

transitioned, 36 moved, and 15 died. Seventy patients are still under pediatric care and were excluded. Sixty-eight percent of patients that transitioned had their last pediatric visit in Birmingham, compared to only 32% of those that transitioned from outreach sites ($p < .01$). Patients were more likely to successfully transition if they had sickle cell anemia (HbSS or HbSÄŸ0) ($p < .01$) and if they were receiving hydroxyurea or chronic transfusion therapy ($p < .01$). DISCUSSION/SIGNIFICANCE OF FINDINGS: Geography, genotype, and SCD therapy are potential drivers for transition. Genotype in pediatrics likely confers disease severity, suggesting patients with worse SCD may be more likely to successfully transition. Novel strategies are needed to improve transition of care for patients outside of Birmingham and those with less severe disease.

58055

Mothers' and Fathers' Parent-Child Aggression Risk, Intimate Partner Violence, and Perceived Child Behavior Problems*

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ABSTRACT IMPACT: In light of the high co-occurrence between intimate partner violence (IPV) and physical child abuse, studying these forms of aggression simultaneously, bidirectionally, and longitudinally is vital to address this public health need. OBJECTIVES/GOALS: This study examined reciprocal associations between parent-child aggression (PCA) risk, IPV victimization, and perceived child behavior problems, to evaluate whether negative processes can transmit across family subsystems (i.e., spillover hypothesis) and/or across individuals (i.e., crossover hypothesis) over time. METHODS/STUDY POPULATION: Participants were first-time mothers and their male partners enrolled in a prospective longitudinal study, which tracked parenting and PCA risk over the transition to parenthood and into early childhood. The current project examined data from the third and fourth waves, when participants' child was 18 months old and approximately 4 years old. At both timepoints, parents reported on their PCA risk (i.e., child abuse potential, harsh parenting), physical and psychological IPV victimization and perpetration, and perceived child behavior problems. Mothers and fathers each completed protocol on laptops in separate private rooms. Hypotheses were tested with autoregressive cross-lagged path models, which were estimated for mothers and fathers separately as well as dyadically. RESULTS/ANTICIPATED RESULTS: Findings partially supported the hypotheses, with evidence of spillover occurring bidirectionally for mothers and unidirectionally for both mothers and fathers. Mothers' PCA risk predicted their subsequent IPV victimization and their reported child behavior problems (i.e., spillover effects) as well as fathers' reported IPV victimization (i.e., crossover effect). Maternal reports of child behavior problems also predicted mothers' reported IPV victimization and fathers' reported child behavior problems, indicating possible child-driven effects. Overall, results demonstrate the mutual influence of individuals and subsystems within the family. Additionally, mothers rather than fathers appear more vulnerable to harmful spillover effects. DISCUSSION/SIGNIFICANCE OF FINDINGS: The need for family prevention and intervention services is clear, given the complex, transactional nature of family violence. Particularly for mothers, higher PCA risk may herald an increased risk for subsequent IPV victimization and vice versa. Clinical implications for parent-focused intervention programs are discussed.

73061

The UAB COVID-19 Collaborative Outcomes Research Enterprise (CORE): Developing a Learning Health System in Response to the Global Pandemic

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ABSTRACT IMPACT: Interdisciplinary networks represent critical components of translational science and learning system development. Our work impacts translational research by presenting an evidence-based approach to developing interdisciplinary networks in response to the COVID-19 pandemic; the approach presented may have broad applications within other academic institutions and medical centers. OBJECTIVES/GOALS: As a local response to the COVID-19 pandemic, we established the University of Alabama at Birmingham COVID-19 Collaborative Outcomes Research Enterprise (CORE) as an interdisciplinary learning health system (LHS) to achieve an integrated health services and outcomes research response amid the pandemic. METHODS/STUDY POPULATION: We adapted a learning system framework, based upon a scoping review of the literature and the Knowledge to Action Framework for implementation science. Leveraging this framework, we developed an institutional-level collaborative network of extant expertise and resources to rapidly develop an interdisciplinary response to COVID-19. The network was designed to quickly collect newly published or clinical information related to COVID-19, to evaluate potential usefulness of this information, and to disseminate the new knowledge throughout the interdisciplinary network; we strove to engage a wide variety of expertise and skills in the network. Thus, we subsequently used social network analysis to examine the emergence of informal work patterns and diversified network capabilities based on the LHS framework. RESULTS/ANTICIPATED RESULTS: We identified three principal characteristics of institutional LHS development including: 1.) identifying network components; 2.) building the institutional collaborative network; and 3.) diversifying network capabilities. Seven critical components of LHS were identified including: 1.) collaborative and executive leadership, 2.) research coordinating committee, 3.) oversight and ethics committee, 4.) thematic scientific working groups, 5.) programmatic working groups, 6.) informatics capabilities, and 7.) patient advisory groups. Evolving from the topical interests of the initial CORE participants, three scientific working groups (health disparities, neurocognition, and critical care) were developed to support the learning network. DISCUSSION/SIGNIFICANCE OF FINDINGS: Interdisciplinary collaborative networks are critical to the development of LHS. The COVID-19 CORE LHS framework served as a foundational resource that may support further institutional-level efforts to develop responsive learning networks. The LHS approach presented may have broad applications within other academic institutions and centers.

95818

Physical and Cognitive Resilience and Alzheimer's Disease in a Tibetan Buddhist Monastic Community

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ABSTRACT IMPACT: The findings of this study could lend us insights into behavioral intervention that could potentially prevent

or slow the onset of Alzheimer's disease. **OBJECTIVES/GOALS:** This study examines the association between cognitive and physical resilience and Alzheimer's disease in a Tibetan Buddhist monastic community in southern India. **METHODS/STUDY POPULATION:** The study will employ mixed methods of semi- and unstructured interviews and surveys. The interviews will be conducted among 60 monks of age 50+ in six Tibetan monastic colleges in southern India. The interviews will comprise general questions related to monks' monastic educations and practices, as well as clinical cognitive interviews. Interviewees will be randomly sampled from a census of monks at the six monasteries. Owing to COVID-19 crisis, we will begin data collection, starting with interviews via zoom in mid-December 2020. The survey, which includes demographic information, cognitive assessments, meditative practices, health, memory and physical activity, will be conducted among 400 monks. The survey will be performed onsite and is tentatively scheduled in the summer of 2021. **RESULTS/ANTICIPATED RESULTS:** The study will help to identify factors associated with physical and cognitive resilience and develop measures to quantify and describe meditative and cognitive practices. These data will be used to both adapt validated measures developed in Western populations for use with this unique population and to develop new items on physical and cognitive resilience to include in the planned survey. Furthermore, the study will provide information about the prevalence of Mild Cognitive Impairment and Alzheimer's disease and related dementias in this population and development of the survey to capture culturally appropriate measures, including on meditation. The findings could eventually lend us insights into behavioral intervention that could potentially prevent or slow the onset of Alzheimer's in wider population. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Cognitive and physical resilience are understood to confer significant benefits to health outcomes and healthy aging. However, the factors related to resilience, particularly in older adults, are poorly understood. This study will estimate the link between frequency and intensity of meditative practices and physical and cognitive resilience.

97448

Biopsychosocial Determinants of Pain Assessment and Management - Medical and Surgical Trainees' Perspective

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ABSTRACT IMPACT: Better understanding how clinicians make decisions about pain management, particularly since our prior research has demonstrated that opioids prescribed at discharge is the strongest predictor of opioids taken, is critical to decrease high-risk medication prescribing while preserving high-quality care. **OBJECTIVES/GOALS:** (1) Identify major biological, psychological, and social determinants of medical and surgical residents' pain management decisions; (2) Determine salient themes regarding the experience of residents in the management of acute and chronic pain. **METHODS/STUDY POPULATION:** Focus groups of internal medicine and general surgery residents at an academic, tertiary care training hospital located in an urban setting were conducted. Due to the COVID-19 pandemic, all focus groups were conducted virtually and occurred during required didactic sessions to facilitate participation. All interviews were recorded and transcribed. Two reviewers independently reviewed and coded the data following the principles of constructivist grounded theory. **RESULTS/ANTICIPATED**

RESULTS: 42 residents participated in ten focus groups ranging in size from two to five individuals. Six themes emerged demonstrating salient BPS factors in pain management decisions: (1) patient and clinician expectations determine what is considered normal/acceptable; (2) inability of pain scales to reliably capture patient pain; (3) desire for more objective methods of pain assessment, while simultaneously recognizing that pain is an inherently subjective experience; (4) difficulty in determine when pain is 'real' or 'legitimate'; (5) lack of education and protocols regarding pain management; (6) the importance of engaging other services such as acute pain service or nurse educators in complicated situations. Junior residents often expressed doubt in the appropriateness of their approaches and decisions. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Surgical and medical trainees routinely treat pain and may struggle, particularly in the early phases of training, to determine if pain levels are appropriate. There is also a lack of education and/or best practices for assessing and managing pain. These areas represent high-value, clinician-focused targets for future interventions to improve care.

Education/Mentoring/Professional and Career Development

55179

An assessment of understandability and actionability in breast cancer survivorship print materials

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ABSTRACT IMPACT: Our results reveal a limited amount of breast cancer survivorship print materials as both understandable and actionable, and indicate a need to supplement material with personalized teaching. **OBJECTIVES/GOALS:** Using educational print material for young women breast cancer survivors (YBCS) is considered a best practice in patient teaching. Little is known about how well YBCS understand or act upon the material. The purpose of this study was to assess the understandability and actionability of commonly distributed breast cancer survivorship print materials. **METHODS/STUDY POPULATION:** We used an environmental scan approach to obtain breast cancer survivorship print materials available in eight outpatient oncology clinics and one electronic medical record used in a Midwestern state. Print materials were included if they were freely available to patients, were specific to breast cancer, provided detailed information about survivorship, and were directly given to patients by physicians or nurses. Print materials were excluded if topics were related to treatment, diagnosis, or prevention. All brochures, drug advertisements, and advertisements for support services were excluded. The understandability and actionability analyses of the breast cancer survivorship print materials were analyzed using Patient Education Materials Assessment Tool for Printable Materials (PEMAT-P). **RESULTS/ANTICIPATED RESULTS:** The environmental scan resulted in 82 individual print materials. After applying the inclusion and exclusion criteria, eight breast cancer survivorship print materials were included in the final sample. The final sample included two books, two patient education handouts from the electronic medical record,