23.

PRACTICAL TOOLS TO SUPPORT ADOLESCENT SUBSTANCE ABUSE PREVENTION IN PRIMARY CARE: A MULTI-SITE RANDOMIZED CONTROLLED TRIAL OF COMPUTER-FACILITATED SCREENING AND PROVIDER BRIEF ADVICE IN THE MEDICAL OFFICE

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Purpose: Substance use (SU) can harm the developing adolescent brain, making delaying its initiation or decreasing its frequency among youth an important public health goal. National guidelines recommend primary care providers screen all adolescents for SU and give brief advice, but studies show that adherence to this recommendation is suboptimal. Often cited barriers to screening include lack of time and training. To ameliorate these barriers, we developed a computer-facilitated Screening and Brief Advice (cSBA) system consisting of computerized pre-visit screening and psychoeducation for patients, and point-of-care decision support and advice guidance for providers. We tested the system's effects, compared to treatment as usual (TAU), on adolescent receipt of provider advice to avoid SU, and on SU prevention during a 12-month follow-up, as indicated by time to first substance use post-visit.

Methods: Patients ages 11–20 years with upcoming well-visits at 5 Boston-area pediatric primary care practices (54 participating providers) were consecutively recruited in 2015–2016 through mailed informational letters, or upon arrival for their visit. Participants (N = 1011) provided informed assent (18 years), with an IRB-approved waiver of parent consent. Before seeing their provider, participants completed the CRAFFT 2.0 screen on a tablet computer, and then were randomized within site (1:2.5) to receive either TAU (n = 279) or cSBA (n = 732). The computer program then presented cSBA participants with immediate personalized feedback about their screen results, brief psychoeducation on substance use risks to health and development, and gave providers the screening results, "talking points" (guiding 2–3 minutes of brief discussion), and recommended follow-up plan. We assessed advice receipt with a patient questionnaire immediately post-visit, and substance use days at baseline and through the 12 months post-visit using a Timeline Follow-Back calendar completed confidentially online or by phone at 3-month intervals. We used Cox proportional hazards regression analysis in SPSS to compare days-to-first-use post-visit, controlling for age and baseline use.

Results: The participation rate was 89%; 89% of baseline completers had at least one follow-up assessment, with no significant difference in retention or baseline substance use rates between groups. Participants had mean age+SD 15.0 + 2.3 years, and were comprised of 51% girls, 44% White non-Hispanic, 77% from two-parent homes, and 65% had college-graduate parents. Most (85%) saw a pediatrician (vs. NP/PA), and 93% had >1 prior visit with that provider. Twenty-nine percent reported any baseline past-12-month alcohol or drug use, with alcohol, cannabis, and other drug use rates 27%, 15%, and 2%, respectively; 9% were CRAFFT+ (score >2). cSBA increased patient-reported receipt of provider advice to avoid use (90% vs. 71%, chi-square p < .001). Adjusted hazard ratios (AHR) for days-to-first-use of any substance in cSBA compared to TAU was .77 (95%CI .61-.98), indicating longer time until use post-visit in the intervention group; the AHR for alcohol was .75 (.59-.96), and for cannabis .61 (.44-.86).

Conclusions: Computer-facilitated adolescent screening and provider brief advice significantly delayed, compared to usual care, time to first substance use following the pediatric well-visit.

PLATFORM RESEARCH PRESENTATION V: MENTAL HEALTH

24.

THE DEPRESSION CURRICULUM: PRIMARY CARE, CASE-BASED TRAINING ON CARING FOR ADOLESCENTS WITH DEPRESSION FROM SCREENING TO PHARMACEUTICAL MANAGEMENT

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Purpose: Although 10% of U.S. children and adolescents have functional impairment from a mental health disorder, fewer than 20% of these youth receive care. To address this gap, pediatricians must possess the knowledge necessary to diagnose and treat depression. However, little formal mental health training currently exists within pediatric programs. We implemented and evaluated a depression curriculum designed to improve resident knowledge and confidence in diagnosing and treating adolescents with depression within the primary care setting.

Methods: A case-based curriculum was implemented to simulate care, from screening to medical management, of the depressed adolescent. Four teaching sessions occurred during the Adolescent Medicine (AM) rotation. Through facilitated small-group case discussions and roleplaying, topics on signs/symptoms of depression, diagnostic criteria, validated screening tools, non-pharmaceutical interventions, initiating medication, and ongoing medical management are explored. Participants are recruited using convenience sampling of pediatric residents on the AM rotation. A de novo, anonymous, 5-point Likert scale, retrospective pre-post survey was administered to assess residents' self-reported knowledge and confidence to diagnose and treat adolescent depression. Demographics include year of training and residency track. Covariates include past experience with child/adolescent psychiatry (CAP) and prior exposure to initiating and managing depression medication in the resident's continuity clinic and the AM rotation. Paired t-tests were used to evaluate change in resident mean self-reported knowledge and confidence scores. This IRB approved study will occur between March 2017 and February 2018.

Results: A total of 23 residents have been eligible to participate and 16(70%) completed all the study components. Of the participants, 2(12%) were post-graduate level (PL) 1, 10(63%) PL2, and 4(25%) PL3 or higher. The majority (81%) were categorical pediatrics, 14(88%) had no formal CAP experience, 10(63%) had never initiated depression medication in primary care, and 11(69%) reported application of learning during their AM rotation by initiating medication. However, only 1 of the 11(9%) had patient follow-up to assess effect of pharmaceutical interventions during the AM rotation. Resident self-reported knowledge significantly improved from the pre to post education with respect to 1) validated screening tools (2.6 to 3.7, p < .001); 2) diagnostic criteria for depression (2.8 to 3.8, p < .001); 3) safety assessment (3.1 to 4.0, p = .002); 4) non-pharmacologic management (2.6 to 3.8,