

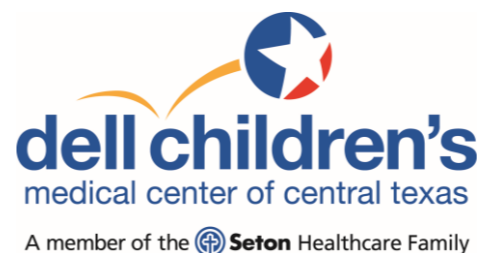


A PARADIGM FOR ACHIEVING SUCCESSFUL PEDIATRIC TRAUMA VERIFICATION IN THE ABSENCE OF PEDIATRIC SURGICAL SPECIALISTS WHILE ENSURING QUALITY OF CARE

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Disclosures

Cincinnati Children's Hospital Medical Center receives funding from participating hospitals to support the collaborative program described



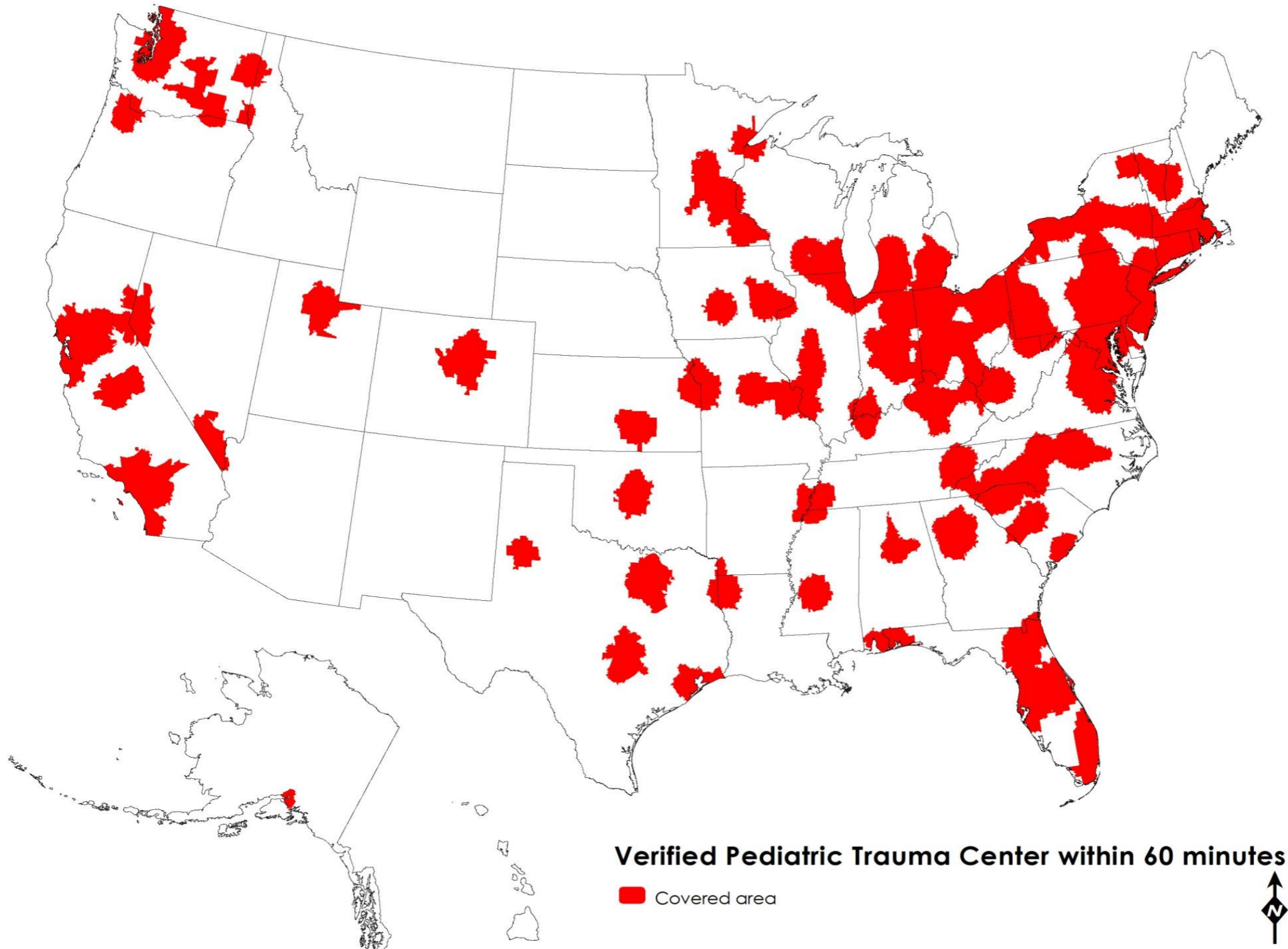
Objectives

- Identify current access to Pediatric Trauma Centers and the need for additional centers
- Discuss the collaborative partnerships paradigm
- Summarize program results
- Define potential future steps

The Problem

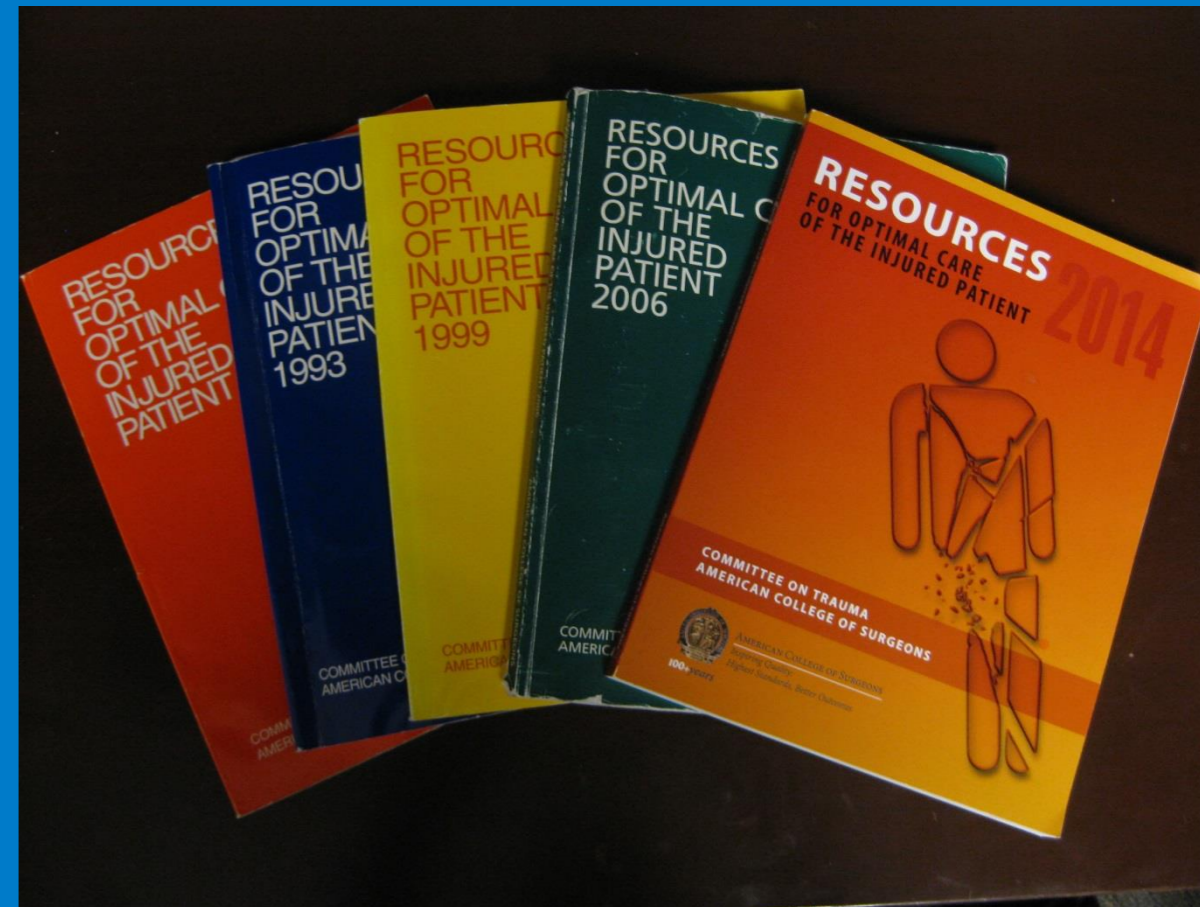
- One in five children are injured each year
- Injury is the leading cause of death in children over 1 year of age
- Verified Pediatric Trauma Centers help but only 10% of children are cared for at these centers

17.4 Million children without access



American College of Surgeon Committee on Trauma Changes

- 2006 New edition released
- No longer allowed “added qualifications in pediatrics”
- Required participation of a pediatric surgeon to qualify



PEDIATRIC TRAUMA TRANSFORMATION COLLABORATIVE



Hypothesis: ATCs in collaboration with a PTC could achieve successful ACS verification as a pediatric trauma center with measurable improvements in care despite the lack of onsite pediatric surgical specialists.



Goals of Collaborative Partnership

- Support hospitals committed to improving the care of injured children in their regions
- Help provide high quality of care in regions of need to reduce the need to transfer patients away from their families and support systems



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Program Description



Participation in monthly performance improvement meetings

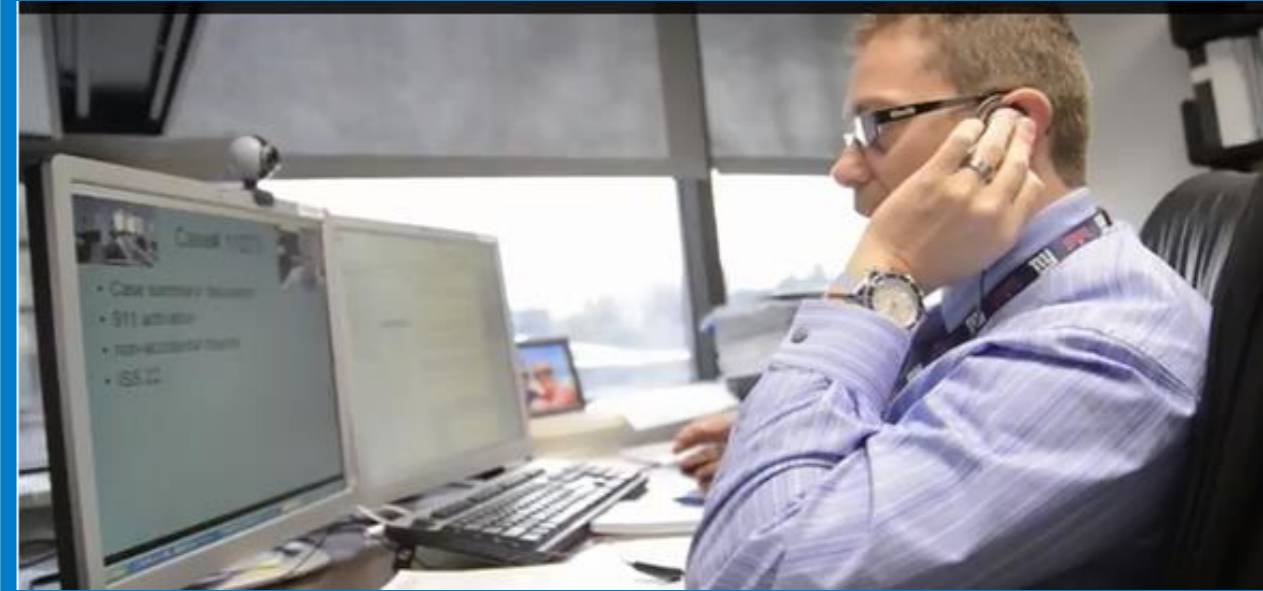
- Review of cases identified by participating hospitals
- Video conference participation in monthly multidisciplinary team meetings
- Identification of improvement opportunities and sharing of resources



Guideline development and support

All current trauma guidelines
are made available to
collaborative partners

Specific needs of individual
partners are reviewed and support
provided in developing and
reviewing new guidelines





Pediatric trauma focused CME/CEU

Comprehensive Children's
Injury Center monthly lecture
series available on-line
10 hours each year

CME/CEU provided for
performance improvement
meetings

Pediatric trauma simulation training

- Multidisciplinary trauma team training
- Scenarios based on real cases
- Video based debriefing



Peer to Peer Support

- Physician and nurse shadowing opportunities
- Registrar expertise support
- Program Manager collaboration
- Pediatric Trauma Nurse Practitioner
- 24/7 access to phone consultation



Results

Patient Volumes

- 2,808 pediatric trauma patients
- 81 (3%) required transfer
- Average volume
 - 128 pre vs. 162 post ($p < 0.05$)
- Transfers
 - 3.8% pre vs 2.4% post ($p < 0.05$)

ACS Verification

- St. Mary's Hospital in Evansville, IN successfully verified twice as Level II Pediatric Trauma Center

All sites had the PTTC listed as one of the key strengths of their program

- Sanford Hospital in Fargo, ND verified as Level II Pediatric Trauma Center – First in North Dakota



Improvement Initiatives

Image/radiation reduction

Cervical Spine clearance

Non-accidental trauma
evaluation process

Safe transport checklists for children

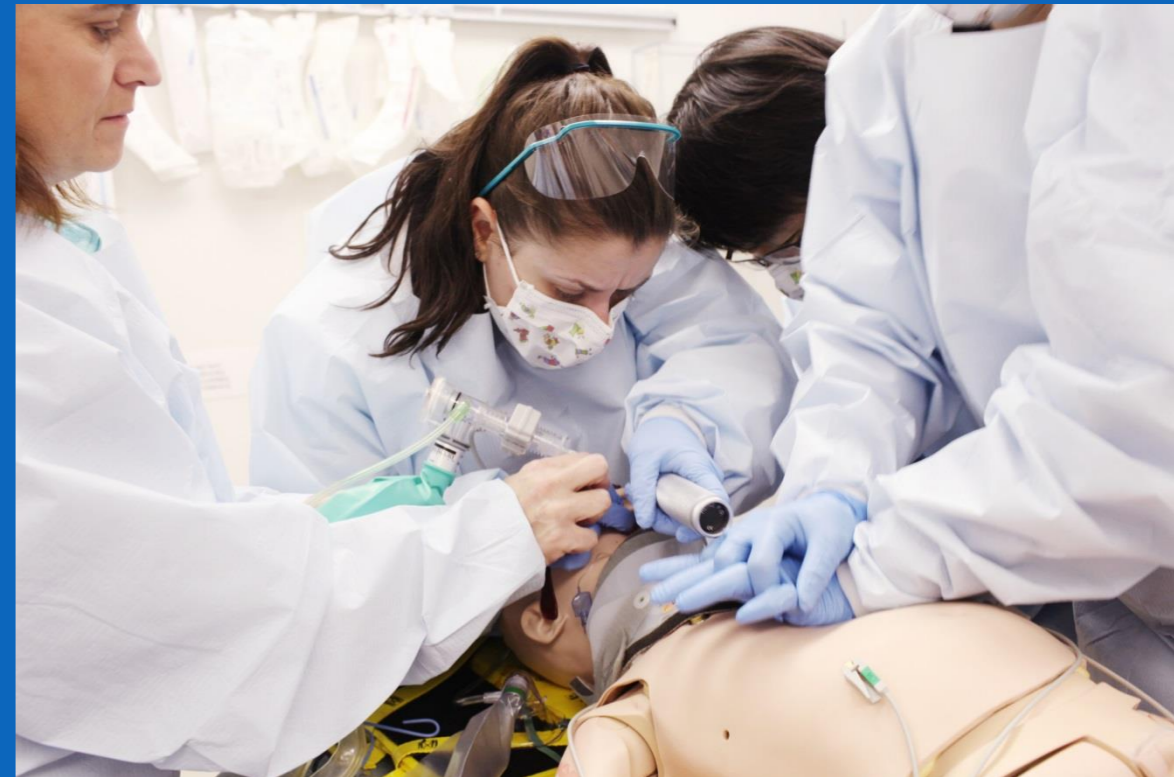
Trauma team notification system to
include pediatric critical care
physician

Pediatric trauma outreach/follow up



Simulation Training

- 13 Four hour sessions
- 129 individuals
 - 23 physicians
 - 94 nurses
 - 12 ancillary staff
- “Shared Mental Model”
- Role definition
- Clear communication



Solid Organ Management

	Pre	Post	P
LOS	7.7	4.3	0.0319
# of lab draws	10.9	6.0	0.0014
% repeat abdominal CT scan	46.4	11.0	0.0001
Total abdominal CT scans (mean)	1.7	1.1	<0.0005



Future Steps

- Expand the number of partners
- Increase collaborative learning opportunities across centers
- Increase the quality and benchmark metrics across sites to improve care and patient safety
- Grow the neurosurgery, orthopaedic and emergency pediatric care components of the collaborative program

Thank You!

