Health-related Social Vulnerabilities in a Pediatric Outpatient Antimicrobial Therapy (OPAT) Program

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Introduction

- OPAT delivery can be complex with outcomes complicated by social vulnerabilities in children’s lives.
- Limited data exists for social needs screening for OPAT.

Objectives

- To identify social vulnerabilities within a pediatric OPAT cohort.
- To assess the relationship between social vulnerabilities and provider/staff perceptions of complications of OPAT delivery.

Methods

- July – Dec. 2017: Caregivers (n = 26) of patients age < 18 discharged on parenteral or prolonged oral antibiotics completed a pre-discharge survey to identify social challenges families faced.
- OPAT provider and support staff rated ease & complexity of OPAT delivery.
- EMR was reviewed to obtain child demographics.
- Descriptive statistics were used to evaluate for association between frequently occurring psychosocial vulnerabilities and perceptions of OPAT delivery.

Results

2. Psychosocial Vulnerabilities Prevalent in OPAT

- Mean patient age: 8.0 years (Range 4 days-16 years)
- OPAT Days: 1150 days
- 390 days parenteral antibiotics
- 760 days prolonged oral antibiotics

Infections Treated:

- 31% Osteomyelitis
- 19% Endocarditis or thrombophlebitis
- 15% Brain abscess or meningitis
- 12% Complicated pneumonia
- 12% Device-related infections
- 12% Other

3. More Vulnerabilities ≠ Difficult OPAT Delivery

- Problems with working appliances at home
- Family involved with CPS or DHS
- Family legal issues
- Inadequate caregiver social support
- Difficulty getting time off work
- Need assistance with coordination of healthcare services
- Difficulty paying for food, housing or utilities
- Caregiver mental health concerns
- High school diploma or less

4. Specific Vulnerabilities Impact OPAT Delivery

Potential Risk Factor

- Problems with working appliances at home
- Family involved with CPS or DHS
- Family legal issues
- Inadequate caregiver social support
- Difficulty getting time off work
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Using Social Determinants of Health in OPAT

- Care Plan Issues
- Recognize Patterns
- Process Improvements

- Unable to schedule clinic visit post-hospital discharge
- 1. Phone number incorrect or out of service
- 2. No reliable transportation
- 3. Unable to get time off work
- 4. Did not understand why FQO clinic visit was needed
- 5. Wants to see NP only
- 6. Too expensive to travel
- 7. Too far away from home
- 8. Too many medical appointments

- Ora antibiotics not being given to child as prescribed
- 1. Medication not in stock at local pharmacy
- 2. Prior path required
- 3. Unable to pay for it
- 4. Abund of potential side effects
- 5. Forgotten to pick up prior to leaving hospital
- 6. Did not understand that infection was still present

Summary

- The most common challenges identified in this small cohort were lower caregiver education level, caregiver mental health concerns, economic hardships, need for assistance with coordination of healthcare services, difficulty getting time off work, inadequate social supports, legal issues, and Child Protective Service involvement.
- Staff perception of difficult OPAT delivery was not related to the total number of psychosocial vulnerabilities families reported. Some at-risk families find OPAT challenging while others exhibit resilience.
- However a trend between potential risk factors and care during OPAT was identified.

Next Steps

- We won’t know unless we ask - Anticipate family needs by screening for psychosocial vulnerabilities that significantly impact OPAT delivery. We don’t yet know how to do this.
- Adapt OPAT education materials and delivery to caregiver education levels.
- OPAT takes a village - Build the expertise & capacity of the OPAT team. Leverage expertise of other specially-trained colleagues, such as social work, case management, and legal assistance.

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