



Social Determinants of Health, Access to Care, and Health-Related Quality of Life Outcomes Among Children Hospitalized with Respiratory Illnesses

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Disclosures

I have no financial relationships to disclose or conflicts of interest (COIs) to resolve.



Background



Seid et al. (2006) *Journal of Pediatrics*.
Simon et al. (2008) *Pediatrics*.



Background



Simon et al. (2008) *Pediatrics*.
Flores et al. (2008) *Pediatrics*.



Background



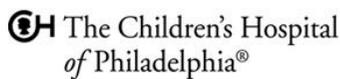
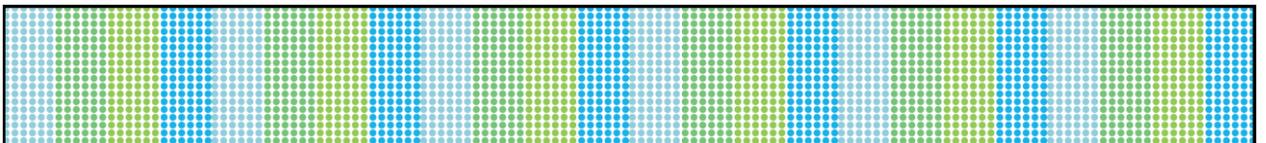
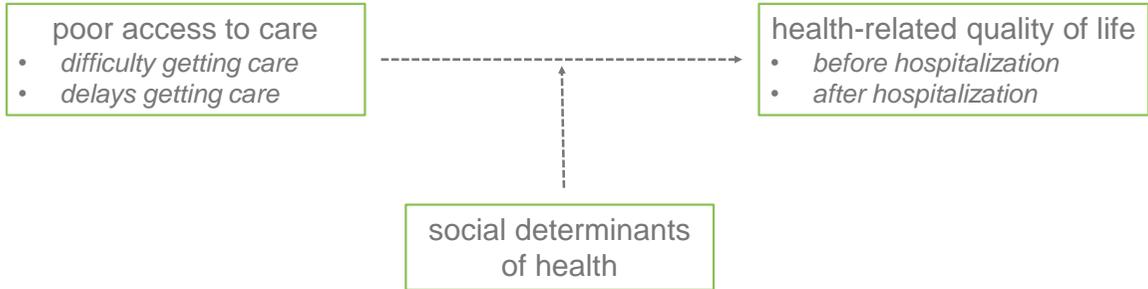
Study Objective

To understand how poor access to care impact health related quality of life outcomes before and after hospitalization in children hospitalized for common respiratory illnesses?



Study Objective

Is the association between poor access to care and quality of life outcomes worse for children with a higher number of social determinants of health?



Study Population

- Previously healthy children 2 weeks – 16 years hospitalized for at least one respiratory illness:
 - asthma
 - bronchiolitis
 - croup
 - pneumonia
- July 1, 2014 – June 30, 2016
- English or Spanish Speaking



Data Collection

1st survey

Response rate = 69%

Within 72 hours of admission

Metrics

- Access to care
- Social determinants of health
- Health-related quality of life
 - At baseline

2nd Survey

Response rate = 72%

Within 2 - 6 weeks after discharge

Metrics

- Health-related quality of life
 - At follow-up



Access to Care

“In the last 6 months, did you have any difficulties or delays getting care for your child because there were waiting lists, backlogs, or other problems getting an appointment?”

sometimes/usually/always = difficulty/delay getting care
never = no difficulty/delay getting care

Adapted from the National Survey of Children with Special Healthcare Needs (NS-CSHCN)



Social Determinants of Health (SDoH)

- Race/Ethnicity → minority
- Language → Limited English proficiency (LEP)
- Education level → \leq high school degree
- Income level → \leq \$30k/year

- 3 categories: no SDoH
1 SDoH
 ≥ 2 SDoH



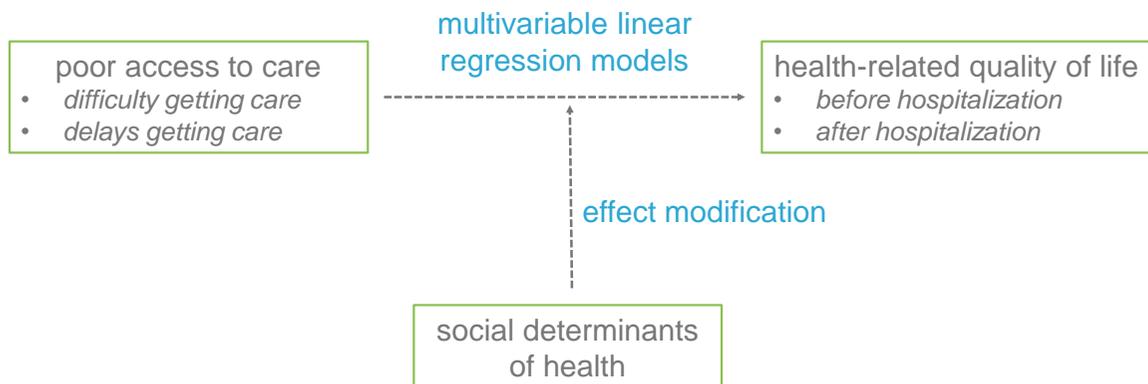
Health-Related Quality of Life

- Pediatric Quality of Life Inventory (PedsQL™)
 - Generic core scales (ages 2 – 18 years)
 - Infant scales (ages <24 months)
- Physical functioning
- 0 – 100 scale (higher = better)
- Minimal clinically important difference (MCID) = 4.5 points
- Proxy-report used when self-report was unavailable
- 1st assessment: Baseline HRQoL
- 2nd assessment: Follow-up HRQoL

Varni et al. (2003) *Ambulatory Pediatrics*.
Desai et al. (2014) *JAMA Pediatrics*.

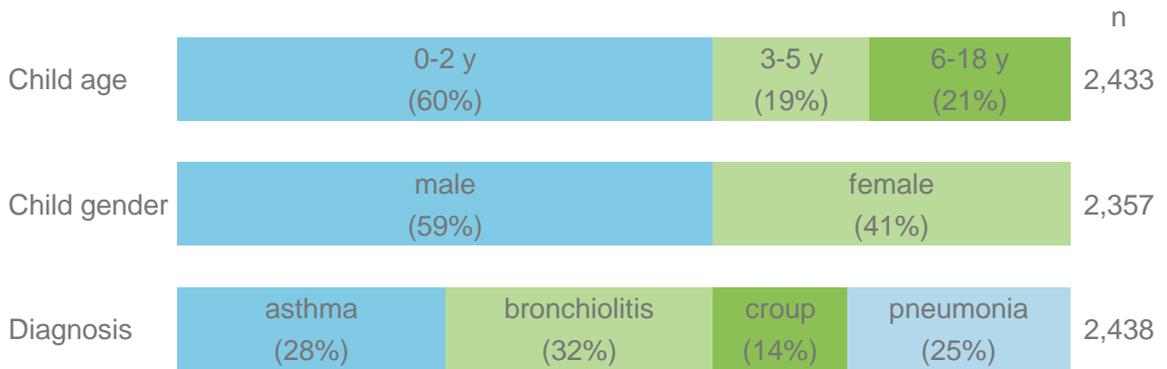


Analytic Plan



Demographics

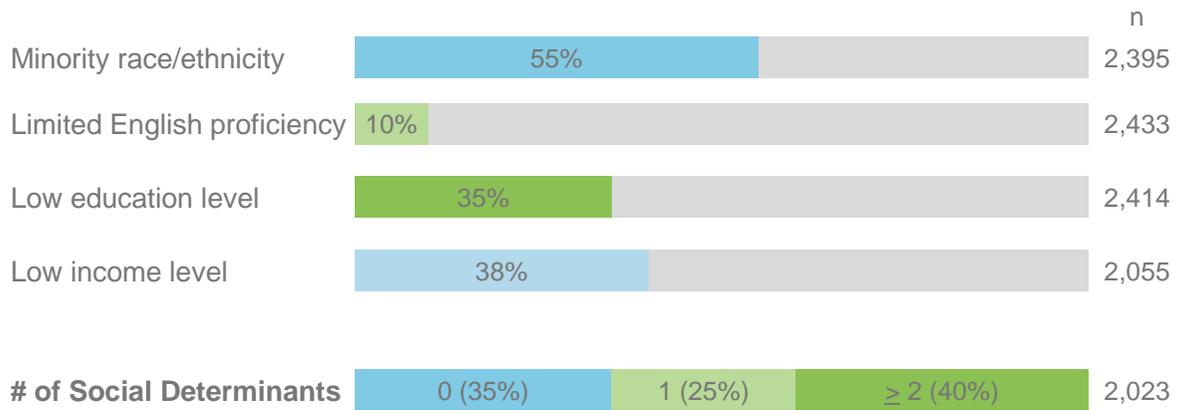
Total N = 2438



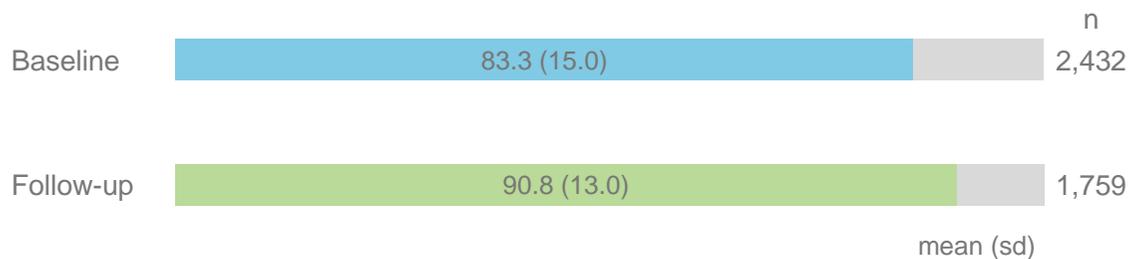
Difficulty or Delays in Getting Care



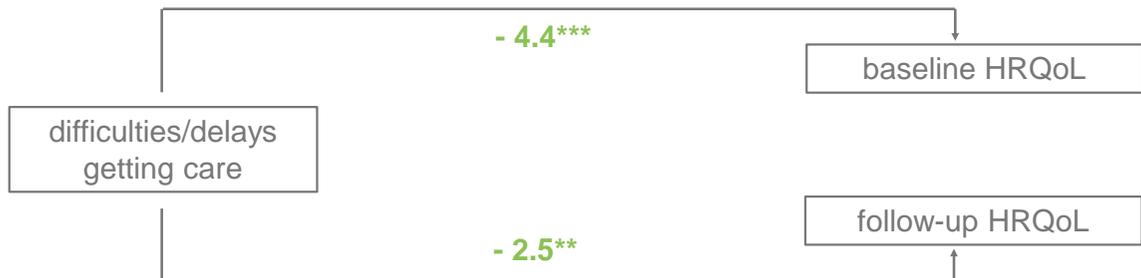
Social Determinants of Health



Health-Related Quality of Life (HRQOL)



Difficulties/Delays Getting Care is associated with Lower Quality of Life



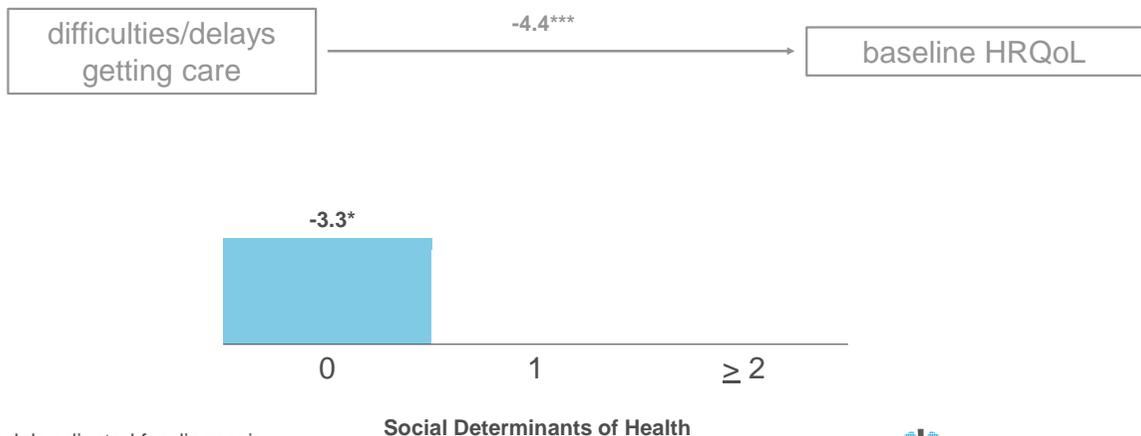
* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

Models adjusted for diagnosis

Minimal clinically important difference (MCID) for PedsQL instrument = 4.5 points



Stronger Association between Difficulties/Delays Getting Care and HRQoL with More SDoHs

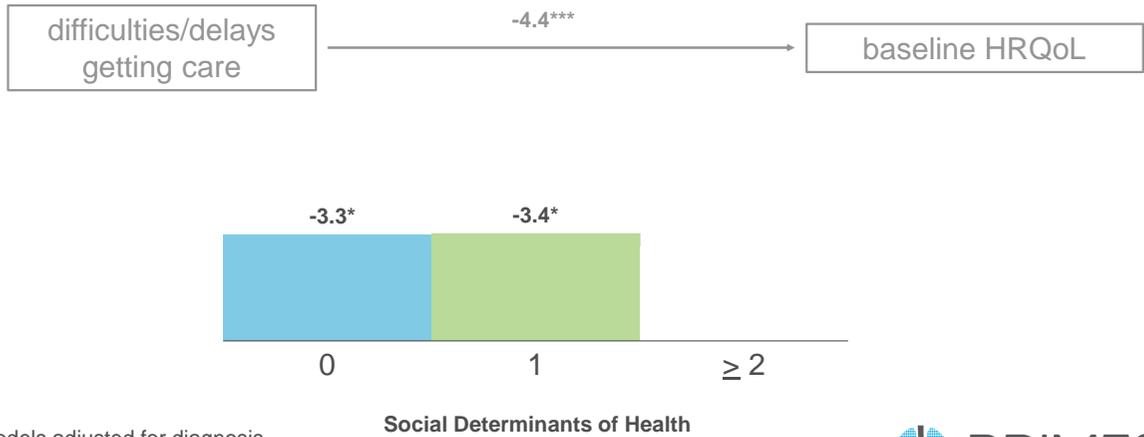


Models adjusted for diagnosis

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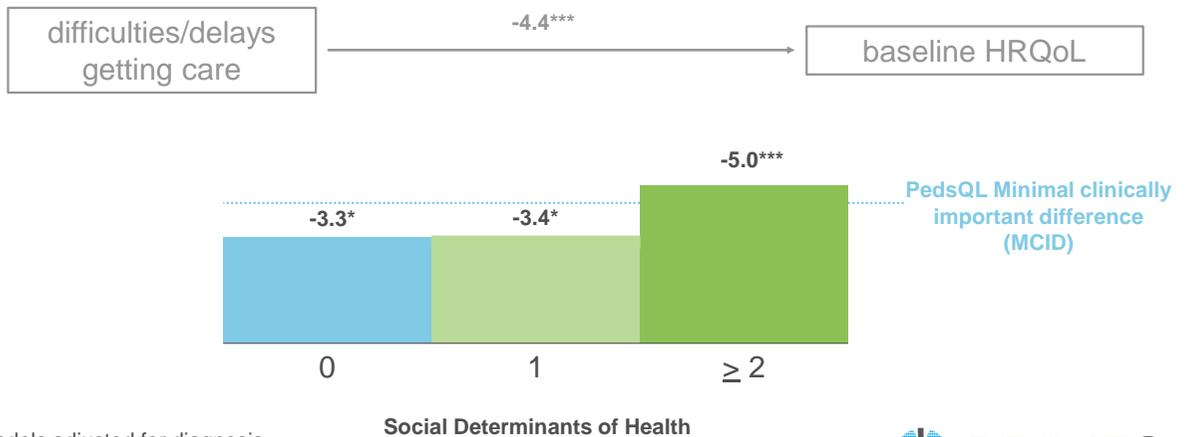
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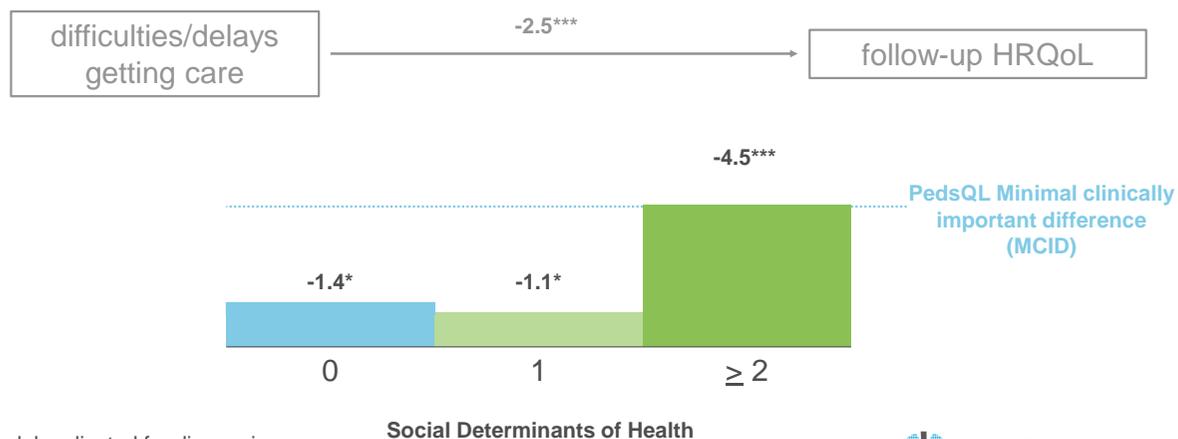
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Stronger Association between Difficulties/Delays Getting Care and HRQoL with More SDoHs



Models adjusted for diagnosis
* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$



Conclusions

- Difficulties/delays getting care is significantly associated with lower HRQoL at baseline
- Disparities persist after hospitalization
- Stronger association between difficulties/delays getting care and HRQoL with a higher number of SDoHs
 - Trend was not significant



Limitations

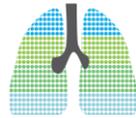
- Other unmeasured SDoHs may have a more significant association with access to care and HRQoL (e.g. housing, transportation, financial security, etc.)
- Underpowered to detect significant differences in effect sizes in stratified analyses



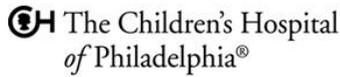
Implications

- Difficulties and delays in receiving outpatient care may be important to assess for discharge planning
- Improving access to outpatient care following hospitalization may improve HRQOL
 - Assistance with scheduling follow-up appointments
 - Navigating logistical barriers to accessing outpatient care (e.g. transportation, insurance)
 - Communicating these needs with outpatient providers





PRIMES

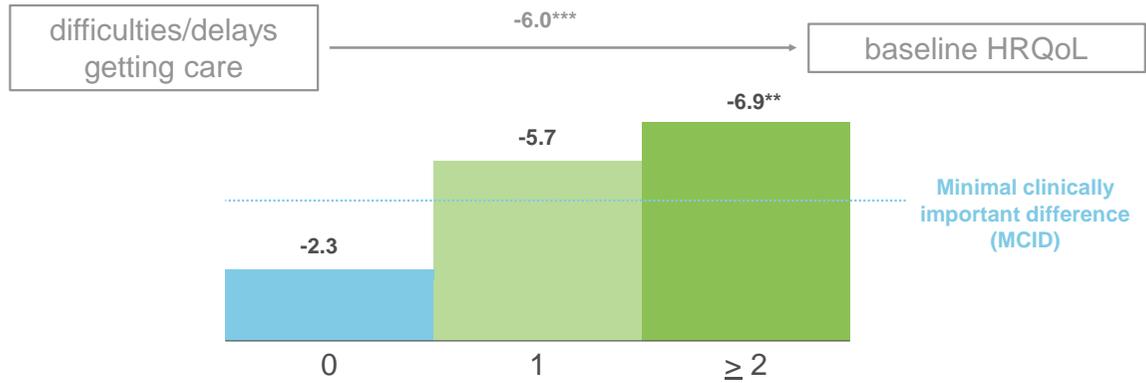


Acknowledgements

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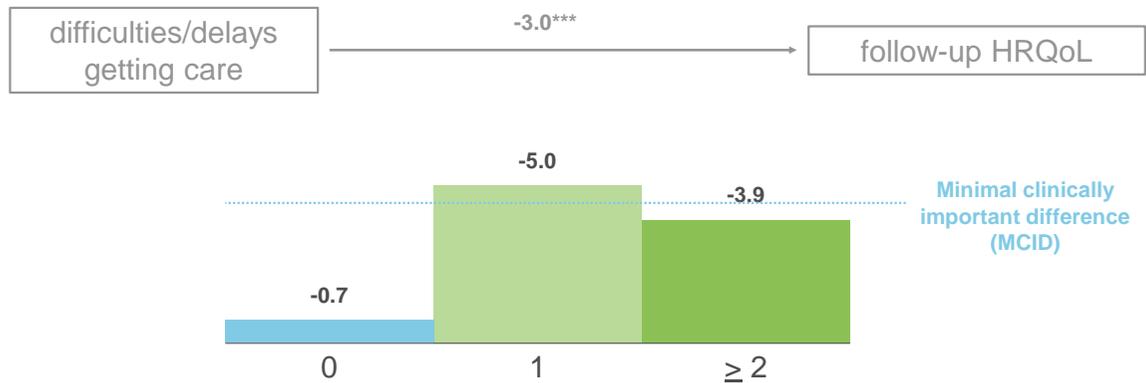
Asthma Patients: Difficulties/Delays Getting Care and Baseline HRQoL



Models adjusted for diagnosis
* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$



Asthma Patients: Difficulties/Delays Getting Care and Follow-Up HRQoL



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