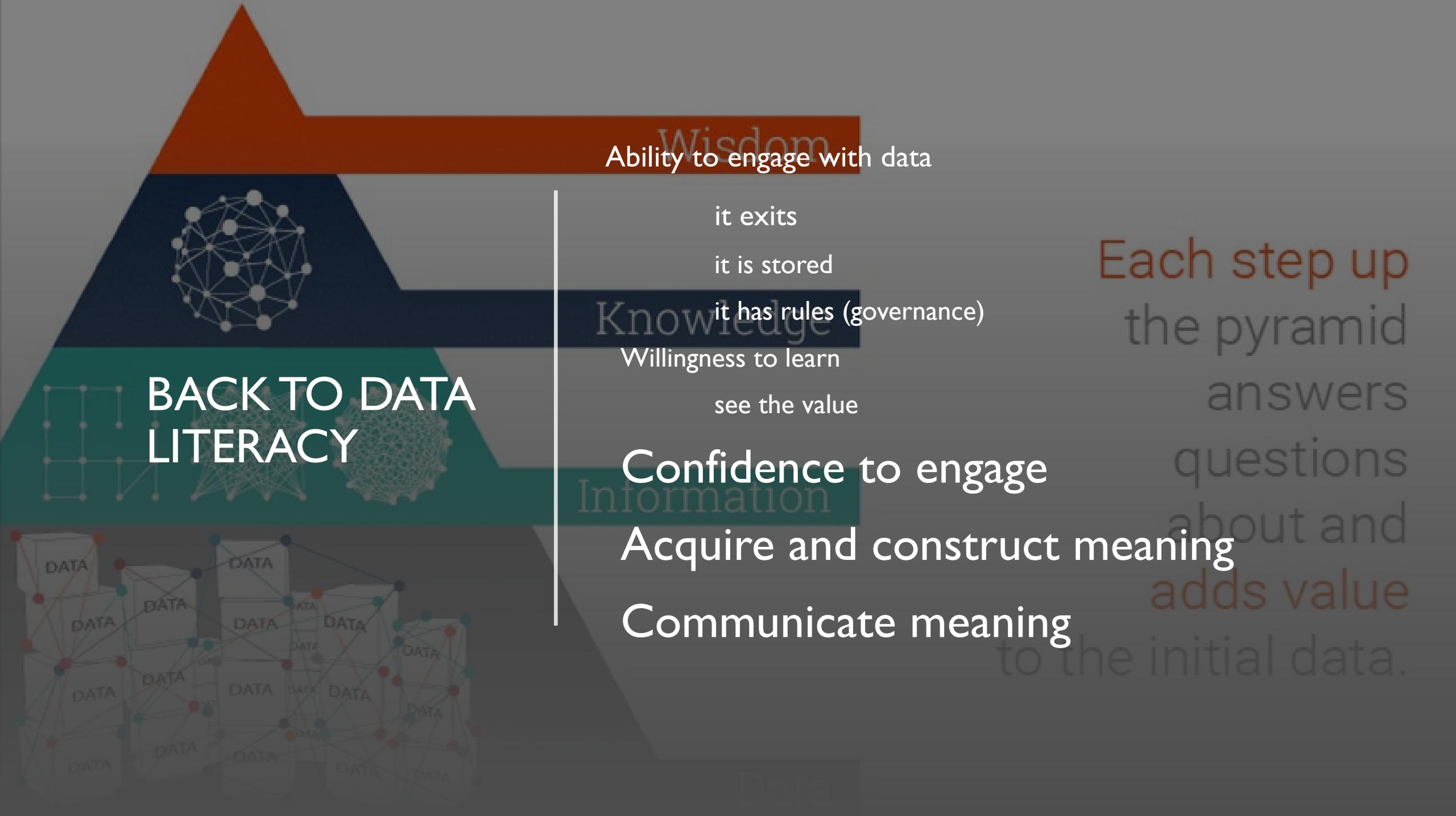
# TEN TIPS TO GET THERE

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8. Respect the time
9. Respect the role

**10. Use the data**





# BACK TO DATA LITERACY

Ability to engage with data

it exists

it is stored

it has rules (governance)

Willingness to learn

see the value

Confidence to engage

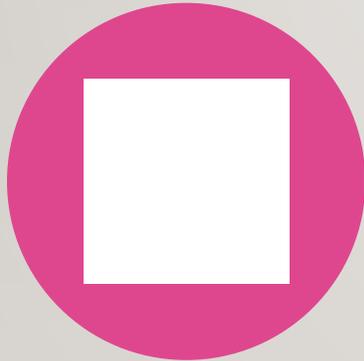
Acquire and construct meaning

Communicate meaning

Each step up  
the pyramid  
answers  
questions  
about and  
adds value  
to the initial data.

# COMMUNICATE THE MEANING

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TRUSTED DATA



CLEAR MESSAGE



EFFECTIVE  
PRESENTATION STYLES

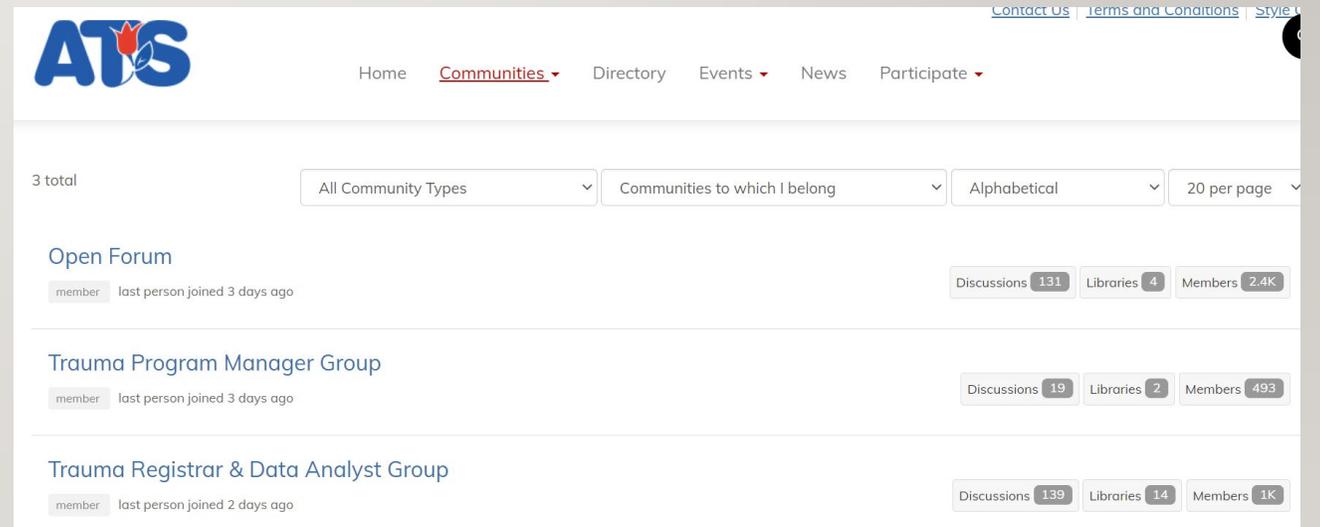
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8. Respect the time
9. Respect the role
10. Use the data

# RESOURCES

- NTDS
  - [NTDS 2021 Data Dictionary \(facs.org\)](https://facs.org)
- TQIP educational programs and conferences
  - [Trauma Quality Improvement Program \(TQIP\) \(facs.org\)](https://facs.org)
- American Trauma Society
  - [American Trauma Society \(amtrauma.org\)](https://amtrauma.org)
- Trauma Center Association of America (TCAA)
  - [Online Education - Trauma Center Association of America \(TCAA\) \(traumacenters.org\)](https://traumacenters.org)
- Registry software vendors
- Grand rounds



The screenshot shows the ATIS website interface. At the top left is the ATIS logo. To the right of the logo is a navigation menu with links for Home, Communities (with a dropdown arrow), Directory, Events (with a dropdown arrow), News, and Participate (with a dropdown arrow). In the top right corner, there are links for Contact Us, Terms and Conditions, and Style Guide. Below the navigation is a search bar and a list of community filters: All Community Types, Communities to which I belong, Alphabetical, and 20 per page. The main content area displays three community listings:

- Open Forum**: member, last person joined 3 days ago. Discussions: 131, Libraries: 4, Members: 2.4K.
- Trauma Program Manager Group**: member, last person joined 3 days ago. Discussions: 19, Libraries: 2, Members: 493.
- Trauma Registrar & Data Analyst Group**: member, last person joined 2 days ago. Discussions: 139, Libraries: 14, Members: 1K.

# THANK YOU!

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- To the Society of Trauma Nurses
- To you, the audience
- To the trauma registry professionals who collect the data we rely on to run our trauma centers
  
- [Jmccormack@licommunityhospital.org](mailto:Jmccormack@licommunityhospital.org)
- [Jane.mccormack@nyulangone.org](mailto:Jane.mccormack@nyulangone.org)