

tools for depression in integrated primary care settings. **METHODS/STUDY POPULATION:** This was a cross-sectional questionnaire study of depressed patients at two primary care clinics in a Midwest academic medical center. Adult patients (≥ 19 years) who had an active or previous diagnosis of depression were included in the study. A self-administered survey collected information pertaining to demographics, smartphone ownership, data plan type, smartphone application usage, mobile app self-management interest, health literacy, and patient activation. Chi-square analysis was conducted to compare the patient demographic characteristics, the smartphone ownership, phone plan, smartphone use for health information between two clinics. Multinomial logistic regression analysis was conducted to examine the association between the patient activation and patient characteristics. **RESULTS/ANTICIPATED RESULTS:** Over 80% of patients owned a smartphone, 80.5% were willing to use data for depression management, and 68.9% believe an app can help in depression management. A higher literacy level was significantly associated with higher level of patient activation (Chi-square=8.5453; $p=0.0360$). These results suggest that planning interventions that use mobile apps within this patient population is likely feasible and the intended underserved patients at these clinics have an interest in using depression related apps which is similar to findings found by other studies exploring app interest. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Understanding patient activation levels within a given population can help to shape corresponding needs. The use of depression related self-management mobile apps will likely require the development of educational materials to facilitate patient use and engagement which means understanding the literacy needs of this population as well.

58210

Perspectives and Guidance for Mobile Health Self-Management Intervention Developers from Adolescents and Young Adults with Chronic Illnesses: A Qualitative Study

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ABSTRACT IMPACT: The perspectives and guidance from adolescents and young adults (AYA) reported in this study could inform the evidence-based development and delivery of mobile health (mHealth) interventions to improve the health of AYA with chronic diseases. **OBJECTIVES/GOALS:** To elicit advice from AYA with chronic healthcare needs regarding if and how mHealth interventions could effectively promote illness self-management skills. We selected this goal because including the user perspective from the beginning of the design process could lead to greater future adoption. **METHODS/STUDY POPULATION:** We purposively recruited AYA patients from a pediatric hospital with heterogeneous chronic illnesses to identify universal chronic disease views rather than condition-specific perspectives. We conducted qualitative face-to-face semi-structured interviews with ($N = 19$) AYA between 16 and 20 years old (63.2% Latinx; 21.1% Black; 10.5% White; 5.3% Multiracial). Using ATLAS.ti, three coders completed thematic analysis to inform a conceptual framework on how AYA believe mHealth interventions could promote the development and maintenance of self-management skills. Member checking was conducted

over the phone to obtain participant feedback on themes to enhance the validity of qualitative results. **RESULTS/ANTICIPATED RESULTS:** Results suggest that AYA develop self-management skills through several strategies, including 1) getting organized, 2) 'making it work for me' and 3) keeping the 'right' mentality. AYA described developing these strategies through: 1) receiving social support, 2) accessing helpful tools and technologies, and 3) going through a maturation process. They provided recommendations for how mHealth interventions could improve this process, including: 1) 'what' recommendations, describing the content or active ingredients that should be included in mHealth interventions, and 2) 'how' recommendations, describing the technological aspects or style in which the interventions should be delivered. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** The results suggest that an appealing mHealth intervention could increase the support for AYA patients to proactively acquire self-management skills, avoiding trial-and-error or uneven access to guidance. Improving self-management could prevent poor health outcomes and increase quality of life.

Mechanistic Basic to Clinical

39347

Examining the Potential for Tech-Based HIV Interventions for Young Black Women

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ABSTRACT IMPACT: Findings from this study have the potential to improve interventions geared toward YBW, by highlighting the potential for technology-based HIV interventions. **OBJECTIVES/GOALS:** A stark disparity in HIV exists for Black American women, with 61% of all new HIV infections among American women occurring in Black women. Using technology to address community-level HIV risk may be beneficial, however few studies have examined the association of tech-based communication and HIV prevention behaviors among Black women. **METHODS/STUDY POPULATION:** Egocentric social network data from 201 young Black women (YBW) were collected from June 2018 to December 2018 to identify how social media use (e.g., amount of time, type of social media used, health information seeking) and sexual health communication (e.g., talk about condom use via face-to-face, text or phone and talk about HIV testing via face-to-face, text or phone) were associated with condom use, HIV testing and interest in pre-exposure prophylactic (PrEP). Statistical analysis proceeded in two stages, descriptive statistics and multivariate logistic regression modeling. **RESULTS/ANTICIPATED RESULTS:** Instagram (82%) and Snapchat (79%) were the most used social media platforms for communication with SNMs. About 20% of YBW reported spent 4 or more hours on social media per day, and a majority of YBW spoke to at least one SNM via text (85%), face-to-face (98%), or on the phone (97%). Multivariate logistic regression results indicated that YBW who spoke to their SNMs via Instagram had 3.23 times the odds of using condom during last sex, however if they spoke to SNMs on twitter or spent more than 4 hours on social media they had a decrease in odds of using condoms. YBW had 96% decreased odds of ever being tested for HIV if they spoke to a SNM face-to-face about condom use; and

notably, YBW had 3 times the increased odds in interest of using PrEP if they had sex with someone they met online or if they sought sexual health information online. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** By assessing the modes of communication YBW are using to speak with their SNMs and their associations with HIV prevention behaviors, we can better determine the most optimal, efficient, and effective ways of utilizing technology for HIV intervention.

Dissemination and Implementation

Clinical Epidemiology

43745

A pilot survey to assess the practices, attitudes and beliefs around endotracheal aspirate culture use in a pediatric intensive care unit

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ABSTRACT IMPACT: Optimizing the use of endotracheal aspirate cultures (EACs) has the potential to improve the care of complex mechanically ventilated children by improving testing practices and avoiding unnecessary antibiotic treatment for false-positive results. **OBJECTIVES/GOALS:** An electronic survey has previously been employed to characterize the practices and attitudes around blood cultures among critically ill children. The objective of this work was to develop and pilot a new survey as a tool to understand practices and attitudes that could inform quality improvement initiatives to optimize EAC practices. **METHODS/STUDY POPULATION:** Informed by prior experience of diagnostic stewardship of EAC in other settings and using a similar structure to the blood culture practice survey, we developed an electronic self-administered survey sent to respiratory therapists, advanced practice providers, and physicians at the Johns Hopkins All Children's pediatric intensive care unit. **RESULTS/ANTICIPATED RESULTS:** A total of 27 of 87 clinicians (37%) responded to the survey (22 respiratory therapists, 9 attending physicians and 1 advanced practice provider). Responses indicated samples are typically collected by respiratory therapists via in-line (endotracheal) or open suctioning (tracheostomy). Most respondents did not feel EACs could lead to unintended negative consequences (71%), agreed practices vary between people (89%), and felt an algorithm would help align the clinical team (79%). Most respondents agreed some clinicians may be reluctant to change practice (82%) and may not change practice due to concern for missing diagnosis of ventilator-associated pneumonia or tracheitis (78%). Surveillance cultures were not used in this unit and there were no prior EAC diagnostic stewardship efforts. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** This survey captured practices, perceptions and barriers to changes that will inform the implementation of quality improvement initiatives to optimize EAC use in this unit. Future studies can consider utilizing an electronic survey to describe practice variation, clinician beliefs and attitudes about EAC testing in ventilated patients.

Digital Health/Social Media

80276

Use of Live Community Events on Facebook to Share Health and Clinical Research Information with the Community: An Exploratory Study

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ABSTRACT IMPACT: We review our strategy to use live community events on Facebook to share health and clinical research information and share further steps to increase engagement. **OBJECTIVES/GOALS:** To describe the use of live community events to enhance communication about clinical and health research through a Facebook platform (MN Research Link) with diverse social media users. The project identified variables associated with video engagement and strategic implications. **METHODS/STUDY POPULATION:** From June 2019 to November 2020 we streamed 31 events on the MN Research Link Facebook public page. Events highlighted different investigators' clinical and health research in the areas of mental health, health and wellness, chronic diseases and immunology/infectious diseases. Facebook analytics were used to determine the number of views, total minutes viewed, average video watch time, and audience retention. Engagement score was calculated as the total number of interactions (likes, shares, and comments) divided by total number of followers (N=1437), expressed as a percentage. **RESULTS/ANTICIPATED RESULTS:** Events averaged 24secs/16 min (SD=0.4). A mean of 1.61 (SD=1.28) followers viewed the events live but an average of 417.52 (SD=793.50) followers viewed after the event posted. The average engagement score was 1.1%. Mean total minutes viewed for all 31 videos was 253.5 (SD= 437.6). Viewers spent an average of 17 seconds (SD=0.01) watching each piece of video content. On average 28 followers viewed the events for at least 1-minute event (SD= 48.7). Audience retention at the halfway point for each video was 15.74% (SD=0.19). **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Results suggest that novel approaches are necessary for active engagement. Promotion of live events is recommended to increase participation and length of engagement. Prior length of engagement (average 17 seconds), suggests refining video introduction will increase engagement.

Education/Mentoring/Professional and Career Development

63565

Awareness of Low Value Care Is Requisite for De-Implementation: Nurses' Choosing Wisely® Campaign

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ABSTRACT IMPACT: Points to strategies to de-implement ineffective, harmful, or unproven practices, lowering burden and cost of