Screening for Social Determinants of Health to Improve Care in Pediatric Patients with Recurrent Urinary Tract Infections: A Scoping Review Emily Gray, MSN, FNP-C and Michelle Rickard, DNP, CPNP-AC

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Purpose

To describe what is known about how SDoH screening impacts adherence to treatment in pediatric patients with recurrent UTIs.

Background

- SDoH affect numerous health outcomes (Sokol et al., 2021)
- Race, low income, & public health insurance are associated with inferior outcomes (Atkins et al., 2020).
- SDoH screening is recommended by AAP
 - Screening increases connection to resources, improving health - Best practices are not well known
- UTIs are one of most common childhood infections
 - Infection rates vary by race and ethnicity
 - SDoH screening could provide support to families resulting in fewer barriers to access care and improved treatment adherence

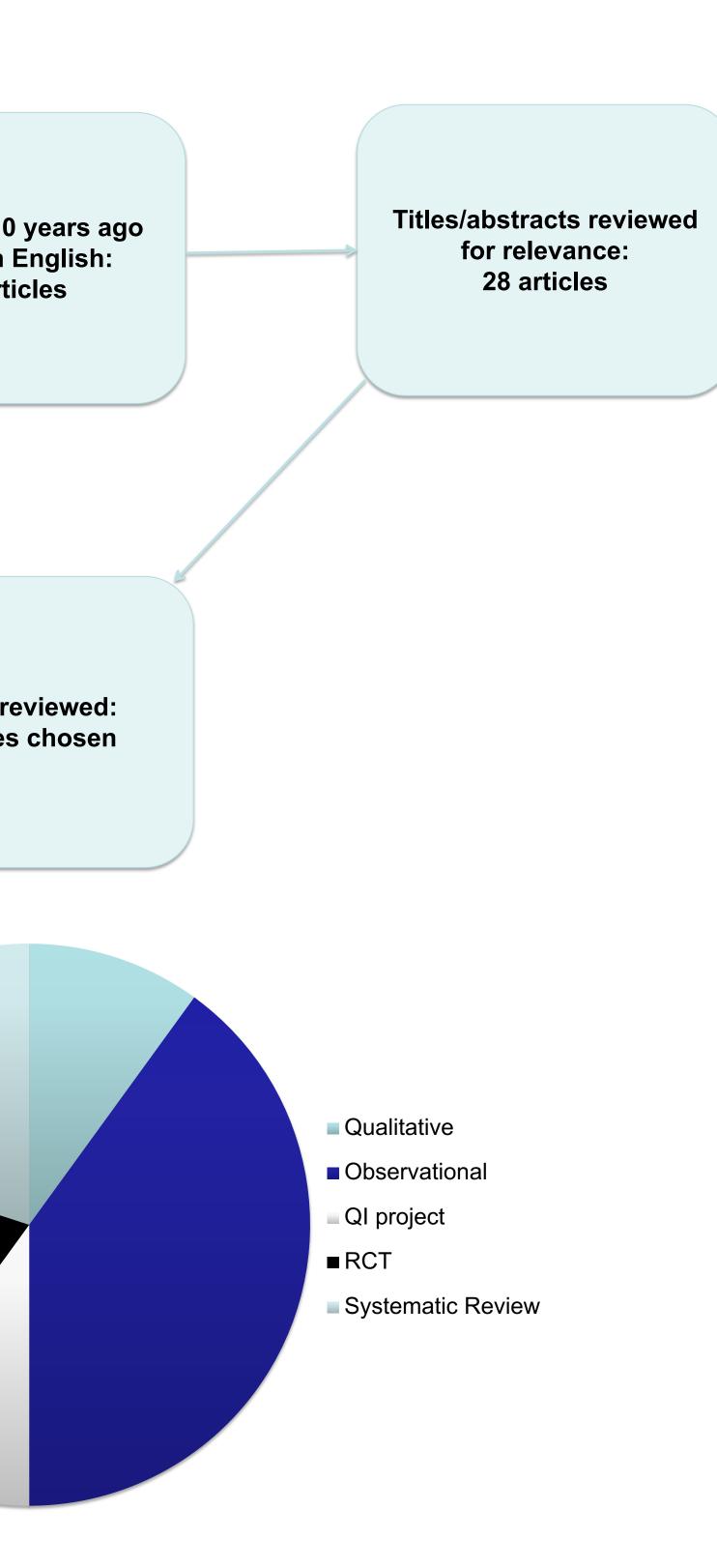
Methods

- PubMed and CINAHL databases were searched for eligible articles as well as the reference lists of relevant articles.
- Titles and abstracts were assessed for relevance to the scoping review's objectives and quality of evidence.
- 10 articles that most closely aligned with the aims of the review were chosen and included a wide range of study designs.
- Key findings were charted in a Microsoft Excel Spreadsheet, including SDoH screening practices and recommendations, adherence to treatment, and the relationship between health outcomes and SDoH screening.

Results Excluded >10 years ago 606 articles in and not in English: PubMed/CINAHL 556 articles Full text reviewed: 10 articles chosen

Results of individual sources of evidence

- SDoH screening most often occurs in the clinical setting (Sokol et al., 2019)
- Providers say screening is important but reported barriers (time, difficulty connecting with resources) (Sokol et al., 2021)
- SDoH associated with worse outcomes in patients with CHD (Davy et al., 2020)
- Environmental variables associated with worse bladder/bowel dysfunction symptoms (Martins et al., 2016)
- Significant decrease in ED visits for asthma exacerbations in a severe asthma clinic where SDoH screening occurred (Leibel et al., 2020)
- SDoH affects clinic visit attendance (Bailey et al., 2021)
- 4+ contacts with community health workers and contact within 30 days was associated with higher connection to resources after SDoH screening (Power Hays et al., 2020)
- Families aided by patient navigator had a decrease in unmet needs (Gottlieb et al., 2016)



Implications for Practice

- - -Screening can lead to referrals

References

- Atkins M., Castro, I. Sharifi, M., Perkins, M., O'Connor, G., Luo, M., Sandel, M., Taveras, E. & Fiechtner, L. (2020). Unmet social needs and adherence to pediatric weight management interventions: Massachusetts, 2017-2019. American Journal of Public Health, 110, S251-257. Doi: 10.2105/AJPH.2020.305772
- Bailey, J., West, M., Agarwal, R., & Kumar, G. (2021). Measuring the barriers to adherence with neurology clinic appointments for children with epilepsy: a pilot study. Child Neurology Open, 8, 1-8.
- Davey, B., Sinha, R., Lee, J., Gauthier, M., & Flores, G. (2021). Social determinants of health and outcomes for children and adults with congenital heart disease: a systematic review. *Pediatric Research*, 89:275–294.
- Fiori, K., MD, Rehm, C., Sanderson, D., Braganza, S., MD, Parsons, A., Chodon, T., Whiskey, R., Bernard, P. & Rinke, M. (2020). Integrating social needs screening and community health workers in primary care: the community linkage to care program. *Clinical Pediatrics*, *59*(6), *547-556*.
- Garg, A., Toy, S., Tripodis, Y., Silverstein, M., & Freeman, E. (2015). Addressing social determinants of health at well child care visits: a cluster RCT. *Pediatrics*, 135(2), e296e304.
- Schudel, C., & Adler, N. (2016). Effects of social needs screening and in-person service navigation on child health: a randomized clinical trial. Jama Pediatrics, 170(11), 1-7. determinants of health in a multidisciplinary severe asthma clinical program. *Pediatric*
- Gottlieb, L., Hessler, D., Long, D., Laves, E., Burns, A., Amaya, A., Sweeney, P., • Leibel, S., Geng, B., Phipatanakul, W., Lee, E., & Hartigan, P. (2020). Screening social Quality and Safety, 5(5), e360.
- Martins, G., Minuk, J., Varghese, A., Dave, S., Williams, K., & Farhat, W. (2016). Nonbiological determinants of paediatric bladder bowel dysfunction: a pilot study. *Journal of Pediatric Urology, 12,* 109.e1-109.e6
- Penn State Health. How social determinants link to patient health. https://pennstatehealthnews.org/2022/07/how-social-determinants-link-to-patient-health/ • Power-Hays, A., Li, S., Mensah, A., & Sobota, A. (2020). Universal screening for social determinants of health in pediatric sickle cell disease: a quality improvement initiative. *Pediatric Blood Cancer,* 67(1), e28006. doi:10.1002/pbc.28006.
- Sokol, R., Ammer, J., Stein, S., Trout, T., Mohammed, L., & Miller, A. (2021). Provider perspectives on screening for social determinants of health in pediatric settings: a qualitative study. Journal of Pediatric Health Care, 35(6), 577-586.
- Sokol, R., Austin, A., Chandler, C., Byrum, E., Bousquette, J., Lancaster, C., Doss, G., Dotson, A., Urbaeva, V., Singichetti, B., Brevard, K., Wright, S., Lanier, P., & Shanahan, M. (2019). Screening children for social determinants of health: a systematic review. *Pediatrics, 144*(4):e20191622.
- Swamy, P., Monterrey, A., Wood, M., Troisi, C. & Greeley, C. (2020). Caregiver and pediatric health care provider views on social needs identification. Journal of Primary Care and Community Health, 11, 1-7. Doi: 10.1177/2150132720923085

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- Incorporate SDoH screening/referral
 - -Unmet social needs are common
- Involve patient navigator role in SDoH screening
 - -Higher chance of connection to resources if patient navigator is
 - involved or follow up call with clinic staff/social worker occurs