

Unmet need for care coordination among children with special health care needs

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Background

- Coordination of children's health care has been endorsed by medical societies, health care institutions, and policy groups.
- Optimizing patients for surgery may require coordinating preoperative care for physical and mental health conditions
- Previous studies have described socioeconomic disparities in access to care coordination among children with special health care needs (**CSHCN**)
- Policy incentives and technological innovation have supported dissemination of the medical home model.
- Using a recent national survey, we evaluated whether disparities remain in access to care coordination among CSHCN

Results

- 5,622 children with no need for care coordination, 1,466 with a met need, and 980 with unmet needs
- Children with mental health conditions were more likely to have unmet rather than met needs for care coordination.
 - OR=4.1; 95% CI: 2.7, 6.1; p<0.001
- In multivariable analysis (**Table**), socioeconomic characteristics were not associated with greater odds of unmet vs. met need for care coordination.

Methods

- CSHCN (0-17 years of age) were identified in the 2016 National Survey of Children's Health.
- Screening questions asked whether child has a chronic medical condition and requires additional care compared to most children.
- Analysis included children using ≥2 types of health services in past year
- Children were classified as (1) not needing care coordination, (2) receiving sufficient care coordination (met need), or (3) needing but not receiving care coordination (unmet need).
- We examined odds of each outcome category according to child and family characteristics using weighted multinomial logistic regression.

Conclusion

- Many caregivers of CSHCN still report unmet needs for care coordination.
- Our study found none of the previously documented socioeconomic disparities in access to care coordination among children who need it.
- Remaining barriers to implementation of care coordination may relate to institutional constraints rather than individual socioeconomic factors.
- Perioperative surgical home initiatives can provide an entry point into care coordination for eligible patients.
- Future studies should evaluate whether preoperative care coordination reduces likelihood of delaying or canceling procedures, and whether postoperative care coordination reduces likelihood of adverse outcomes such as emergency department and urgent care visits.

References

1. Toomey SL, Chien AT, Elliott MN, et al. Disparities in unmet need for care coordination: the national survey of children's health. *Pediatrics*. 2013; 131:217-24.
2. Ferrari LR, Antonelli RC, Bader E. Beyond the preoperative clinic: Considerations for pediatric care redesign aligning the patient/family-centered medical home and the perioperative surgical home. *Anesth Analg*. 2015; 120:1167-70.

Table. Odds ratio of reporting unmet need vs. met need for care coordination from weighted multivariable regression (N=2,446)

| Characteristic ^a | Unmet vs. met need | |
|--------------------------------|--------------------|--------|
| | OR (95% CI) | P |
| Mental health condition | 4.1 (2.7, 6.1) | <0.001 |
| Female | 0.9 (0.6, 1.2) | 0.426 |
| Age | | |
| 0-5 years | Ref. | |
| 6-11 years | 1.4 (0.9, 2.2) | 0.161 |
| 12-17 years | 1.0 (0.6, 1.6) | 0.940 |
| Race | | |
| Hispanic | 1.2 (0.7, 2.1) | 0.468 |
| Non-Hispanic white | Ref. | |
| Non-Hispanic black | 0.8 (0.5, 1.3) | 0.353 |
| Other | 1.3 (0.8, 2.2) | 0.351 |
| Born in United States | 0.9 (0.4, 2.0) | 0.819 |
| Household income | | |
| 0-99% FPL | Ref. | |
| 100-199% FPL | 1.5 (0.9, 2.6) | 0.131 |
| 200-399% FPL | 1.0 (0.6, 1.8) | 0.947 |
| ≥400% FPL | 0.8 (0.5, 1.5) | 0.480 |
| Insurance type | | |
| Private | Ref. | |
| Public | 1.1 (0.7, 1.9) | 0.579 |
| Other | 0.8 (0.4, 1.7) | 0.600 |
| No insurance | 0.5 (0.2, 1.5) | 0.235 |
| English spoken at home | 0.9 (0.4, 2.1) | 0.792 |
| Family structure | | |
| Two-parent | Ref. | |
| Mother only | 0.7 (0.5, 1.1) | 0.170 |
| Other | 0.7 (0.4, 1.2) | 0.182 |
| Parental education | | |
| High school or less | Ref. | |
| Some college | 1.2 (0.7, 2.0) | 0.543 |
| Bachelor degree | 2.3 (1.3, 4.1) | 0.005 |
| Postgraduate | 1.8 (1.0, 3.2) | 0.068 |

^a Analysis also adjusted for state of residence (ORs not shown).
CI = confidence interval, FPL = federal poverty line, OR = odds ratio