Child Abuse & Neglect 65 (2017) 212–225

Contents lists available at ScienceDirect

Child Abuse & Neglect

Complex health concerns among child welfare populations and the benefit of pediatric medical homes

Shauna Rienks*, Jon Phillips, Julie McCrae, Kim Bender, Samantha Brown

University of Denver, Graduate School of Social Work, 2148 S. High St. Denver, CO 80208, United States

ARTICLE INFO

Article history:
Received 19 May 2016
Received in revised form
17 November 2016
Accepted 26 January 2017
Available online 10 February 2017

Keywords:
Child welfare
Patient-centered medical homes
Pediatric health
National Survey of Child and Adolescent Well-Being (NSCAW)

ABSTRACT

Children referred to child welfare have higher-than-average rates of physical, mental, and developmental health conditions, yet coordinating medical care to address their complex needs is challenging. This study investigates complex health characteristics of child welfare-involved children to inform evolving patient-centered medical homes that incorporate multidisciplinary care and social health determinants. Study questions include: (1) To what degree do child welfare-involved children present with complex physical, behavioral, and developmental conditions? (2) How does the clustering of complex health concerns vary according to developmental stage? (3) What demographic factors relate to complex health concerns? Data are from 5873 children (birth to 18) who participated in the National Survey of Child and Adolescent Well-being II. Latent class analyses were conducted for children in four developmental groups (infants, preschool-age, elementary school-age, and adolescents), including up to 11 indicators from standardized health measures. For all developmental groups, the best fitting model indicated a complex health concern class and a class with fewer health concerns. Multivariate logistic regressions revealed that membership in the complex health concerns class was associated with: increased age, poverty, poor caregiver health, out-of-home placement, gender, and race/ethnicity; although some developmental differences in predictors were observed. Results suggest that for younger children, preventive approaches and integration of developmental specialists in primary care is needed, while school-age children and adolescents demonstrate greater need for integrated behavioral health. All developmental groups would benefit from multidisciplinary teams that address complex health issues related to environmental risks common among children involved in child welfare.

1. Introduction

Children involved in the child welfare system have special health care needs due to higher-than-average rates of physical, behavioral, and developmental disorders that are often related to increased vulnerability associated with maltreatment (Leslie, Gordon, Meneken, Premji, Michelmore, & Ganger, 2005). Over three million children are referred annually to child welfare, and based on data collected from 2008 to 2009, Stein et al. (2013) reported that, among children investigated for maltreatment, prevalence of chronic health conditions range from 30% to 49% of children, depending on child age. Other

---

* Corresponding author.

E-mail addresses: Shauna.rienks@du.edu (S. Rienks), Jon.Phillips@du.edu (J. Phillips), Julie.McCrae@du.edu (J. McCrae), kimberly.bender@du.edu (K. Bender), Samantha.Brown@du.edu (S. Brown).

http://dx.doi.org/10.1016/j.chiabu.2017.01.021

national data show that approximately one-half of children investigated by child welfare have clinically significant behavioral or emotional problems, a rate that is 2.5 times greater than children in the general population (Burns et al., 2004; Casaneuva, Ringeisen, Wilson, Smith, & Dolan, 2011). In addition to concurrent health concerns, exposure to environmental risks is high, placing these children on the elevated end of exposure to Adverse Childhood Experiences (ACEs), which have been linked to chronic disease in adulthood (Felitti et al., 1998; U.S. Department of Health & Human Services (USDHHS), 2016).

Providing care to families who have encountered child welfare poses unique challenges. Child-welfare involved children may move frequently or have changes in caregivers, resulting in gaps or discontinuity in care (Leslie et al., 2005) and making it difficult to access their health care records. Caregivers may be mistrustful of service providers due to a history of multi-system involvement, difficulty accessing concrete supports, mental health issues, or substance abuse problems (Dubowitz & Bennett, 2007). Caregiver well-being also influences children's trajectory of health and well-being, with studies pointing to a relationship between particular caregiver health conditions and child health conditions (e.g., Reilly et al., 2005). Physicians, with increased expectations to address social determinants of health, in turn, may suspect that a child or family has considerable environmental risk, but they are often ill-equipped to discuss such concerns during the clinical encounter (Kennedy, Fasolino, & Gullen, 2014). In addition, many of our patient care payment mechanisms are based on fee-for-service health care and illness prevention such as immunization and are therefore poorly structured to cover multi-system integrated care required of many families involved in child welfare (Edwards, Bitton, Hong, & Landon, 2014). Understanding the need for complex physical, behavioral, and developmental services among child welfare-involved children will help inform potential integrated care structures in health clinic settings that serve this population.

Providing a patient-centered medical home (PCMH) is one of the most promising mechanisms for achieving comprehensive, proactive health care that is centered on the needs of the whole family and child (Aaron & Burtless, 2014). According to the American Academy of Family Physicians, a PCMH involves a coordinated team led by a personal physician that subscribes to a whole-person orientation and integrated care across all elements of the complex health care system (American Academy of Family Physicians [AAFP], 2007). PCMHs are intended to shift medical care from reactive, visit-based care to proactive population-based health management (Aaron & Burtless, 2014). Meeting the objectives of a PCMH requires understanding the whole-health needs of children who experience maltreatment. At the same time, health systems need mechanisms to prioritize family needs and manage the increasing number of individuals who are insured and who access health care as a result of the Affordable Care Act (AAFP, 2007).

This study aims to inform family-focused, comprehensive and proactive pediatric health care that addresses maltreated children's health needs. The research questions in this exploratory study are: (1) To what degree do child welfare-involved children present with complex physical, behavioral, and developmental conditions? (2) How does the clustering of complex health concerns vary according to developmental stage? and (3) What demographic factors relate to complex health concerns? To address these questions, this study utilizes data from a nationally representative sample of 5873 children referred to child welfare agencies from 2008 to 2009. To attend to developmental differences, children were grouped into four developmental stages according to age (infant, preschool, elementary school-age, adolescence), within which we investigated the presence of physical health (chronic, acute, and general), developmental, and socio-behavioral health conditions.

The study uniquely addresses several limitations in the existing literature: (1) most existing research uses analytic strategies that are variable-based, examining how *constructs* are related rather than taking a person-centered approach by examining how individuals are similar to or differ from one another across multiple dimensions; (2) most studies do not take a developmental approach, limiting analyses to one specific age group or examining all age groups together; and (3) there has been limited inquiry into the health status of children who are referred to child welfare but not placed in foster care (those who remain in-home). This study uses latent class analysis (LCA) to examine the clustering of children according to their physical, developmental, and behavioral health concerns in four distinct developmental stages.

2. Method

2.1. Sample and procedures

Data for this study were collected in the National Survey of Child and Adolescent Wellbeing II (NSCAW II), a national, longitudinal, multi-informant study of the safety and wellbeing of children in contact with child welfare services (Dowd et al., 2014a). NSCAW II includes 5873 children and youth ages birth to 18 years who were investigated by U.S. child welfare agencies for possible maltreatment. Casting a broad net, NSCAW includes: children whose cases were substantiated (maltreatment was sufficiently indicated) *and* unsubstantiated (no finding or insufficient indication of maltreatment); families who received ongoing child welfare services as well as those who did not; and children who remained at home following the investigation and those who were placed in out-of-home care.

To create a sample representative of all U.S. children investigated during the sampling period, a two-stage stratified sampling design was used to collect NSCAW II data (see NSCAW II documentation for details on sampling and weights; Dowd et al., 2014a). For each child in the study, multiple informants were interviewed between March 2008 and September 2009, including the child, caregiver, teacher, and investigative caseworker. This study utilizes baseline data from caregivers, youth, and caseworkers.