Introduction, History Taking and Communication: Say what you mean and mean what you say

Kansas CARE Training
September 29, 2022
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Child Abuse Pediatrician
Children's Mercy Kansas City

Disclosures

- I have nothing to disclose.

Objectives

1. Obtain and document an appropriate medical history from a parent and/or child in a case of suspected child physical abuse
2. Discuss strategies of communicating effectively with families and/or caregivers
3. Explain why is important to separate emotions and relationships from data in cases of possible child abuse
4. Obtain and document an appropriate injury history in cases of suspected abuse
5. Understand the responsibility to appropriately access and collaborate with investigative services and subspecialty providers in cases of alleged abuse

Introduction to Kansas CARE

Kansas CARE

- CARE: Child Abuse Resource and Evaluation
- Agencies Involved:
  - KDHE
  - DCF
  - KAAP
  - Medical Resource Centers (CM, KU)
  - And, YOU!

CARE PROVIDERS

Requirements:

- Two-day initial training
- Mentorship
  - Review first 100 cases
  - All positive findings
- Ongoing training (minimum 6 hours/year)
- Maintain records, photo documentation
- Be willing to serve as community resource, court

Referral Process

- DCF starts referral process through LACIE
  - Children < 6 years
  - Physical abuse, physical neglect
  - Reviewed by resource center child abuse pediatrician
  - Recommendation provided to DCF
    - ❖ May include recommendation for evaluation by CARE provider
    - ❖ Referral may be sent to CARE provider thru LACIE by DCF

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CARE Provider Responsibilities

- Intake referrals from DCF
- Medical evaluation of patients
  - May include photo documentation
  - Access to lab, radiology
- Referrals
  - ED and/or subspecialty or tertiary care as needed
  - Mental health, behavioral and developmental needs
  - Community resources (food, housing, etc)

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Background and Introduction

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In 2020, Child Protective Services nationwide received
3.9 million referrals involving 7.1 million children

Child Maltreatment: Putting it in Perspective

Asthma
- **Incidence: 70-100/1000 kids**
- **185 child deaths**

Child Abuse
- **Incidence: 43/1000 kids**
- **1750 child deaths**

80% of deaths are children < 4 years of age

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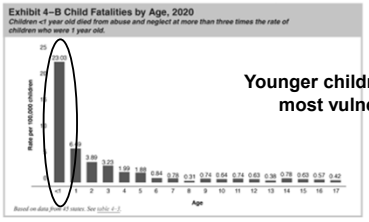
Asthma and Allergy Foundation of America
American Academy of Allergy, Asthma and Immunology 2007 data

NIS4 Child Endangerment Standard
NCANDS 2020

KBF1

80.0 percent (80.6%) of child fatalities involved parents acting alone, together, or with other individuals



Younger children are the most vulnerable!

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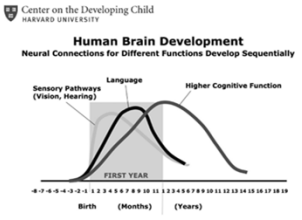
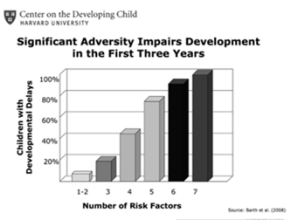
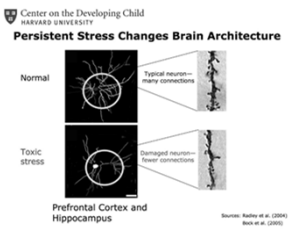
Adversity Impairs Development

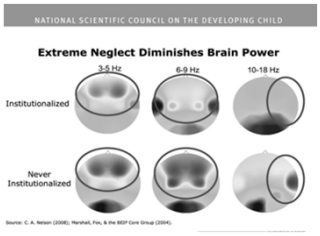




https://developingchild.harvard.edu/resources/

Adversity Impairs Development





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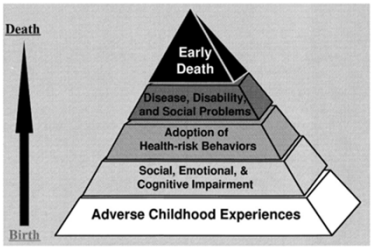

Figure 2. Potential influences throughout the lifespan of adverse childhood experiences.

Felitti, Vincent J., et al. "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study." *American journal of preventive medicine* 14.4 (1998): 245-258.

Things We Know…

Gaze Aversion Happens

Things We Know… Medical providers don't always get the right answer for the right reason.

- **39% provided an incorrect diagnosis**
- **58% correctly identified fracture morphology**
- **60% correctly identified mechanics of fracture**

Anderst, James, et al. "Using simulation to identify sources of medical diagnostic error in child physical abuse." *Child abuse & neglect* 52 (2016): 62-69.

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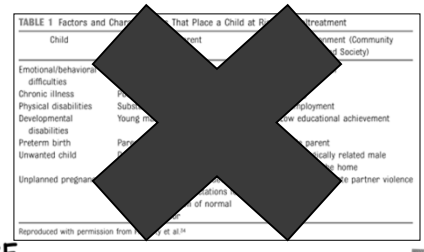
Medical Evaluation of Child Physical Abuse

Risk Factors



American Academy of Pediatrics, Committee on Child Abuse and Neglect. Pediatrics. 2015; 135 (5):e1337-e1354.

Disparities Exist

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Child Abuse is a Medical Diagnosis

- Social settings/risk factors do **not** play a role → BIAS!
  - Abuse more likely missed in white, two parent families
  - Minorities more likely falsely accused abuse
- Medical history, clinical presentation, medical evaluation and outcome are the basis for diagnosis
  - Example: AHT more likely to have deeper brain injury
- No injury by itself is diagnostic of abuse!!!

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Jenny C, Hymel K, et.al. Analysis of missed cases of abusive head trauma. JAMA 281: 621-626, 1999. Vinchon M, Defoort-Dhellemmes S, et.al. Accidental and nonaccidental head injuries in infants: a prospective Bechtel K, Stoessel K, et.al. Characteristics that distinguish accidental from abusive injury in hospitalized young children with head trauma. Pediatrics 114: 165-168, 2004.

Medical providers do not consistently screen for abuse.

Wood, J. N., Feudtner, C., Medina, S. P., Luan, X., Localio, R., & Rubin, D. M. (2012). Variation in occult injury screening for children with suspected abuse in selected US children's hospitals. *Pediatrics, 130*(5), 853–860.

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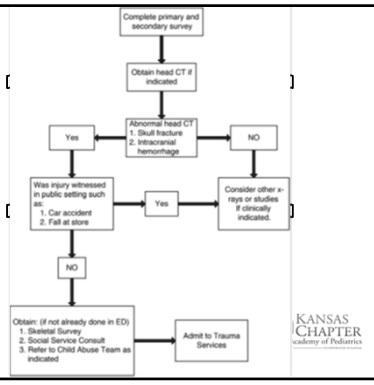
Evidenced based practice and clinical guidelines can improve disparities.



Rangel, Erika L., et al. "Eliminating disparity in evaluation for abuse in infants with head injury: use of a screening guideline." *Journal of pediatric surgery* 44.6 (2009): 1229-1235.

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Obtaining a Forensic Medical History

Medical History- I'm going to assume you all know how to do this!

- Standard history
  - Medical, developmental, social
  - Pregnancy history
- ROS
  - Feeding history
  - Prior injuries- bruising, oral/nasal bleeding, red spots in eyes
- Family history
  - Attention to bleeding, bone disorders

American Academy of Pediatrics, Committee on Child Abuse and Neglect. Pediatrics. 2015; 135 (5):e1337-e1354.

Components of a Medical Forensic History

- Taking an injury history to include:
  - Witnesses
  - Timing
  - Location
  - Mechanics
  - Reaction
  - Development
- Gathering information from the scene

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Checklist for Cases of Suspected Physical Abuse in Children < 3 years of Age

Checklist for Cases of Suspected Physical Abuse in Children < 3 years of Age

A. Source(s) of Information and Status of Caregivers at Time of the Child's Reported Injury and/or Ill Symptom Appearance

- ☐ Identified source(s) of information including name and relationship to child
- ☐ Identified the mental status/condition of the caregivers for the child at the time of child's injury and/or ill symptom appearance (intoxicated/ill/not intoxicated, etc.)

B. If an Injurious Event was Witnessed or Reported by a Non-Witness (Complet Based on Available Information, Even if the Source of Information was Not a Witness)

- ☐ Determined if the injurious event was witnessed, heard but not witnessed, or not witnessed and not heard by the historian
- ☐ Identified the last witness(es) to well/asymptomatic behavior
- ☐ Identified the last location where the child was well/asymptomatic
- ☐ Identified the last point in time when the child was well/asymptomatic
- ☐ Identified specific location where injury occurred
- ☐ Identified the timing of injurious event
- ☐ Identified who heard or saw injurious event and position/location of those individu
- ☐ Identified the position/location of child immediately prior to injurious event
- ☐ Identified the activity of child immediately prior to injurious event
- ☐ Identify mechanics of injurious event (twisting falling backwards, forward, etc.)
- ☐ Identified surfaces/objects potentially impacted during injurious event
- ☐ Identified specific body part(s) impacted during injurious event
- ☐ Identified the child's physical position after the injurious event
- ☐ Asked witnesses to reenact mechanism
- ☐ Identified the nature of the child's first symptoms/reaction to injurious event
- ☐ Determined the first person that identified the child's symptoms/reaction to injurio event
- ☐ Identified the order of appearance of ill symptoms
- ☐ Identified the duration of ill symptoms
- ☐ Identified the clothing worn at time of injurious event

C. If No Injurious Event was Witnessed or Reported, but the Child Presented wi Findings Concerning for Abuse

- ☐ Identified the last witness(es) to well/asymptomatic behavior
- ☐ Identified the last location where the child was well/asymptomatic
- ☐ Identified the last point in time when the child was well/asymptomatic
- ☐ Identified the first concerning symptom of the child
- ☐ Determined who identified the first concerning symptom(s) for the child
- ☐ Identified the child's location when the symptom(s) were first noticed
- ☐ Identified the child's physical position when the symptom(s) were first noted
- ☐ Identified the immediate surroundings of the child (blank/toys, etc.) when the symptom(s) were first noted
- ☐ Identified the order of appearance of the child's ill symptoms
- ☐ Identified the duration of the child's ill symptoms

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Components of a Medical Forensic History

- Was the injurious event witnessed?
  - Directly witnessed, by whom, historian?
  - Heard but not witnessed
  - Not witnessed and not heard by the historian

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Components of a Medical Forensic History

Identify:

- Who heard or saw injurious event and position/location of those individuals
- Last witness(es) to well/asymptomatic behavior
- Last location where the child was well
- Last point in time when child was well

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Components of a Medical Forensic History

Identify:

- Location where injury occurred
- When did the injurious event occur
- Position/location of child immediately prior to event
- Activity of child prior to injurious event
- Mechanics of injurious event (Twisting, falling backwards, etc)
- Surfaces/objects potentially impacted
- Specific body part(s) impacted
- Child's physical position after the injurious event

**Ask witnesses to reenact mechanism!!

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Components of a Medical Forensic History

Identify:

- Nature of the child's first symptoms/reaction to injurious event
  - First person that identified the child's symptoms/reaction to injurious event
- Order of appearance of ill symptoms
  - Vomiting
  - Lethargy
  - Inability to use arm/leg
  - Pain
- Duration of ill symptoms
- Clothing worn at time of injurious event
- Developmental abilities

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Documentation of a Forensic History:

- What not to do: “Mom and dad report that child fell off the bed”
- What to do:
  - “Mom states, ‘I put her on the bed in the middle on her back, I turned to pick up a blanket off the floor and she rolled off the bed landing on her right side on the hardwood floor’
  - “Dad states, ‘She was crying so I went to the kitchen to get a bottle, I heard a thud and then I heard her scream louder; my wife said she fell off the bed.’ ”

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Is the diagnosis of physical abuse changed when Child Protective Services consults a Child Abuse Pediatrics subspecialty group as a second opinion?

James Anderst[a,*], Nancy Kellogg[b], Inkyung Jung[c]

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[b] Division of Child Abuse Pediatrics, UT Health Science Center San Antonio, USA
[c] Department of Epidemiology and Biostatistics, UT Health Science Center San Antonio, USA

Table 2
Comparison of diagnoses provided to CPS by non-CAP physicians and CAP physicians working in concert with CPS (overall).

CAP diagnosis	Non-CAP physician diagnosis			
	Abuse (%)	Nonabuse (%)	Total (%)	Kappa (95% CI)
Abuse	50	9	59(51.3)	.14(−.02, .29)
Nonabuse	40	16	56(48.7)	
Total	90(78.3)	25(21.7)	115(100)	

- Changes in 40% of cases
- 80% of changes from abuse to non-abuse
- Most valuable information from **scene investigation** by CPS

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Obtaining History from a Child Victim

- Developmentally appropriate language
- Open-ended questions
  - No leading statements or language
    - ❖ What happened, tell me more
  - Keep it simple
  - Avoid repeated questioning

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History Suggestive of Abuse

- No explanation for significant injury (or vague history)
- Denial of trauma in child with injury
- Important detail changes in a substantive way
  - Different witnesses provide different explanations for injuries
- Explanation is inconsistent with physical/developmental abilities
- Unexplained or unexpected delay in seeking medical care
- Disclosures of abuse

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American Academy of Pediatrics, Committee on Child Abuse and Neglect. Pediatrics. 2015; 135 (5):e1337-e1354.

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Key Elements of Your Physical Exam

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Medical Evaluation: Physical Exam

- Exam with child undressed (in gown)
  - Document skin injuries
- Measure and plot growth
- Careful exam of HEENT for injury
  - Head and face most commonly injured part of body
- Complete neuro assessment, evaluation of development

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Physical Exam Components Suggestive of Abuse

- Injury to a young, pre-ambulatory infant
  - Bruising, mouth injuries, fractures, intracranial or abdominal injury
- Injury to multiple organ systems
- Injuries to non-bony or other unusual locations such as over the torso, ears, face, neck or upper arms
- Multiple injuries in different stages of healing
- Patterned injuries
- Significant injuries that are unexplained

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American Academy of Pediatrics, Committee on Child Abuse and Neglect. Pediatrics. 2015; 135 (5):e1337-e1354.

Sibling Evaluations

- Studies show that when a child is abused, other kids in the home often are, too
  - In twins when one is abused, the other is, too >20% of the time
  - When a child is abused, >50% of families may have another child abused in the future
  - >10% of siblings have occult (hidden) fractures!
- Which siblings need to be seen for a physical exam?
  - Any children less than 5 years old
  - Children less than 2 also need a skeletal survey
  - Children with visible injuries or who disclose abuse

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Vitale MA, Squires J, et.al. Evaluation of the Siblings of Physically Abused Children: A Comparision of Child Protective Services Caseworkers and Child Abuse Pediatricians. Child Maltreatment 15:144, 2010
Lindberg DM, Shapiro RA, et.al. Prevalence of Abusive Injuries in Siblings and Household Contacts of Physically Abused Children. Pediatrics 130, 2012.

Sibling Exams

- 4 yo non-verbal, autistic child with burns
- Mom reported he was in her room with 1, 2 and 3 yo sibs
- Came out with burns
- Iron left on ironing board, unplugged
- Recommended physical exam for all siblings

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Communication With Families

Case: Communication with families

- A 6 month old healthy girl comes to your office for cough and fever
  - Family is well known to you (PCP)
  - Have cared for 2 older siblings in family and have had no prior concerns
  - Family is compliant with check ups and recommendations
  - Dad employed outside the home, mom stays home with the kids
  - No known history of involvement with CPS or LE
  - No known issues with substance abuse
  - No known mental health concerns
- You obtain an x-ray of the chest to evaluate for pneumonia

Case: Communication with families

Child has 3 healing posterior rib fractures on CXR…

Case: Communication with families

- You follow up and ask about any history of trauma:
  - Parents report baby rolled off the couch 3 days ago
  - You recall from your KS CARE Training that:
    - ❖ Posterior rib fractures in children are due to anterior to posterior compression (typically violent squeezing/shaking),
    - ❖ Healing indicates that the fractures are at least 7-10 days old
  - The medical evidence is contradicting your impression/relationship with the family…

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Case: Communication with families

- What do you say to the family at the family at this point?
- How would you communicate your concern about the rib fractures?
- What do you want to do next?
- What would you tell the parents about your plan and next steps?
- Pair up with 1-2 other people at your table and come up with a script of what you would say to the parents.

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Case: Communication with families

Do:

- Share concerns: be honest, non-judgmental
- Explain your obligations (by law, policy)
- Hear parents feelings
  - "How you're feeling is understandable"
- Partner with the parent
  - "I know you want to figure out what happened, too"

Don't:

- Downplay concern
- Say what will/won't happen next
- Become defensive
  - "I'm not…accusing you, saying you're a bad parent, etc"

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Vitale MA, Squires J, et.al. Evaluation of the Siblings of Physically Abused Children: A Comparison of Child Protective Services Caseworkers and Child Abuse Pediatricians. Child Maltreatment 15:144, 2010
Lindberg DM, Shapiro RA, et.al. Prevalence of Abusive Injuries in Siblings and Household Contacts of Physically Abused Children. Pediatrics 130, 2012.

Case: Communication with families

- Emphasize that you are looking for all possible causes of the finding
  - Discuss possible medical causes
  - Discuss *trauma* as a possible cause
- Discuss your legal obligations as a mandated reporter
- Reference your organization's *policy*
  - Families can be mad at the policy instead of you

Communication and Reporting

- Medical providers report maltreatment at lower rates than expected.
- Separate emotions and relationships from data in cases of possible child abuse!

TABLE 2 Level of Clinician Suspicion According to Decision to Report to CPS

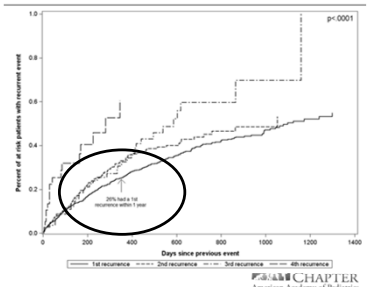
Management Status	Level of Suspicion, *n* (%)			
	Unlikely	Possible	Likely	Very Likely
Reported to CPS	7 (0.5)	34 (24.3)	25 (86.2)	29 (64.4)
Not reported to CPS	1464 (99.5)	106 (75.7)	4 (13.8)	16 (35.6)

The adjustment described in the text was used. The actual number of injury visits with some suspicion was 1683.

Flaherty, E. G., Sege, R. D., Griffith, J., Price, L. L., Wasserman, R., Slora, E., ... NMAPedsNet (2008). From suspicion of physical child abuse to reporting: Primary care clinician decision-making. *Pediatrics, 122*(3), 611–619.

Communication: Opportunities for Intervention and Prevention

- 1300+ children with PA
  - 26% recur in 1 year
  - 40% in 2 years
- Risk factors:
  - Age < 30 months,
  - initial minor injuries,
  - Rural area



Deans, K. J., Thackeray, J., Groner, J. I., Cooper, J. N., & Minneci, P. C. (2014). Risk factors for recurrent injuries in victims of suspected non-accidental trauma: A retrospective cohort study. BMC Pediatrics, 14(1), 217.

Communication: Risk of Repeat Abuse

- Mortality is significantly higher in children with repeat physical abuse
  - Mortality single episode = 10%
  - Mortality recurrent episodes = 25%
  - 7x higher than accidental trauma

TABLE 1. Comparison of Patients of a Single Episode of NAT to Patients of Recurrent Episodes of NAT

	Single-Episode NAT (n = 1,519)	Recurrent-Episode NAT (n = 53)	*p*
Male	52% (791/1,519)	66% (35/53)	0.05
Race			0.02
White	65% (980/1,519)	83% (44/53)	
Black	25% (378/1,519)	13% (7/53)	
Other	11% (161/1,519)	4% (2/53)	
Pediatric trauma center	69% (1,054/1,519)	87% (46/53)	0.008
Mortality	9.9% (151/1,519)	24.5% (13/53)	0.002

Deans KJ, et al. Mortality increases with recurrent episodes of nonaccidental trauma in children. J Trauma Acute Care Surg. 2013, 75: 161-165. 10.1097/TA.0b013e318298483l

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Case: Communication with families

- Refer the patient to a child abuse pediatrician or ask for help/recommendations
  - If you are not able to separate your feelings/emotions from the situation, refer to someone who can
- If you are seeing the patient in the capacity of the specifically evaluating the child for abuse or neglect…
  - It is our responsibility to communicate the diagnosis of physical abuse, abusive head trauma, etc clearly to the family/caregivers

Communicating Diagnosis of Abuse

- These are injuries, there is not a medical condition apart from trauma that would explain these injuries
- These injuries occurred from trauma
- These injuries make me concerned that someone did something to hurt him/her
- You baby is not able to cause these types of injuries to him/herself
- These are not the types of injuries we typically see from other young children/pets/short falls/etc
- I am diagnosing physical abuse

Communicating Diagnosis of Abuse

- Don't get into mechanistic debates with upset families
- Don't offer possible mechanisms to potential perpetrators
- Don't get defensive or argumentative
  - Consider timing of delivering diagnosis
  - Revert back to reflective listening and validation of feelings
- Do reassure family that the medical team will provide their child with excellent care and continue to support the family

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Knowing Your Role and Resources

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Role of the Medical Provider

- History and physical exam
  - You've got this!
- Evaluate for occult injury
  - We will discuss this in detail!
- Diagnosis, treatment and referrals
  - Holistic care for patient and family
- Mandated reporter
- Educator

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Know Your Local Resources

- Child Advocacy Center
- Department of Children and Families
  - Family First Funding for Prevention
- Community Mental Centers
  - Behavioral health and therapy providers
- ED, Lab, Radiology Referrals
  - May need education as well!

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You are Part of a Larger System

- The "old" way of thinking: "It's up to the police to figure it out"
- Reality: The medical system has an obligation to provide appropriate and continuing medical feedback to investigators
  - Incorrect diagnoses, either way, are disastrous
  - Creating a more accurate/proficient medical response to child abuse is necessary == KANSAS CARE

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You are Part of a Larger System

- You can't do everyone else's job
- You can do your job to the best of your ability
  - Accurate medical diagnoses may improve outcomes
  - Identification of additional medical, developmental, mental health issues
- Understanding the system can help reduce burnout
  - Goal of child welfare – child to remain safety with their family
  - Child placed in protective custody – goal is typically reunification

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Goad, John. Understanding roles and improving reporting and response relationships across professional boundaries. *Pediatrics*; 2008.

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You are Part of a Larger System

- In person/face to face communication is ideal
  - Sharing photos of injuries and radiologic images can be powerful
- Build professional relationships and understand the structure of child protective services, law enforcement, family court and criminal court in your region
  - Vary state to state, county to county, city to city
- Everyone has a supervisor
  - It is ok to ask to speak to someone's supervisor
  - Continue to move up supervisory structure if needed- goal is safety of the child!!!

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Know Your Resources

- Mentorship
  - You are not alone!
  - Review all cases and any questions anytime
- Ongoing education
  - The Quarterly
- The Child Protector App

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COMMENTS OR QUESTIONS?

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