

# **Emergency and Trauma Registries**



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**National Committee on Vital and Health Statistics  
(NCVHS)**

**National Health Information Infrastructure Workgroup  
(NHII)**

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- **“We can’t win at home. We can’t win on the road. As general manager, I just can’t figure out where else to play.”**

- 1992 Pat Williams, Orlando Magic







# Registry Experience

## UNC

- \* North Carolina PreHospital Medical Information System (PreMIS)
- \* North Carolina Emergency Department Database (NCEDD)
- \* North Carolina Trauma Registry
- \* North Carolina Stroke Registry
- \* UNC Highway Safety Research Center

## Grants and Contracts

- \* National EMS Information System  
[www.nemsis.org](http://www.nemsis.org)
- \* National Trauma Registry for Children
- \* National Registry for CPR

# Local Implementation Experience



## EMS Agency

- \* PreMIS
- \* National EMS Information System

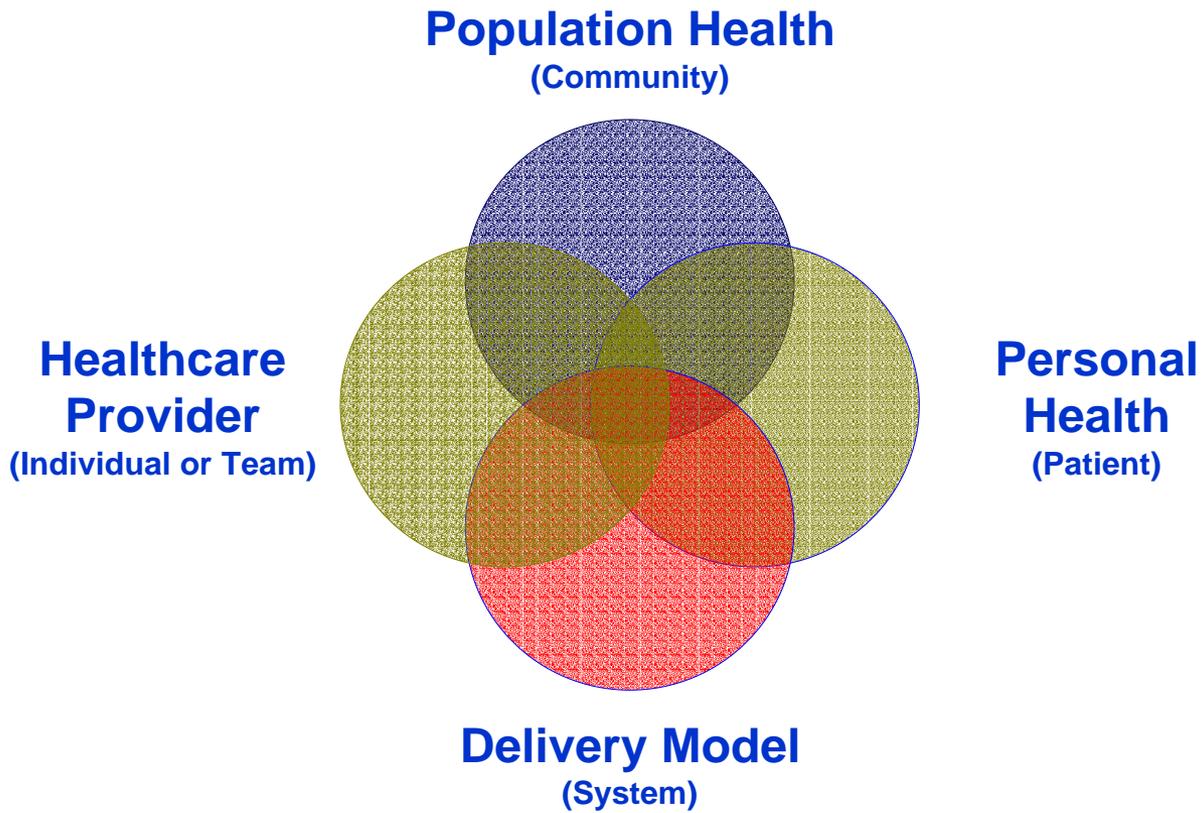
## Hospital

- \* NCCED
- \* NC Trauma Registry
- \* National Registry of CPR
- \* NC Stroke Registry

# Emergency and Trauma Registries

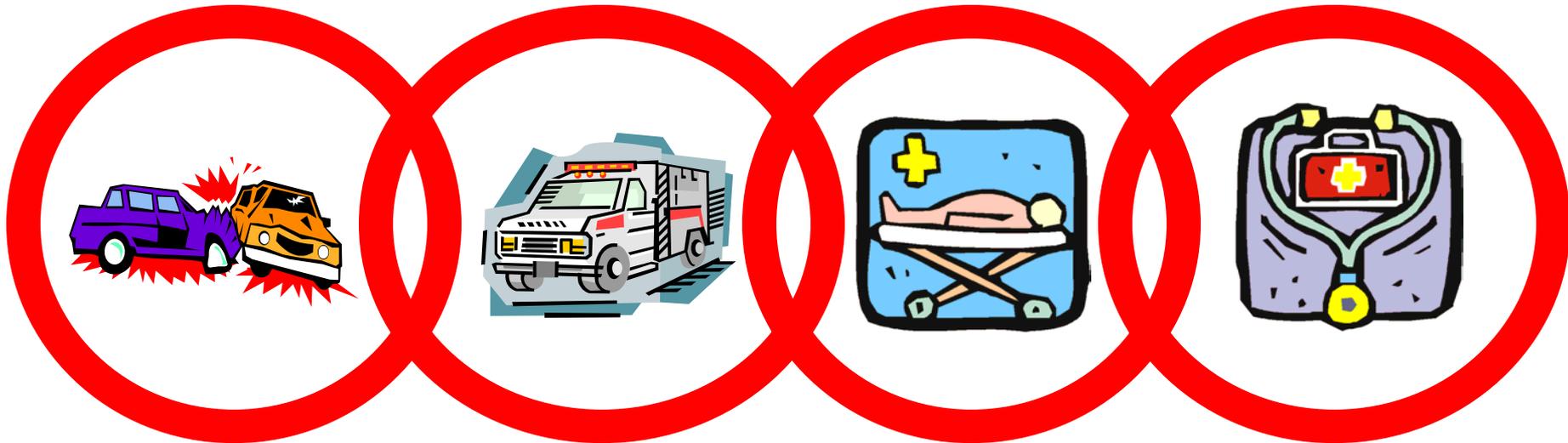
- \* EMS
- \* Trauma
- \* Emergency Department





# Information

## Chain of Survival



**Crash**

**EMS**

**ED**

**Hospital**

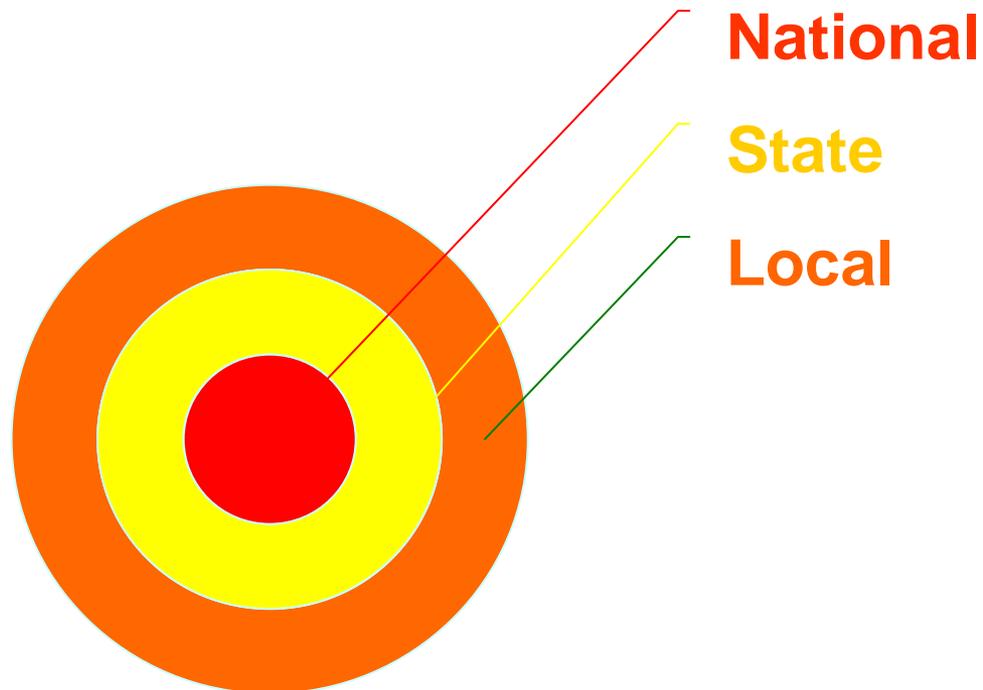
# Data Sources

- \* National
- \* State
- \* Local
- \* Linkage

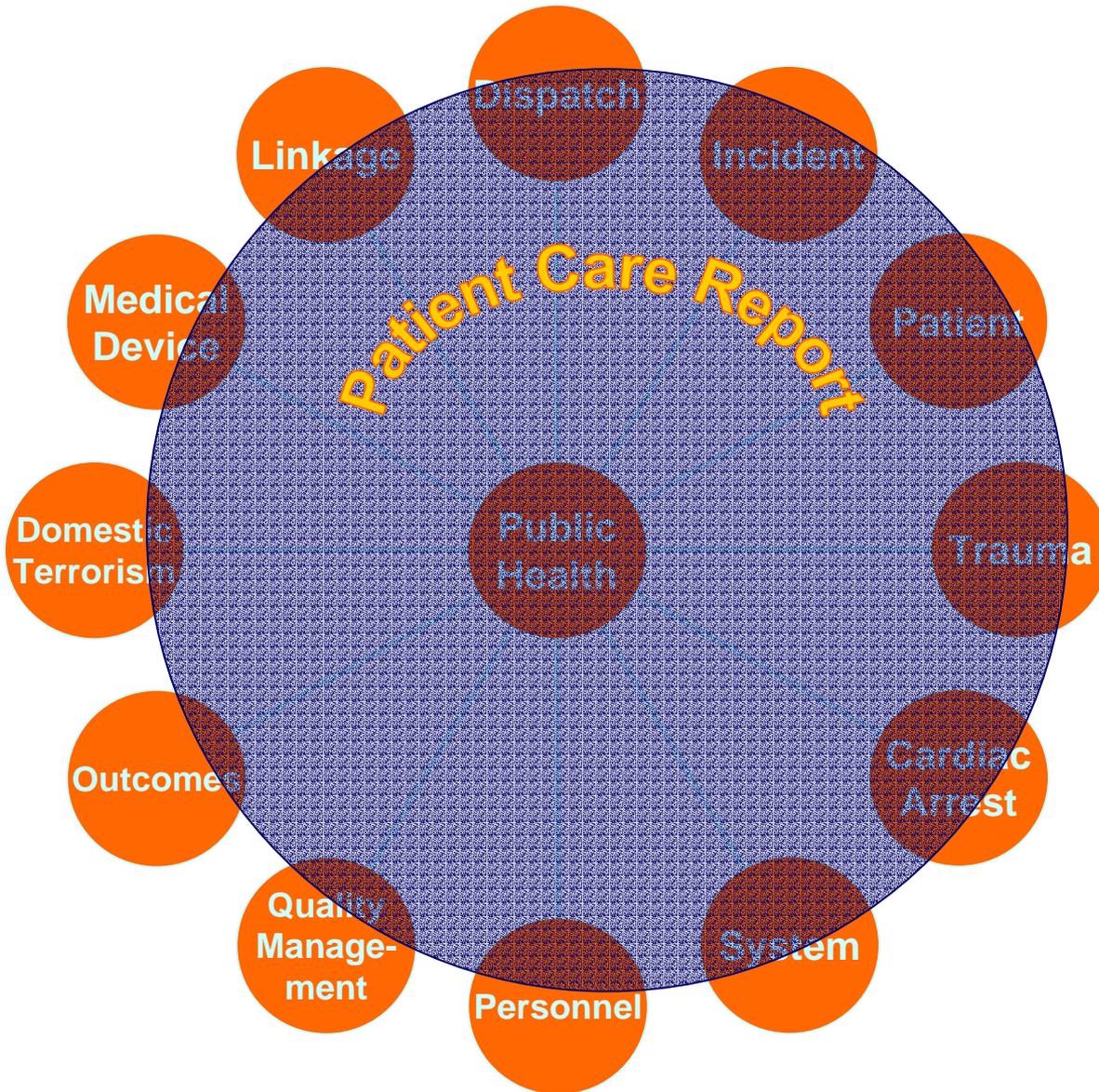




# Information Systems



# Data Components



# Consensus



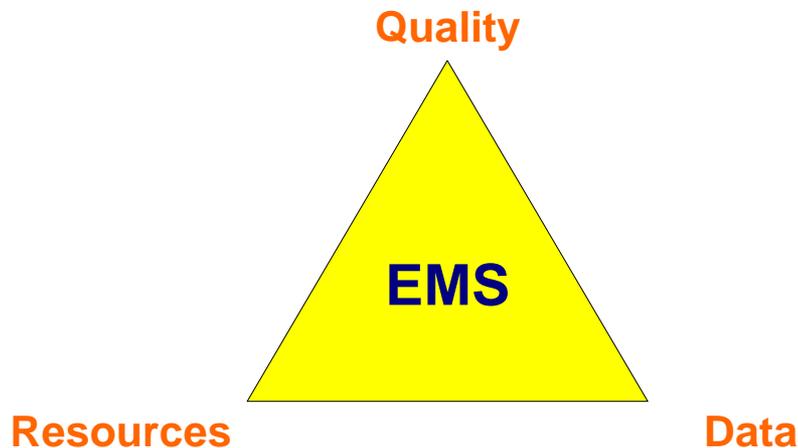
## Professional Organizations

- \* AAA
- \* ACEP
- \* ACS-COT (NTDB)
- \* AHA (NRCPR)
- \* EMSOP
- \* IAFC
- \* IAFF
- \* NAEMD
- \* NAEMSP
- \* NASEMSD
- \* NENA

## Federal Partners

- \* CDC
- \* FEMA
- \* HRSA-EMSC
- \* HRSA-EMSC/NEDARC
- \* HRSA-EMSC/NRC
- \* HRSA-ORHP
- \* HRSA-Trauma/EMS
- \* NHTSA

# The Science of Quality



- \* Care is local
- \* Quality is the target
  - \* System
  - \* Patient
- \* Data drives Resources
- \* Resources provide Quality

# The National Need



- \* Education

- \* Curriculums
- \* Local Education

- \* Outcomes

- \* Something other than death
- \* System evaluation

- \* Research

- \* Evaluate Cost effectiveness
- \* Identify problems and target issues

- \* Reimbursement

- \* National fee schedule and reimbursement rates

# Disclosure



- \* Symbiotic relationship between data collection and analysis
- \* Unique issues for the data collector and the data user

# Assumptions



- \* Local Providers are interested in improving care and public health while reducing errors.
- \* The collection, aggregation, and analysis of data is good providing it is well defined, safe, confidential and used.
- \* Linking data with other pertinent data sources will improve the usefulness of the information....."whole is greater than the sum of the parts" .....

# Assumptions continued



- \* Technology must support the concept.
- \* Data entry must be automated whenever possible for ease of use and for accuracy
- \* Confidentiality and privacy of data will be protected but the resources and cost associated with the protection is supported or bearable by the system.
- \* The migration to electronic systems will be lengthy, but is achievable

# Local Pulse



- \* Data collection is important
  - \* Medical record keeping
  - \* Local data analysis
  - \* Decision making
    - \* Patient
    - \* System
  - \* Error Reduction
  - \* Resource Utilization
    - \* Personnel
    - \* Equipment
  - \* Reimbursement

# Local: Where we are



- \* Very little information on local data collection
- \* Most systems are paper based but are discussing or transitioning to electronic
- \* Many systems use paper and scan into databases or do manual entry

# Local: Where we are



- \* There is variable compliance with national dataset definitions
- \* Several models for data collection, but no uniformity or consistency across systems
- \* In general, there is an absence of data to drive reimbursement and policy decisions at the system level

# Local: Where we want to be

- \* Electronic data collection
- \* Uniform dataset with definitions
  - \* Patient care
  - \* Personnel
  - \* System
- \* Workflow oriented
- \* No dual entry
- \* Data comes from the source
  - \* CAD
  - \* Medical Devices
- \* Quality Improvement
- \* Benchmarking
- \* The health care components are linked via a unique identifier
  - \* EMS
  - \* Hospital
  - \* Public Health
  - \* Public Safety
- \* Community based
- \* Information is passed to the State and Federal level for finance and policy decisions
- \* Infrastructure Support
  - \* Funding
  - \* Expertise and Guidance

# Local: How to get there

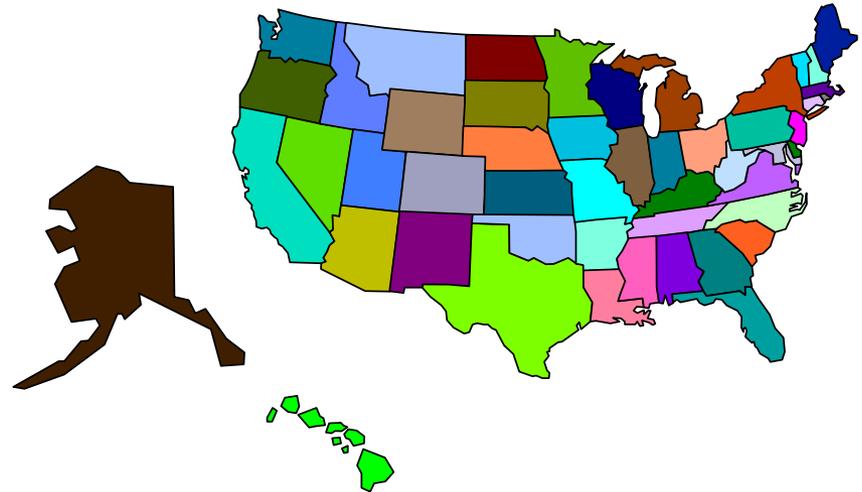


- \* Technical Assistance
- \* Model administrative and/or statutory language
  - \* Is it time for mandated participation?
- \* Standards for data collection and definitions
- \* Attach to educational agenda and local training programs
- \* National job description for healthcare providers
- \* Medical and communication device transmission standards (across the entire healthcare sector)
- \* National Performance Standards

# State Pulse

\* There is little data for:

- \* Resource planning
- \* Budget justification
- \* System-wide development and evaluation
- \* Injury prevention programs
- \* Target support and assistance



# Funding and Support



- \* Implementation
- \* Support and Training
- \* Future Development
- \* Oversight
- \* Startup
- \* Administration



“Relationships are the currency of the future”

Ricardo Martinez, MD

# The Answer



- “We can’t win at home. We can’t win on the road. As general manager, I just can’t figure out where else to play.”

- 1992 Pat Williams, Orlando Magic

- **We must play everywhere at the same time.**







# Thank You

