their own providers, and that there are an array of problems that could be targeted. Intervening with parents of young children has the potential to affect multiple child outcomes. A group intervention may target poor social support, though this format is not universally preferred. Next steps for this project include assessing the acceptability and preference for various content components (i.e., depression, parenting stress, legal issues) and linking parent data with child data (including developmental screening results, weight, feeding problems, and behavior problems).

2332 Community engagement in clinical and translational research: A framework for research institutions
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OBJECTIVES/SPECIFIC AIMS: Community engagement is a commonly used term, but is complex in both meaning and application. In order to help academic institutions and administrators develop infrastructure to promote and support community engagement and to help investigators work productively with communities, this analysis discusses the major components of community engagement in research on both the institutional and individual project levels as well as the interplay between them. METHODOLOGY/STUDY POPULATION: A literature synthesis conducted by a community engagement in research committee at 1 CTSA institution that examined the myriad factors related to effective community engagement in research identified across multiple disciplines was used to distill the major factors identified, assess the interplay of the identified factors, and produce a conceptual model to help administrators and investigators apply best practices in engaging communities in clinical and translational research. RESULTS/ANTICIPATED RESULTS: This work takes a concept—community engagement in research—that is often stated and discussed, but is highly complex and challenging to implement—and identifies and discusses the multiple, interrelated factors that impede, assess the interplay of the identified factors, and produce a conceptual model to help administrators and investigators apply best practices in engaging communities in clinical and translational research. DISCUSSION/SIGNIFICANCE OF IMPACT: Results are presented through a conceptual framework which displays the major components needed for rigorous, ethical, and effective community engagement. MATHEMATICAL/STATISTICAL ANALYSIS: The model illustrates that while community engagement in research is implemented in the context of individual projects, a deep and continual interplay between individual projects and the goals, capacities, and policies of research institutions is needed for rigorous, ethical, and effective community engagement. DISCUSSION/SIGNIFICANCE OF IMPACT: Results are presented through a conceptual framework which displays the major components needed for rigorous, ethical, and effective community engagement in research. In addition, the conceptual framework presented will provide assistance to those developing approaches to measure and evaluate institutional readiness for community engagement in research as well as the effectiveness of individual community engagement efforts.

2342 How interruptions affect the triage process in the emergency department
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OBJECTIVES/SPECIFIC AIMS: The aim of this study was to determine how interruptions affect the triage process. METHODS/STUDY POPULATION: Prospective, observational study, where 118 triage interviews were observed. RESULTS/ANTICIPATED RESULTS: In total, 57% of triage interviews were interrupted. The most common interruption was by other nurses; however, 7% of the interruptions were by the triage nurse themselves. When an interruption occurred during the triage process, 67% of the time the triage nurse would stop the triage assessment and attend to the interrupter. In the interrupted interviews, 17% of the entire triage time was dedicated to addressing interruptions. Some interruptions (i.e., additionally staff entering to conduct ECG) had a positive impact by expediting care during the triage process; while other interruptions delayed patient care. DISCUSSION/SIGNIFICANCE OF IMPACT: Interruptions increased the triage time and created additional stress for patients, as patients perceived errors in nursing assessment. Understanding the classifications of triage interruptions and the impact on patient outcomes will allow researchers to develop interventions to mitigate the impact of these interruptions.

2349 Development of a Pediatric Hydrocephalus Severity Index to predict long-term clinical outcomes
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OBJECTIVES/SPECIFIC AIMS: To create a composite index, referred to as the Pediatric Hydrocephalus Severity Index (PHSI), to classify the severity of disease at baseline and predict outcomes among children treated for hydrocephalus. METHODS/STUDY POPULATION: The Hydrocephalus Outcome Questionnaire will be administered in person or online to the parents of 150 patients between the ages of 5 and 18 years who are followed at the Neurosurgery Clinic at St. Louis Children’s Hospital for hydrocephalus. Patients must have been diagnosed and treated for hydrocephalus at least 6 months prior to the survey date. Potential participants are excluded if their health status changed during the 4 weeks prior to survey date, as determined by the child’s parents. Potential risk factors (see anticipated results) will be identified on retrospective medical record review. We will create a clinical prediction rule, called the PHSI, to stratify patients on likelihood of experiencing a poor long-term outcome after surgical treatment. Participants will be classified as “good” or “poor” outcome based on thresholds set for questionnaire results. We will use a combination of bivariate analysis and clinical reasoning to restrict the number of factors for further analysis, and multivariate logistic regression to build a predictive model for poor outcome. Creation of the PHSI will involve assigning integer values to adjusted odds ratios for significant risk factors at a 95% confidence level. RESULTS/ANTICIPATED RESULTS: Risk factors that we anticipate will be predictive of long-term clinical outcome include signs and symptoms at onset (bulging fontanel, splayed sutures, papilledema, up-gaze palsy, headache, vomiting, lethargy), head circumference above the 97th percentile, frontal-occipital horn ratio greater than 0.4, etiology of meningitis or neonatal intraventricular hemorrhage, central nervous system comorbidities (seizures, Chiari malformation, scoliosis, periventricular leukomalacia), pre-operative infection or sepsis, and frequent shunt revisions or infections. We
PTSD: Understanding differences in trauma cognitions, memory, and emotional regulation
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OBJECTIVES/SPECIFIC AIMS: Low-income, urban adolescents experience high rates of interpersonal and community violence and consequently post-traumatic stress disorder (PTSD). Memory theory purports that the development of PTSD can be explained by dysfunctional trauma cognitions, high sensory and poor articulation of trauma memories, and poor emotional regulation. The purpose of this paper is as follows: (1) to describe trauma experiences and PTSD symptoms of a high-risk sample of low-income urban youth and (2) to explore if post-traumatic cognitions, trauma memory quality, or emotional regulation means differ in participants screening positive for PTSD as compared with those that did not screen positive. METHODS/STUDY POPULATION: A preliminary sample of low-income, urban adolescents (ages 16–21) at risk for homelessness took a web-based, self-report survey responding to questions related to their experiences of trauma and mental health (n = 48). PTSD was measured with the PTSD Checklist for DSM-5 criteria (PCL-5). A cut-off of 33 was used as a positive screen for PTSD. Post-traumatic cognitions was measured with the post-traumatic cognition inventory (pct) with higher scores representing greater dysfunctions and negative cognitions. Trauma memory was measured with the Trauma Memory Quality Questionnaire (TMQQ) with higher scores representing more sensory-based and poorly verbalized memories. Emotional regulation was measured using the Difficulties in Emotional Regulation Scale (DERS) with higher scores representing greater difficulties with emotional regulation. All 3 variables conceptually represented theoretical constructs of the development of PTSD. Initial data from the baseline survey was used conducted a 1-way ANOVA to compare the difference in post-traumatic cognition, quality of trauma memory, and emotional regulation in those that screened positive for PTSD as compared with their peers. RESULTS/ANTICIPATED RESULTS: The majority of this population (80%) experienced at least 1 traumatic life event. This sample experienced an average of 10.5 lifetime traumas (SD = 10.6). Of those experiencing trauma, 70% (n = 8) reported positive PTSD symptoms (PCL-5). There were significant group differences among those screening positive for PTSD and their peers in the following variables: (1) pct (F(1,34) = 10.43, p < 0.004), (2) TMQQ (F(1,29) = 11.02, p < 0.002), and (3) DERS (F(1,34) = 19.68, p < 0.001). The majority of this population (80%) experienced at least one traumatic life event. This sample experienced an average of 10.5 lifetime traumas (SD = 10.6). Of those experiencing trauma about 20% (N=8) reported a positive PTSD screen (PCL-5). There were significant group differences among those screening positive for PTSD and their peers in the following variables: (1) pct (F(1,24) = 10.43, p < 0.004), (2) TMQQ (F(1,29) = 11.02, p < 0.002), (3) DERS (F(1,36) = 19.68, p < 0.001). DISCUSSION/SIGNIFICANCE OF IMPACT: This sample reported high rates of trauma and PTSD. Constructs representing memory theory (cognition dysfunction, quality of memory, and emotional regulation) all significantly differed among participants with PTSD compared with their peers. Consequently, it may be useful for trauma interventions to target the maladaptive post-traumatic cognitions, quality of traumatic memories, and emotional regulation in this population. These results will inform work that aims to target the maladaptive post-traumatic cognitions, quality of traumatic memories, and poor emotional regulation. The purpose of this paper is as follows: (1) to describe trauma experiences and PTSD symptoms of a high-risk sample of low-income urban youth and (2) to explore if post-traumatic cognitions, trauma memory quality, or emotional regulation means differ in participants screening positive for PTSD as compared with those that did not screen positive.

Characterizing delayed transition to adult care in children with chronic kidney disease
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OBJECTIVES/SPECIFIC AIMS: As part of a larger effort to create a longitudinal record of care for patients with chronic kidney disease (CKD), in Delaware, we assessed transitions of care from pediatric to adult care. This study examined the length of time between last pediatric contact and first contact in the adult system in order to determine characteristics associated with delayed transition to adult care. METHODS/STUDY POPULATION: Patients who receive pediatric care at the Nemours/Alfred I. duPont Hospital for Children (Nemours) are transitioned to adult care between the ages of 18 and 21. Our study population consists of all patients seen in the Nephrology unit at Nemours for CKD, hypertension (HTN), or diabetes who turned 21 years old between 2007 and 2013. Records of office visits from Nemours, Christiana Care Health System (CCHS), and Nephrology Associates, P.A. (NAPA) were transferred into the OMOP common data model and merged. Patients who had at least 1 record in the Nemours EHR of pediatric care before age 21 and had at least 1 record in the CCHS or NAPA adult EHRs were considered transitioned. To identify characteristics associated with delayed transition to adult care, we compared gender, race, ethnicity, age, comorbidities, and level of kidney function at the last pediatric visit between patients whose transition gap was less than 1 year and patients whose gap was 1 year or more. Kidney function was estimated by calculating glomerular filtration rate (GFR). Nemours estimates GFR in children using the revised Schwartz equation, which is based on serum creatinine and height. To calculate adult GFR, we used the CKD-Epi equation, which is based on serum creatinine, age, sex, and race and is widely used to derive adult GFR. As kidney function declines, GFR decreases. We used Fisher exact test to compare categorical variables and t-test to compare age and GFR. RESULTS/ANTICIPATED RESULTS: We found only 109 (25%) patients who had records in our adult offices out of the 440 Nemours patients in our database. Of the 109 transitioned patients, 54 had offices visits at CCHS, 37 at NAPA, and 18 at both locations. Examining the office visits of the 109 transitioned patients, 34 (31%) had an overlap in visits defined as an office visit at CCHS or NAPA before the last office visit at Nemours, and 75 (69%) did not have an overlap. The median gap between last pediatric and first adult office visit for the 75 patients without an overlap was 615 days (range 8–3495 d). Only 6% (6 of the 109 transitioned patients had overlapping GFR measurements) from pediatric to adult care, and all of the adult GFR calculations (CKD-Epi) were greater than the pediatric GFR calculations (Schwartz). The difference between child and adult GFR ranged from 8.2 to 87.1 mL/minute per 1.73 m². DISCUSSION/SIGNIFICANCE OF IMPACT: During the transition from pediatric care to adult care, many young adults with CKD experience declines in health outcomes and comorbidities such as diabetes and HTN complicated self-management. Lack of overlap between pediatric and adult care office visits indicates a delay in executing this transition. In our population of 109