

ENTRY INTO RESIDENTIAL CARE BY CLINICAL AND NON-CLINICAL CHARACTERISTICS AMONG YOUTH IN STATE CUSTODY

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Abstract

This study examined the extent and correlates of entry into residential care among 672 children and adolescents in state custody who have experienced a psychiatric crisis. Overall, 36% of the sample were placed in residential care at some point after their first psychiatric crisis screening. Among the youth placed in residential care, 54% did so within 6 months of their first crisis screening, with an additional 18% between 6 and 12 months. Psychiatric hospitalization, older age, and type of child welfare placement, independent of psychiatric status, were associated with an increased risk for residential care placement. Having an inpatient psychiatric episode places children at greater risk for residential placement, suggesting that it would be efficient to develop diversion programs from residential placements within and immediately following psychiatric hospital episodes. Youth in psychiatric crisis may also benefit from efforts to include their families as part of the treatment process.

Keywords: residential care, youth in state custody, psychiatric crisis, hospitalization

Introduction

Of 513,000 children and adolescents in out-of-home care from the U.S. child welfare system in 2005, 18% were in a residential or group care setting (U.S. DHHS, 2006). Residential care consists of a variety of types of programs, including community-based group homes, campus-based residential facilities, and secure facilities (Shireman, 2003). A residential treatment center is a key component of residential care programs in both public mental health service and child welfare systems and is defined as a “24-hr facility, not licensed as a hospital, which offers mental health treatment” (Burns et al., 1999, p. 209). Contained within a broad definition, however, are residential facilities that range from family-like group homes to psychiatric hospitals and juvenile detention centers (Leventhal, 2002). Residential care in this study is defined as congregate care facilities that serve as placements for state wards. Thus group homes and residential treatment centers are included but psychiatric hospitals are not.

Placement in residential care mainly aims to provide a safe living environment that can protect youth from his/her own dangerous behavior, protect others from youth dangerous behavior, or facilitate the treatment of the youth’s emotional or behavioral problems (Wells & Whittington, 1993; Whittaker, 2004; Whittaker & Pfeiffer, 1994). Although widely regarded as a necessary placement option in any comprehensive continuum of care, residential care is both relatively restrictive and expensive, and its effectiveness has not been clearly specified (Burns et al., 1999; Farmer et al., 2004; Lyons, 2004).

Evidence on the benefits of residential care, even for children with serious mental disorders, is mixed. A follow-up of 123 adolescents with severe psychiatric problems reported that intensive, short-term residential treatment resulted in a clinically substantial improvement from admission to discharge and improvement was sustained for the year following discharge

(Leichtman et al., 2001). One statewide study found that residential treatment is effective at reducing high risk behaviors and psychotic symptoms but may exacerbate anxiety and hyperactivity (Lyons et al., 2001). Residential treatment has not been found to result in better clinical outcomes than community-based treatment for children with mental disorders (Barth, 2002; U.S. DHHS, 2000).

Residential care also is associated with considerable public costs. Residential care costs 6.6 times that of traditional foster care and more than twice that of treatment foster care (Barth, 2002). Care in residential treatment facilities costs between \$80,000 and \$350,000 per child annually (Lyons, 2004). As a consequence, although only 8% of youth who receive mental health services are in residential care nationally, they account for approximately 25% of total mental healthcare expenditures (Burns et al., 1999), with considerable variation by state. In California, the 8% of children in residential care account for 37% of out-of-home care expenditures for children in foster care (Barth, 2002).

The disproportionately high costs of residential care combined with the lack of consistent evidence regarding its effectiveness beg the question of how we can improve the matching of residential placements to the needs of youth. Any proposals for change in related policies and practices, however, should be informed by a careful description of youth most at risk for placement in residential care. Understanding predictors of residential placement can guide the development of interventions to divert youth to less restrictive and costly home- and community-based alternatives or develop residential treatment models that more effectively address the needs of the youth who require this intensive level of care.

The fact that perhaps as many as a third of children in residential care may not meet criteria for a psychiatric disorder suggests that factors other than psychiatric need are associated

with decisions to refer youth to these placements (James et al., 2006). Only a handful of studies have directly addressed this issue, however. Previous studies found that children in residential care are older, have had less placement stability (Breland-Noble et al., 2005; Wulczyn et al., 2003), and exhibit more behavior problems (Handwerk et al., 1998) than children in other types of out-of-home care, although differences in behavioral and cognitive functioning are no longer significant after age is taken into account (Barth, 2002). Interpretation of these findings is hampered by the studies' cross sectional design, which makes it difficult to determine characteristics preceding placement. A recent study has used a longitudinal design to identify predictors of residential placement among children in foster care. James et al. (2006), using data from the National Study of Child and Adolescent Wellbeing (NSCAW), found that among children in out-of-home care, those who were male, older, or had a greater behavioral and cognitive impairment were more likely to be placed in intensive and restrictive out-of-home care. While studies using NSCAW data have greatly increased our understanding of the experiences of children in foster care, this study was limited in several important ways. First, data were collected at four time points over a 36-month period and relied on caregiver report of activities occurring during the prior interval. Information was not collected concurrently on the ever-changing clinical status of children, and validity was potentially biased by differential recall. In addition, the sample included children who already had been placed in residential settings.

The current study addresses some of these limitations by following a cohort of children in state custody who were at potential risk of placement in residential care because they were identified as having had a psychiatric crisis. Their clinical status, mental health services they received and placement experiences were noted whenever changes in any of these variables occurred. The objectives of the study were to examine 1) the frequency of residential care

placement among state wards that have experienced a psychiatric crisis, and 2) the independent effects of psychiatric status at the time of the psychiatric crisis (e.g., psychiatric symptoms, risk behaviors, level of functioning, comorbidity), psychiatric hospitalization, and placement characteristics on subsequent residential care placement.

Methods

Data Sources

The current study was conducted using two sources of data collected by the Illinois Department of Children and Family Services (DCFS). The first source of data was DCFS child welfare records, which include information on demographic characteristics (age, race, sex), allegations of maltreatment (report date, substantiation status), reasons for child welfare case opening, and placement dates and types.

The second source of data was the records of the Screening, Assessment and Support Services (SASS) program that provides screening and treatment to children who are at risk for psychiatric hospitalization. All children who are the legal/financial responsibility of the Illinois Department of Children and Family Services are eligible for the SASS program. Children are referred to SASS if they demonstrate a risk of self-harm or injury to others that might result in hospitalization. A SASS team screens the child using the Childhood Severity of Psychiatric Illness (CSPI) decision support tool to determine if the child could be stabilized in the community. SASS services include ongoing monitoring of hospitalized children, post-hospitalization services, and intensive community treatment for children who do not meet admission criteria. The SASS program records provide information on children's symptoms and functioning, contextual factors and comorbidities, disposition of screening, date of services, and demographic characteristics.

Sample

The sample included children and adolescents in state custody, who were the legal/financial responsibility of the child welfare agency in Illinois, were screened for the first time by the SASS program between July 1, 2001 and June 30, 2003, and had no history of residential care at the time of first SASS episode. Children and youth in the sample were mostly in non-kinship foster care (an arrangement in a licensed or approved foster family home), kinship foster care (a foster care living arrangement made among relatives or other adults who have a kinship bond with the child), and specialized foster care (a foster home where foster parents are provided specialized training and support services to care for children with special difficulties, usually significant emotional and behavioral problems) at the time of entry into the SASS program.

Of 2,066 children who met the first two criteria, 477 were not between the ages of 3 and 18 years and an additional 918 had a history of residential care before their first SASS episode; these 1,395 youth were excluded from the study, resulting in a sample of 672 children with 1,107 SASS episodes. Using child welfare records, subjects were followed from their first placement in out-of-home care until their case was closed or until June 30, 2005, the end of the observation period. Every individual in the sample was followed at least 2 years after their first SASS screening.

Measures

Residential care was defined as placement in a group home or institution setting through the child welfare system. Hospitalization was not counted as residential care. Placement in residential care was coded as a dichotomous variable regardless of the timing of the placement relative to the first SASS screening.

Symptoms and functioning were measured at each crisis screening using the Childhood Severity of Psychiatric Illness (CSPI; Lyons, 2004), a standardized screening tool completed by SASS workers. When the SASS program receives a crisis phone call, program workers, many of whom are master's-level social workers, conduct a screening using the CSPI to determine whether the crisis can be stabilized by a referral to intensive community treatment instead of psychiatric hospitalization. The CSPI is a 27-item Likert-type rating scale with four anchored levels per item, from 0 (no evidence of disturbance) to 3 (acute or severe degree of disturbance). CSPI items measured five domains:

- 1) Symptoms, range: 0-21: neuropsychiatric disturbance, emotional disturbance, conduct disturbance, oppositional behavior, impulsivity, contextual consistency of symptoms, temporal consistency of symptoms
- 2) Risk of harm to self or others, range 0-15: suicide risk, danger to others, elopement risk, crime or delinquency, sexual aggression
- 3) Functioning, range 0-9: school dysfunction, family dysfunction, peer dysfunction
- 4) Psychiatric and medical comorbidity, range 0-18: adjustment to original trauma or separation, medical status, substance abuse, severity of abuse or neglect, sexual development, learning disability or developmental delay
- 5) System factors, range 0-18: caregiver's ability to provide supervision, caregiver's motivation for change, caregiver's knowledge of the child, placement safety, community capacity for individualized services, multi-system needs

Results from previous studies suggest that the CSPI can serve as a useful decision-support tool and is an accurate measure of children's mental health needs and outcomes (Leon et al., 2000; Lyons et al., 1998). The SASS program requires that

program workers be certified in the use of the CSPI. All SASS workers are trained to a reliability of at least 0.70 (intraclass correlation). The statewide average reliability is approximately 0.80.

Psychiatric hospitalization was determined by an admission into inpatient psychiatric treatment following a SASS screening. This information was obtained from the SASS dataset.

Number of SASS screening was calculated as the sum of completed CSPI's during the observation period.

Types of placement at the time of or immediately preceding SASS assessment were classified as non-kinship foster home, kinship foster home, specialized foster care (this term in this study is interchangeable with treatment foster care and therapeutic foster care), and other types of care including home of adoptive or biological parent or subsidized guardianship. A small number of children resided at home of adoptive or biological parents at the time of SASS screening. Although none of these children were in substitute care settings, all were under the legal responsibility of the state child welfare system. These children are believed to be in transition, for example, temporarily returning to their parents or under monitoring of the child welfare system after achieving permanence. Because children could be in a different type of placement at each SASS screening, frequencies of placements are presented in the descriptive analyses, with the total equal to the total number of SASS episodes.

Reasons for child welfare case opening were categorized as physical abuse, neglect, sexual abuse, child behavior problem/parent-child problem, and other reasons such as pending investigation and dependent.

Number of placements was calculated by counting the number of changes in physical location of out-of-home care. Federal guidance defines a placement as "last(ing) more than 24

hours while the child is in foster care under the placement, care or supervision responsibility of the State agency” (U.S. DHHS ACF, 2006). If a child moves from kinship foster care to specialized foster care, this constitutes two placements. Temporary living conditions, such as hospitalization for medical treatment, acute psychiatric episodes or diagnosis, respite care, and runaway episodes, were not counted as a placement.

Demographic characteristics were abstracted from the child welfare records and included sex, age, race and ethnicity. Age at the time of first SASS episode was categorized as 3-6 years, 7-12 years, and 13-18 years. Race and ethnicity were classified as non-Hispanic African-American, Hispanic, non-Hispanic white, and other racial/ethnic group.

Analyses

Chi-square and t-tests were used to explore the bivariate relationships between covariates and placement in residential care. Rates of residential care placement were presented by the months since the first SASS assessment. Life-tables were also used to estimate hazard functions for residential care placement based on the time from the start of the first SASS episode to the placement or the end of the study period. A multivariate Cox proportional hazards model with time-constant and time-dependent covariates that changed at irregular intervals were used. Time-dependent covariates, measured repeatedly over time, include psychopathology and functioning, psychiatric hospitalization, and type of placement. Time-constant covariates included reason for child welfare case opening and demographic characteristics. SAS 9.1 was used to conduct the analyses. A *p*-value of .05 was used to indicate statistical significance and 95% confidence intervals were reported for multivariate analyses.

Results

As shown in Table 1, children between the ages of 7 and 18 comprised more than 91% of the sample. The vast majority of the children were non-Hispanic African-American or white with fairly even split between males and females. The main reason for child welfare case opening was neglect for approximately 55% of the children, followed by physical abuse for 22% of the sample. Almost 40% of the sample had more than one crisis screening. Two-thirds of the children experienced three or more placement changes during the observation period. Approximately 46% of the sample had a psychiatric inpatient treatment episode subsequent to crisis assessment during the study period. Over 46% of the sample were placed in non-kinship foster care at the time of the SASS screening, 20% in kinship foster care, 26% in specialized foster care, and 7% in other settings.

Table 1 also reports on the percentage of placement into residential care by each variable of interest. Overall, 243(36%) out of 672 children and adolescents were placed in residential care after their first SASS screening. Children between 13-18 years old had a substantially higher rate of residential care placement than others. Children who came to the child welfare system for reasons of child behavior issues were much more likely to be placed in residential care than any group of children coming to the system for reasons of physical abuse, sexual abuse, neglect or other reasons. Children with a history of psychiatric hospitalization were considerably overrepresented among those who entered residential care: while 40% of the sample received inpatient care following SASS screenings, the proportion was 60% in the group placed in residential care. The number of SASS screenings and placement type immediately preceding SASS assessment were close to statistical significance in their association with residential placement. Race/ethnicity, sex, and number of placement changes before SASS entry did not produce significant differences in residential care placement.

Table 2 reports that compared to children not placed in residential care, those who were placed had higher levels of symptoms, risk of harm to self or others, functioning problems, psychiatric and medical comorbidity, and system-related problems. These differences between those who entered residential care and those who did not were statistically significant at the level of .01; however, the magnitude of the difference was relatively small.

Figure 1 shows the proportions of residential care placement of the sample. Among youth who were placed in residential care following their first SASS screening, 54% did so within 6 months of their first crisis screening. The rate then declines, with an additional 18% in residential care between 6 and 12 months and an additional 12% between 12 and 18 months. Hazard functions also confirmed that the risk of residential care was highest during the first three quarters after the first crisis assessment (figure not shown).

Table 3 shows the results of multivariate Cox regression analysis. None of the five domains of the CSPI was significantly associated with residential placement. Experiencing a psychiatric inpatient episode increased the risk of placement by 55%. Each increased year of subject's age was also associated with a 15% increased risk for residential placement. For children who entered the child welfare system mainly due to their behavior issues, the risk of residential placement was 90% higher than that of the physical abuse group. Children in kinship care had a 46% higher risk of placement than those in non-kinship foster care. Children in other type of care (i.e., under the care of a biological/adoptive parent or subsidized guardianship) were 2.2 times more likely to experience residential placement compared to children in non-kinship foster care.

Discussion

Of youth in state custody who had no history of residential care before their first psychiatric crisis screening, 36% were subsequently placed in residential care. This percentage is considerably higher than 26% reported by James et al. (2006) whose study included treatment foster care and psychiatric hospitalization for the measure of residential care placement and whose sample included children who had already experienced placement in residential care settings. The higher proportion in the current study demonstrates that youth in state custody who exhibit psychiatric crisis are indeed at a great risk for placement in residential care.

Psychiatric hospitalization following a SASS screening was much more predictive of residential placement than symptoms and functioning among those referred to crisis screening. It may be that exogenous factors predict both hospitalization and residential placement, separate from the measured child characteristics. For example, parent's capacity to manage youth's behavior and availability of support services (i.e., community-based treatment) may affect the likelihood of a youth's hospitalization and entry into residential care. Previous studies reporting that caregiver's knowledge of children and multi-system needs are inversely associated with children's admission to psychiatric hospital (He et al., 2004) and psychiatric hospitals are closely linked to children's entry into residential care (Lyons, 2004) provide some evidence for this conclusion. An exploratory post hoc analysis of the sample using a model based on symptoms and risk behaviors to examine whether a child was in need of psychiatric hospitalization showed that among youth without a need of hospitalization, approximately 24% were hospitalized, and for those in need of hospitalization, 29% did not receive inpatient care. These results suggest that factors other than symptoms and risk behaviors play a role in youth' hospitalization and it is likely that those factors are also associated with a youth's subsequent entry into residential care.

However, it is possible that the clinical profile of children and youth change over time and how they appear in crisis may not reflect their ongoing needs.

Another interpretation is that when making decisions about placements, child welfare professionals take hospitalization history into account as an indicator of need for residential treatment. Hospitalization may, therefore, place youth at greater risk for residential placement because of how it is perceived by those making placement decisions. There is anecdotal evidence that hospitalizations were used in this way. In fact, after this cohort of children and youth, DCFS changed how decisions were made to place children and youth in residential care by implementing a team decision-making model referred to as Child and Youth Investment Teams. These teams use a structured assessment, the Child and Adolescent Needs and Strengths (CANS; Lyons, 2004) to ensure that the placement decision is based on the child or youth's current needs and not historical patterns of service receipt.

Finally, hospitalization may have unintended adverse effects, causing placement disruptions, exacerbating symptoms and risk behaviors, or shaking caregivers' confidence in their ability to manage a child or youth's behavior resulting in more restrictive placements.

For the sample of the current study, children referred for a crisis screening, the measures of symptoms, risk behaviors, and functioning problems did not have a significant predictive power for residential placement. This finding is in contrast with previous studies showing an association between youth in out-of-home care who have more severe behavior problems or mental health needs and a youth's entry into residential care (Friman et al., 1993; Handwerk et al., 1998; James et al., 2006). This discrepancy is in part because, unlike previous studies that looked at youth in out-of-home care, the current study focused on youth in state custody who were referred for a crisis screening. In addition, note that while statistically significant, the

differences in the five CSPI domains between those who did and did not enter residential care were quite small. While children who receive a crisis screening have a different level of need for hospital admissions, many of those children and their families may have a great need for crisis services for better coping with children's problems, which can obviate the need for placing children into an intensive, restrictive treatment setting.

Other findings also point to the role of non-clinical factors in predicting residential placement. For example, the association of older age with residential placement might result from less availability of foster homes and a less likelihood of family reunification and adoption for older children. Residential placement, therefore, may be one of a more limited number of options available to older children.

Although the number of children who enter the child welfare system mainly due to their behavior issues is relatively small, they are much more likely than others to end up in residential care. These children and their families are likely to benefit from support services (i.e., intensive community care, including mentoring and respite services) and home-based crisis services in obviating their need for residential care. However, it is possible, perhaps even likely, that these youth often represent families who have already tried community options and having failed to adequately address the needs of their child, have sought giving up custody in order to obtain residential treatment services. The use of giving up custody of your child in order to obtain access to residential treatment is an important and controversial issue (U.S. GAO, 2003). It will be very important to understand what community based interventions have been attempted with these youth before their parents are forced into such a difficult decision.

A higher risk of residential placement associated with kinship foster care compared with non-kinship foster care might be related to the differences in familial characteristics and

socioeconomic status between the two types of foster home. Evidence showed that kinship caregivers have fewer resources and receive less training and support services than their non-kinship counterparts (see Cuddeback, 2004 for review) and they also have age and health limitations (Terling-Watt, 2001). It is possible that kinship foster parents have less capacity to care for children with special needs. In addition, kinship caregivers' less likelihood of following through with services for children as pointed out by Gleeson and Philbin (1996) may exacerbate the symptoms of children in kinship care that leads to the children's placement in intensive care settings.

An excess risk associated with 'other' type of placement is troubling, given that most children in this group were residing with their biological/adoptive parent' home. The family of origin may continue to have problems that led their children to be removed. Caregivers of children in these types of care may have less parenting skills and greater need for supports. Parents of those children returned to their families or adopted may find difficulty in managing the children's behavior problems or emotional disturbances, or they allow the child welfare agency to provide more intensive services, such as residential treatment, to their children that they might not otherwise afford. Obtaining information on caregivers' service needs along with assessment of children's needs seems critical for more effective service planning.

Limitations

Several study limitations should be noted. First, this study is based on data from one state. Child welfare and children's mental health systems vary across states, limiting the generalizability of the findings of the current study. Second, there is limited information on the reasons for request of or referral for SASS screening, particularly reentry into the SASS program. There may be factors other than psychiatric need associated with the number of times a

child is brought for screening. It may be these factors, rather than need *per se*, that are associated with youth residential placement. Finally, the extent of psychiatric crisis and level of functioning were measured when a SASS assessment was conducted, and the timing of SASS assessment did not usually coincide with that of residential placement. It is possible that symptoms change over time and the crisis presentation may be different than the presentation at time of placement in residential care.

Clinical Implications

It appears that psychiatric hospitalization, independent of the severity of symptoms at the time of crisis screening, is a risk factor for future residential placement. Thus, it would be efficient to develop diversion programs from residential placements within and immediately following psychiatric hospital episodes of care. The higher risk for residential care placement during the first several months after crisis assessment suggests that any interventions to decrease the need for residential care would be more effective if implemented immediately following the crisis screening rather than later on. In addition, efforts to prevent unnecessary hospitalizations would reduce demand for residential care placements. Both mental health and child welfare professionals need to be aware of the excess risk for residential care among state wards in psychiatric crisis and make efforts to include their biological, adoptive, or foster families as part of the treatment process. Clinicians might also need to help families access community-based, prevention oriented services available through both the public mental health and child welfare systems. The findings of this study on both clinical and non-clinical characteristics of state wards in psychiatric crisis can be used to reduce the likelihood of unnecessary placement into residential care and provide knowledge to develop more effective treatment programs for those entering residential care.

Table 1. Sample characteristics and rates of residential placement during the study period (N=672)

	Residential care placement				
	Total		(n=243)		<i>p</i> -value
	n	%	n	%	
Age (mean=11.6, SD=3.6)					
3-6 years	56	8.3	9	3.7	<.001
7-12 years	281	41.9	64	26.3	
13-18 years	335	49.8	170	70.0	
Race/ethnicity					
African American (Non-Hispanic)	327	48.7	126	51.9	0.26
Hispanic	36	5.4	15	6.2	
White (Non-Hispanic)	297	44.2	100	41.2	
Other racial/ethnic group	12	1.8	2	0.8	
Sex					
Male	340	50.6	126	51.9	0.62
Female	332	49.4	117	48.2	
Reason for child welfare case opening					
Physical abuse	149	22.2	50	20.6	<.001
Neglect	369	54.9	123	50.6	
Sexual abuse	13	1.9	5	2.1	
Child behavior problem/parent-child problem	33	4.9	23	9.5	
Other reasons	108	16.1	42	17.3	
No. SASS screening					
1	417	62.1	137	56.4	0.06
2	154	22.9	62	25.5	

3 or more	101	15.0	44	18.1	
No. placement changes (mean = 4.7, SD = 3.7)					
2 or less	216	32.1	77	31.7	0.85
3 or more	456	67.9	166	68.3	
Inpatient care following SASS screening					
Yes	310	46.2	146	60.0	<.001
No	361	53.8	97	40.0	
Placement type immediately preceding SASS screening (N=1,107)					
Non-kinship foster care	511	46.2	181	41.7	0.07
Kinship foster care	223	20.1	90	20.7	
Specialized foster care	291	26.3	124	28.6	
Other settings	82	7.4	39	9.0	

Table 2. Symptoms, risk of harm to self or others, functioning problems, comorbidity, and system factors by subsequent residential care placement status for 1,107 SASS episodes of 672 children and adolescents

	Residential care placement			<i>p-value</i>
	Total	Yes	No	
	(N=1,107)	(n=434)	(n=673)	
	mean(SD)	mean(SD)	mean(SD)	
Symptoms	8.5 (3.6)	9.2 (3.6)	8.3 (3.7)	<.001
Risk of harm to self or others	2.8 (2.1)	3.4 (2.3)	2.6 (2.1)	<.001
Functioning problems	3.7 (2.1)	4.0 (2.3)	3.5 (2.1)	<.01
Psychiatric and medical comorbidity	3.7 (2.2)	4.0 (2.3)	3.6 (2.2)	.01
System factors	2.6 (3.2)	3.2 (3.6)	2.5 (3.1)	<.001

Figure 1 Percentage of residential care placement

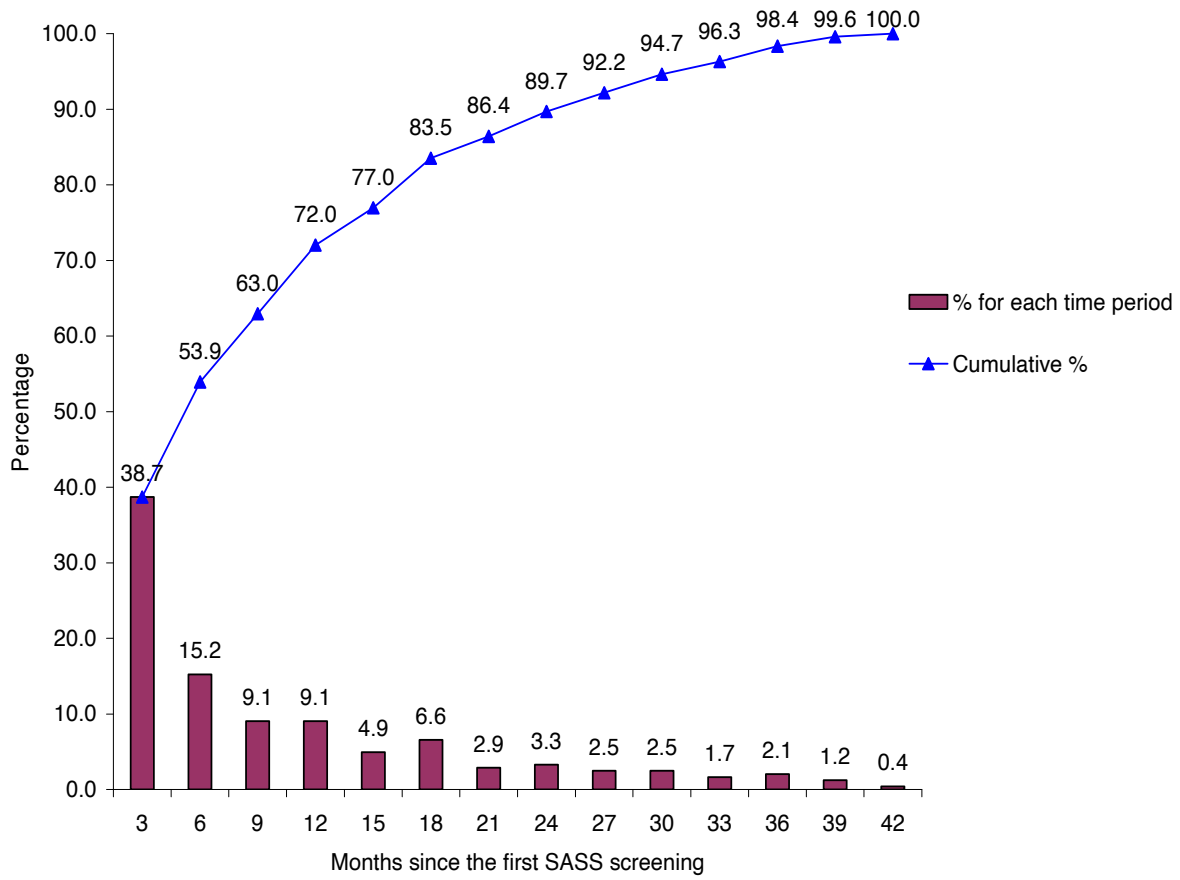


Table 3. Cox regression of residential care placement for 672 children with 1,107 SASS episodes

Independent Variables	Risk ratio	95% CI	<i>p</i> value
Symptoms	1.04	0.99-1.09	0.11
Risk of harm to self or others	1.07	0.99-1.15	0.08
Functioning problems	1.04	0.96-1.11	0.34
Psychiatric and medical comorbidity	0.98	0.91-1.05	0.51
System factors	1.03	0.97-1.06	0.11
Inpatient care following SASS screening	1.55	1.15-2.10	<.01
Age at first SASS screening	1.15	1.10-1.20	<.001
Male (vs. Female)	1.22	0.93-1.60	0.16
African American (vs. non-Hispanic white)	1.23	0.92-1.63	0.16
Hispanic (vs. non-Hispanic white)	1.64	0.94-2.87	0.08
Neglect (vs. physical abuse)	1.08	0.77-1.51	0.65
Sexual abuse (vs. physical abuse)	2.07	0.81-5.29	0.13
Child behavior issue (vs. physical abuse)	1.90	0.98-3.08	<.05
Other reasons (vs. physical abuse)	0.99	0.65-1.51	0.96
Kinship care (vs. Non-kinship care)	1.46	1.04-2.05	<.05
Specialized foster care (vs. Non-kinship care)	1.23	0.87-1.75	0.25
Other type of care (vs. Non-kinship care)	2.21	1.43-3.40	<.001
Number of placement changes	1.04	1.00-1.08	0.07
Number of psychiatric crisis episodes	1.01	0.88-1.16	0.88

Note. Coefficients that are statistically significant at .05 level are in bold.

^aModel Chi-Square = 135.6 (DF=19)

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