

reports a positive likelihood ratio of 26.1 and a negative likelihood ratio of 0.04 for predicting and excluding sepsis, respectively, with universal PCR used in initial evaluation for sepsis in neonates not exposed to antibiotics. Both values are well beyond the commonly identified thresholds of 10 for ruling in and 0.1 for ruling out disease. Accuracy of universal PCR is greater than that of the commonly used diagnostic adjunct, C-reactive protein.^{1,2} Still, the test did not identify all cases of culture-positive sepsis. Additionally, universal PCR was negative after antibiotic administration in nearly all neonates with sepsis. With the results of this study, universal PCR offers some clinical benefit over currently available tests that guide decision-making during initial sepsis evaluation in the neonatal intensive care unit. However, universal PCR cannot inform decision-making when sepsis evaluation is compromised by antibiotic exposure, arguably the clinical situation for which a discriminating test would be more useful.

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References

1. Malik A, Hui CP, Pennie RA, Kirpalani H. Beyond the complete blood cell count and C-reactive protein: a systematic review of modern diagnostic tests for neonatal sepsis. *Arch Pediatr Adolesc Med* 2003;157:511-6.
2. Fowle PW, Schmidt B. Diagnostic tests for bacterial infections from birth to 90 days—a systematic review. *Arch Dis Child Fetal Neonatal Ed* 1998;78:F92-8.

E-mail intervention decreases online health risk references among adolescents

Moreno MA, VanderStoep A, Parks MR, Zimmerman FJ, Kurth A, Christakis DA. Reducing at-risk adolescents' display of risk behavior on a social networking web site: A randomized controlled pilot intervention trial. *Arch Pediatr Adolesc Med* 2009;163:35-41.

Question Among at-risk adolescents who display references to sex and substance abuse on internet social networking sites (SNSs), will an online intervention reduce these references?

Design Randomized controlled intervention trial.

Setting www.MySpace.com

Participants A total of 190 self-described 18- to 20-year-olds with public MySpace profiles who met predefined criteria for being at-risk.

Intervention Single e-mail from self-identified physician.

Outcomes Web profiles were evaluated for references to sex and substance use and for security settings before and 3 months after the intervention.

Main Results Of 190 subjects, 58.4% were male. At baseline, 54.2% of subjects referenced sex and 85.3% referenced substance use on their social networking site profiles. The proportion of profiles in which references decreased to 0 was 13.7% in the intervention group versus 5.3% in the control

group for sex ($P < .05$, number needed to treat = 12) and 26.0% versus 22% for substance use ($P < .61$). The proportion of profiles set to "private" at follow-up was 10.5% in the intervention group and 7.4% in the control group ($P < .45$). The proportion of profiles in which any of these 3 protective changes were made was 42.1% in the intervention group and 29.5% in the control group ($P < .07$).

Conclusions A brief e-mail intervention shows promise in reducing sexual references in the online SNS profiles of at-risk adolescents.

Commentary Although media exposure has long been investigated as a health influence, interactive media present opportunities to measure and intervene on risk behaviors. Internet SNSs have become an increasingly important venue for identity exploration and self-presentation among youth. This study investigated effects of online warning from a physician on public displays of sex or substance use among high-risk 18- to 20-year-olds. Of 1340 profiles, 109 displayed ≥ 3 references to sex or substances, including ≥ 1 reference each to tobacco and alcohol use. Half were randomly selected to receive a single cautionary e-mail from a physician. After 3 months, compared with control subjects, adjusted odds of having removed all references to risk behaviors in the e-mail group were 4.2 times higher for sex and 1.9 times higher for either removing risk references or making the profile private. For youth, individualized concerned communication from an online health authority appears to encourage reduction in online displays of health risks.

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Pulse oximetry before discharge from the nursery can increase detection of serious congenital heart disease

de-Wahl Granelli A, Wennergren M, Sandberg K, Mellander M, Bejlum C, Inganas L, et al. Impact of pulse oximetry screening on the detection of duct dependent congenital heart disease: A Swedish prospective screening study in 39 821 newborns. *BMJ* 2009;338:a3037.

Question Among newborns, what is the accuracy of pulse oximetry in screening for early detection of life-threatening congenital heart disease?

Design Prospective screening study.

Setting All 5 maternity units in West Götaland, Sweden, and the supraregional referral center for neonatal heart surgery.

Participants A total of 39 821 screened babies born between July 2004 and March 2007. Total duct-dependent circulation cohorts: West Götaland $n = 60$, other regions $n = 100$.

Intervention Pulse oximetry before discharge from newborn nurseries in West Götaland.