



Objective: To characterize clinician and parent discussions of brain imaging for critically ill infants

Background

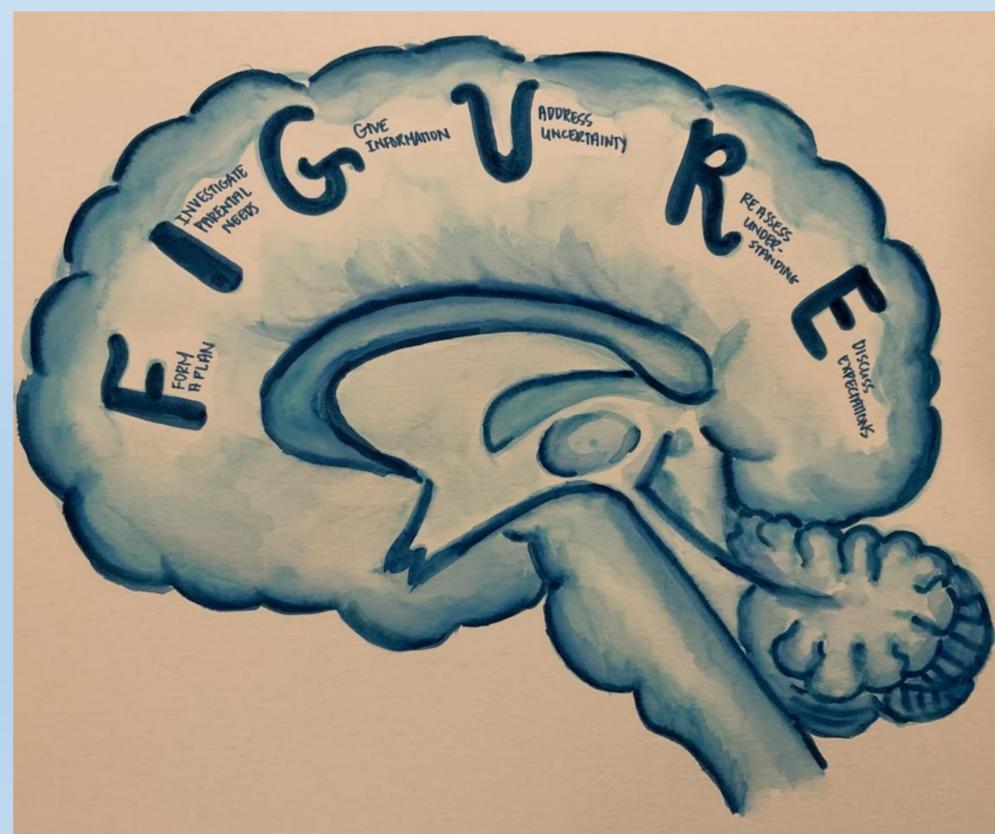
- Critically ill infants often require brain imaging to define the need for interventions and to estimate prognosis
- Little is known about how clinicians discuss brain imaging with families.

Methods

- Study participants included infants with a neurologic condition, their parent(s), and their clinician(s)
- Family conferences were audio-recorded as they occurred
- Audio recordings were transcribed, de-identified, and analyzed using a conventional content analysis approach

Current Progress

- Developed and refined codebook (**Table 1**)
- n= 66 meetings were recorded, n=36 meetings with imaging discussion (36/66, 54.5%)
- Content analysis is ongoing
- Contributed to a chapter review regarding effective strategies for communication of brain imaging finding (**Figure 1**).



Painting Courtesy Dr. Sarah Bernstein

Figure 1. Guidelines for effective physician-family communication:
Form a plan, Investigate parental needs, Give Information, address Uncertainty, Reassess understanding, discuss Expectations

Table 1. Codebook

Node	Definition
1. Discussion Initiator <ul style="list-style-type: none"> Clinician Parent/Family 	Party who initiates brain imaging discussion for the first time in the transcript
2. Visual Aid <ul style="list-style-type: none"> Reviewed Constructed Absent 	Use of a visual aid during brain imaging discussion, which may be: Reviewed by means of the physical report or scan present for discussion Constructed in-the-moment via a visual representation, diagram, or sketch created by the speaker Alternatively, there may be no visual aid present during the discussion (Absent)
3. Modality <ul style="list-style-type: none"> Strengths Limitations 	Strengths refers to the purpose and strengths of a particular brain imaging modality and why it is useful to clinicians Limitations refers to the limitations of the brain imaging modality, including what cannot be learned from the image; uncertainty
4. Context <ul style="list-style-type: none"> Provide Relevant Background Orientation to Scan Asking Information Preferences or Permission Assess Baseline Knowledge Check Understanding 	Relevant Background provides critical anatomical and functional information that is requisite to understanding an imminent brain image discussion. This could include a description of normal brain or body structure and function or features of a condition or abnormality. A clinician may provide a brief orientation to the scan , outlining features of a present image or specific visuals. Asking information preferences, or permission to show a particular brain scan serves to initiate a brain imaging discussion. Assess baseline understanding of previous knowledge related to the findings of a scan. Includes previous conversations with other clinicians. Check understanding after an imaging discussion or provides an opportunity to ask follow-up questions.
5. Finding <ul style="list-style-type: none"> Normal Abnormal Unknown Significance 	Used to categorize how clinicians define the nature of the brain image.
6. Result Implication <ul style="list-style-type: none"> Relationship to Future Outcomes Relationship to Current Presentation 	The clinician may explain how the findings discovered from the brain image may translate into future outcomes via observable behaviors, and how these may change throughout development. The clinician may state how the brain scan explains current behaviors or diagnosis .