Emergency and Trauma Registries

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National Committee on Vital and Health Statistics (NCVHS)

National Health Information Infrastructure Workgroup (NHII)

Sheraton Buckhead Hotel
Atlanta, GA

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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


EMS
HURST


2

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
- National Trauma Registry for Children
- National Registry for CPR

Local Implementation Experience

EMS Agency

- PreMIS
- National EMS Information System

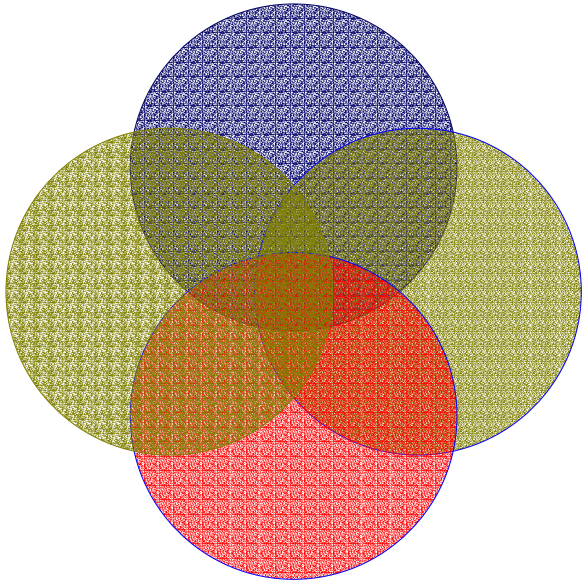
Hospital

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

Emergency and Trauma Registries

- EMS
- Trauma
- Emergency Department

Population Health
(Community)

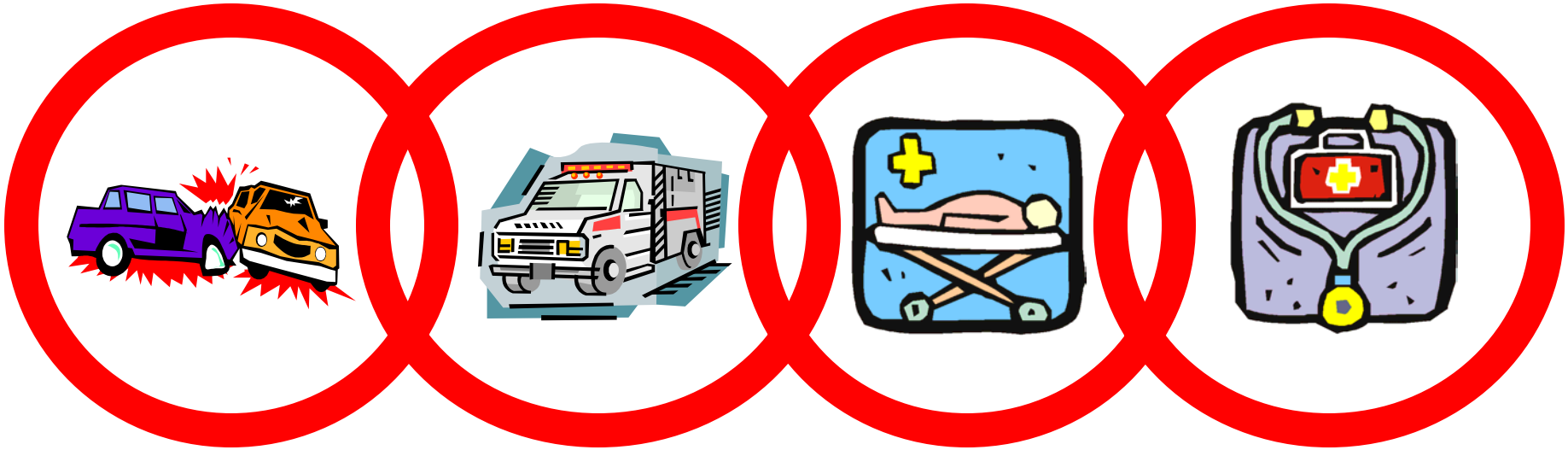


Healthcare Provider
(Individual or Team)

Personal Health
(Patient)

Delivery Model
(System)

Information Chain of Survival

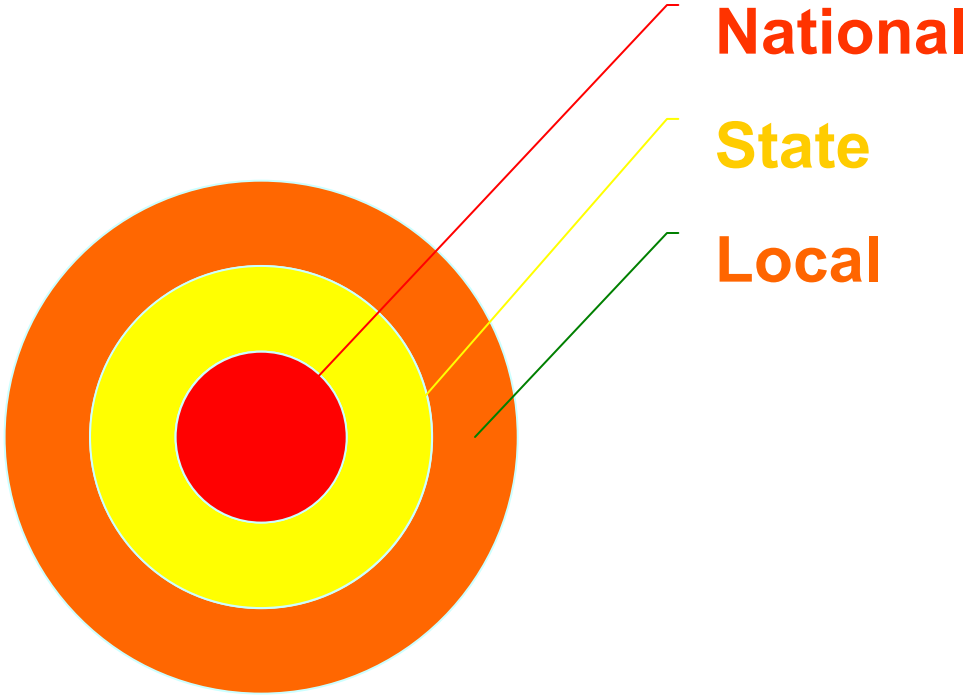


Crash EMS ED Hospital

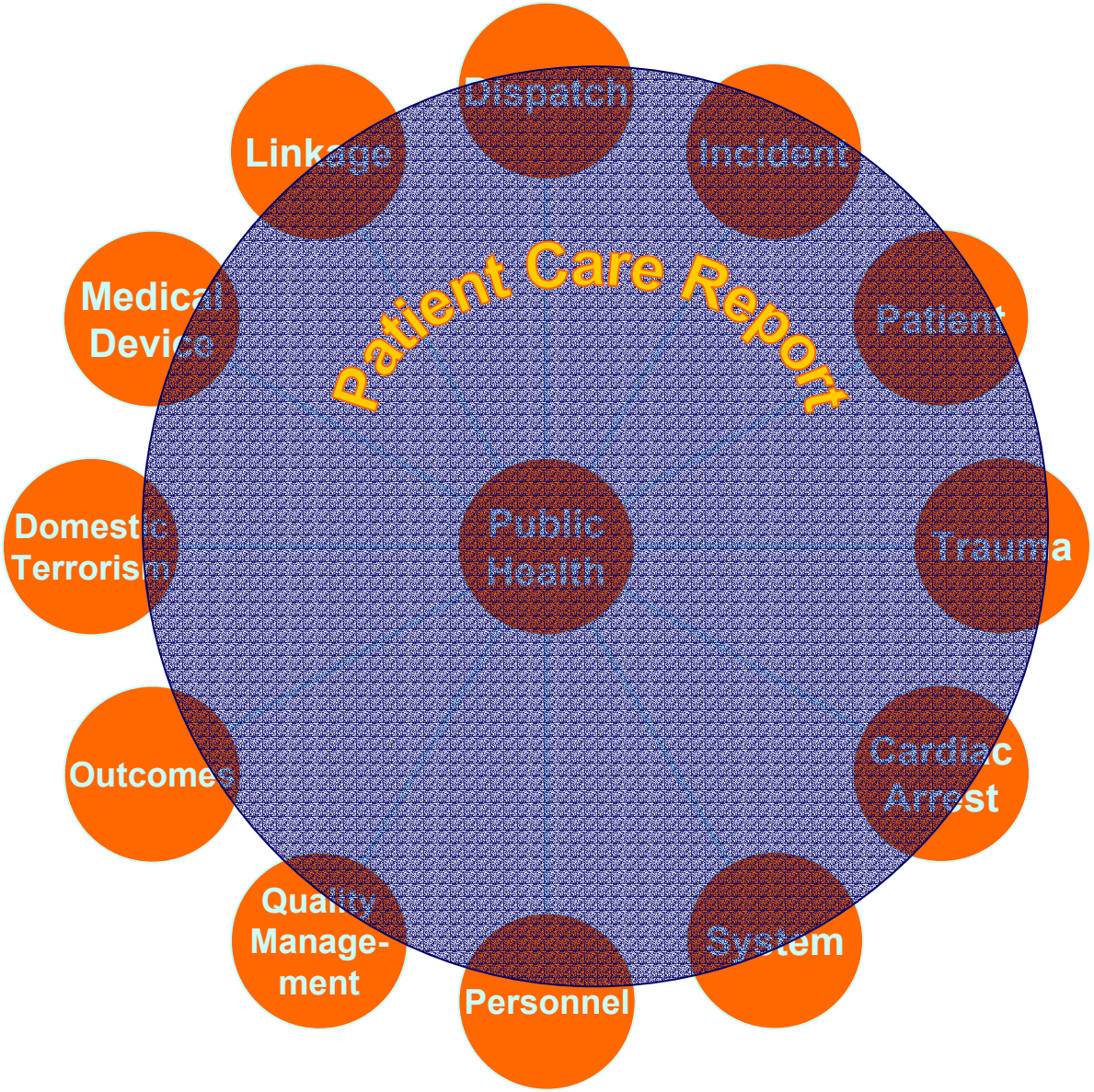
Data Sources

- National
- State
- Local
- Linkage

Information Systems



Data Components



Consensus

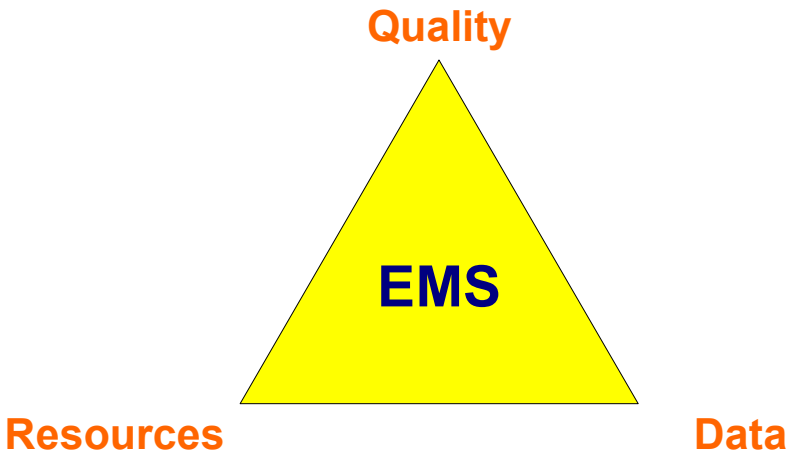
Professional Organizations

- 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

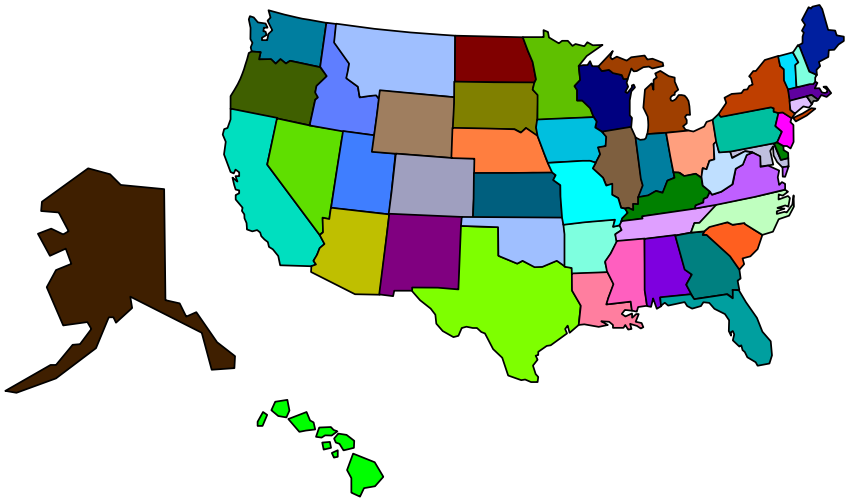
- The health care components are linked via a unique identifier
  - EMS
  - Hospital
  - Public Health
  - Public Safety
- Community based
- Information is passed to the State and Federal level for finance and policy decisions
- Infrastructure Support
  - Funding
  - Expertise and Guidance

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.**


EMS
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Thank You