

Improving Behavioral Health Care for Delaware’s Children in Foster Care: A Public Health Imperative

Aileen D. Fink, PhD, Thomas I. Mackie, PhD, MPH, and Christopher Bellonci, MD, DFAACAP

According to the Centers for Disease Control and Prevention (CDC), child abuse and neglect is a “serious and prevalent” public health problem¹; the estimated life time cost associated with just one year of confirmed cases of abuse and neglect in the United States is approximately \$124 billion dollars. While a relatively small percentage of children who come to the attention of child welfare systems will be placed in foster care, these children often enter care with unmet health care needs including significant behavioral health problems.

Over the past several years, heightened concern has been raised regarding the high number of children in foster care with behavioral health problems who are prescribed psychotropic medication(s) in ways that are not consistent with the best available evidence. For example, children in foster care are significantly more likely than other children (Medicaid and privately insured) to receive psychotropic medications (including antipsychotic medications) without concurrent evidence-based therapies. Although children in foster care are often high utilizers of health care services and disproportionately account for total health care spending, long term outcomes (health, education, employment, financial) are poor. Increasingly, federal and state efforts have focused on addressing the concerns outlined above including quality of psychotropic medication prescribing for children in foster care. It is helpful to consider a common set of goals in evaluating such efforts, such as the “Triple Aim”, originally put forward by Donald Berwick, MD, former Administrator of the center for Medicare and Medicaid Services.² The Triple Aim framework emphasizes three goals for improvement of the healthcare delivery system:

1. To improve the individual experience of care,
2. To improve the health of populations, and
3. To reduce the per capita costs of care for populations.

In this article, we consider the unique needs and opportunities that exist in Delaware to attain these goals in meeting the behavioral health needs of children in foster care.

Special Health Care Needs of Children in Foster Care

In 2014, the population of children ages birth through eighteen removed from their family of origin and placed into foster care within the United States was approximately 415,000 (point prevalence).³ Removal of a child from her or his family most frequently occurs as a result of an imminent threat to child safety because of abuse and/or neglect.⁴ Children in foster care may be placed in a variety of settings whether family foster care, congregate care, or court-ordered or formal kinship care (extended family or kin).

It is well documented that children in the United States involved with the child welfare system have significant physical and behavioral health care needs; almost 90% have at least one physical health problem⁵ and between 50% and 75% have at least one behavioral health problem for which behavioral health treatment is indicated.^{6,7} The high prevalence of behavioral health problems for children entering foster care is likely related to multiple factors including trauma exposure, genetic vulnerability to behavioral health disorders (given the high rates of these

disorders in their parents) and increased intra- uterine drug and alcohol exposure.⁸ Moreover, removal from the family of origin is also an emotionally traumatic event that may further compound pre-placement adversities.⁹

Exposure to adverse childhood experiences (ACEs) such as those that bring children into contact with the child welfare system (e.g., abuse, neglect) have consistently been shown to increase rates of physical and mental health problems across the lifespan with high costs to individuals, families and communities.^{1,10,11} Children in foster care are not only more likely to experience behavioral health problems prior to age 18; they are also significantly more likely to experience persistent behavioral health challenges into adulthood after exiting care.

One study which looked at alumni of foster care found that more than half of them (54.4%) had clinically significant symptoms of at least one mental health disorder (e.g., depression, anxiety, substance use) as adults with almost 20% experiencing three or more mental health.¹² Concurrent with high rates of behavioral health problems, the study found that alumni of foster care compared with the general population of adults were significantly more likely to be unemployed (19.9% alumni vs. 5% general population), uninsured (nearly double the national average) and to experience homelessness (20%) after exiting foster care. The high rate of persistent behavioral health problems and the sobering statistics regarding lack of housing and financial stability for alumni of foster care underscores the critical need to ensure that child welfare systems develop strategies (e.g. targeted case management) to coordinate and address children's behavioral health needs while they are in foster care.

Healthcare Service Utilization by Children in Foster Care

Despite the well-established evidence of behavioral health needs for children in foster care, research consistently finds that these needs often go unmet.¹³ For example, one study found that only one of four children received behavioral health care within 12 months of an initial contact with child welfare despite having evidence of significant behavioral health problems. A number of barriers potentially contribute to children in foster care not receiving needed behavioral health services. Although most children in foster care are categorically eligible for public insurance through Medicaid, challenges persist including lack of adequate screening, care coordination, and access to trauma-informed services. However, it is crucial that these barriers be addressed because without effective intervention, children in foster care are at increased risk for poor educational outcomes and contact with the justice system.¹⁴ Early identification of behavioral health problems and access to evidence-based trauma-informed treatment services are core strategies to reduce these risks and promote health and wellbeing for children in foster care.^{14,15}

Over the past decade, studies have documented concerns regarding the safe and judicious use of psychotropic medications for Medicaid-insured children in foster care. Compared to the general Medicaid-insured population of children, those in foster care are significantly more likely to be prescribed psychotropic medications and multiple medications concurrently as compared to other Medicaid-insured children. For example, children in foster care were up to 4 times more likely to be prescribed one or more psychotropic medications than Medicaid-insured children not in foster care.¹⁶ Of children in foster care prescribed at least one psychotropic medication, one state Medicaid analysis suggested 41% of Medicaid-insured children in foster care were prescribed three or more psychotropic medications within the same month.¹⁷

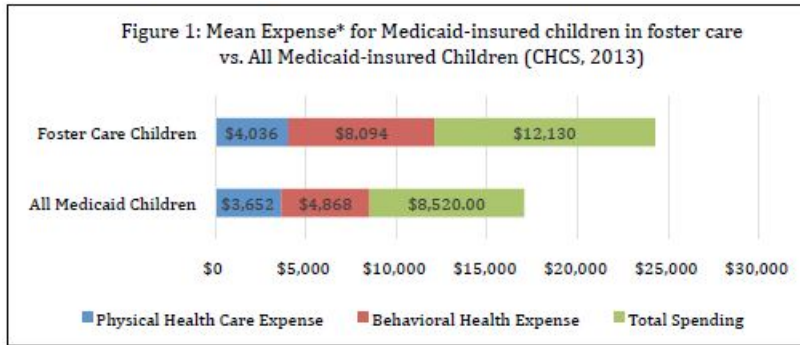
Studies have also found that children in foster care receiving behavioral health services are less likely to receive high quality services (e.g. meeting best practice standards). For example, Medicaid claims analysis has indicated that as many as 50% of children in foster care who were prescribed a psychotropic medication had no concurrent claim for therapy despite clinical guidelines recommending medications not be used alone.¹⁸ Another Medicaid claims analysis found that only 28% of children in foster care prescribed antipsychotic medications received metabolic monitoring for both blood glucose and cholesterol despite clinical guidelines suggesting this be done as part of standard clinical care when antipsychotic medications are prescribed.¹⁹

In the past several years, national attention has focused specifically on the use of antipsychotic medications among children in foster care. In addition to the overall increase in use of psychotropic medications, there has been a dramatic growth over the last two decades in the use of antipsychotic medications, particularly the second generation antipsychotics also called “atypical antipsychotics” (e.g. risperidone, aripiprazole, quetiapine, olanzapine) for children and adolescents.¹⁹ Children in foster care are prescribed antipsychotic medications at a significantly higher rate than their Medicaid-insured peers not in foster care (42% of children in foster care and 26% of other Medicaid-insured children).²⁰ The potential serious adverse effects (including weight gain, drowsiness, hyperglycemia, hyperlipidemia, hyperprolactinemia and diabetes) associated with antipsychotic medications in combination with their increased use with children (including children under age six) has raised significant concerns.²¹

Rubin examined different rates of antipsychotic medication prescribing across states for children in foster care, utilizing data from 2002-2007.²⁰ The trends highlighted concerns regarding the prescribing of antipsychotic medications for Delaware children in foster care. Prescribing of antipsychotic medication for Delaware children in foster care increased to 12.2% in 2007 reflecting a 45.9% increase across this five-year time frame. Ranking of states based on change in prescribing over time placed Delaware as 13th in the country for highest increase in prescribing of antipsychotic medications. In addition, Delaware also had a higher rate of children on antipsychotic medications than the national average (11.8% of children in foster care).

While some percent of children in foster care who need health care services do not receive them, examination of utilization and cost data for those who do reveals disproportionately high medical service use and cost as compared to other Medicaid-insured populations. While children in foster care represent only 3% of all Medicaid-insured children nationally, they account for 15% of children receiving behavioral health services and 29% of total behavioral health expenditure.²² Differences in spending are in part due to the fact that compared to Medicaid-insured children not in foster care, those in foster care are less likely to receive community-based and evidence-based treatment services and are more likely to receive deep-end services like inpatient psychiatric treatment.²³ Children in foster care have the highest mean annual costs for behavioral health services compared to any other categorically-eligible Medicaid group (e.g. TANF, SSI/Disability) as well as a higher mean cost for combined physical and behavioral health care.²² Figure 1 modified from the 2013 Center for Health Care Strategies (CHCS) Faces of Medicaid Study provides mean expense data for physical, behavioral health and total spending.¹⁸

Figure 1. Mean Expense* for Medicaid-Insured Children in Foster Care vs. All Medicaid-Insured Children



*Includes children with at least one claim for a behavioral health service in 2005 with or without concomitant psychotropic medication use, N = 1,213,201

The review above highlights the challenges that our public health systems confront in ensuring access, quality, and value of behavioral health service delivery for children in foster care. The majority of children in foster care present with behavioral health concerns and could benefit from improved access to evidence-based and trauma-informed services but few will receive these services in a timely manner suggesting the need to enhance access. Current research on psychotropic medication use patterns for children in foster care also suggests challenges in aligning behavioral health services with clinical guidelines for psychotropic medication treatment among children, suggesting the need to enhance the quality of services provided.

While a small percentage of children receiving behavioral health services (therapy and/or medication) are in foster care, these children account for a disproportionately high percent of the overall behavioral health spending suggesting the need for systems to develop strategies to ensure value while improving access and quality.

To address these challenges, a number of strategies have been adopted by federal and state systems. These include approaches employed prior to dispensing the medication (e.g., secondary review as part of an informed consent process, prior authorization implemented by Medicaid) and after dispensing the medication (e.g., drug utilization reviews), as well as psychiatric consultation programs for primary care providers, particularly targeted to non-psychiatrist prescribers.²⁴ For example, a 2015 review found that 31 states had implemented prior authorization for antipsychotic medication prescribing for Medicaid-insured children.²⁵ Another national study found that 45 of the 50 states and DC had at least one psychotropic oversight mechanism in place for children in foster care; these were implemented not only by Medicaid agencies but also state and county child welfare departments, state mental health entities, managed care organizations, and the judiciary.²⁴ In addition, professional organizations have promoted practice parameter guidelines. In 2015, the American Academy of Child and Adolescent Psychiatry (AACAP) issued best practice parameter recommendations for children involved in public service systems, including child welfare.²⁶

Delaware's Response

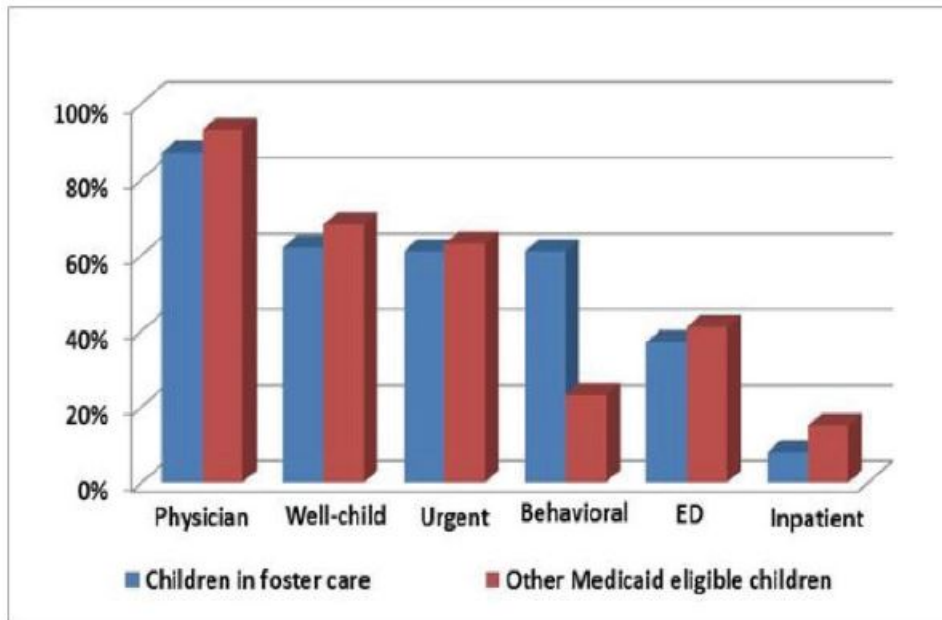
In 2014, the Delaware General Assembly established the Task Force on the Health of Children in Foster Care (hereafter referred to as the "Task Force") to examine the health of children in foster care, their access to and utilization of health services and to provide recommendations for enhancing health care service delivery for children in foster care. As a core strategy, the Task force utilized analysis of claims data from fiscal years 2013 and 2014 for all Medicaid-insured

children in Delaware (comparing those in foster care with those not in care). Key findings from the analysis included the following:

- Compared with Medicaid-insured children not in foster care, those in foster care had higher rates of behavioral health services (20% vs. 60%, respectively).
- More than half of all claims for Medicaid-insured children in foster care were for behavioral health services.

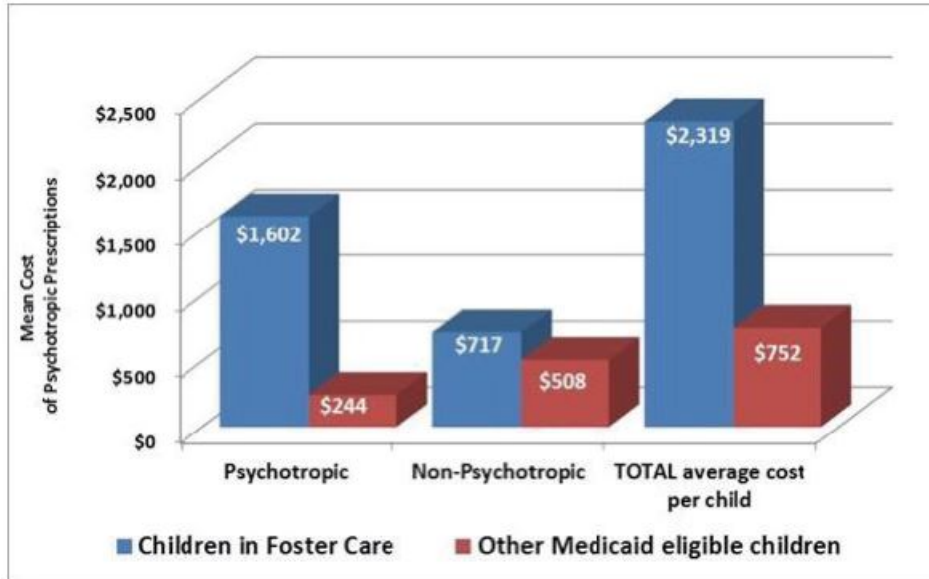
Figure 2 shows the percentages of children in foster care who received selected services (n=1,485) compared with non-foster children (n=124,667) in the Delaware Medicaid program during the review period.²⁷

Figure 2. Percentages of Children in Foster Care Receiving Services v. Non-Foster Children



The Task Force also examined claims for psychotropic medication and found that within that two-year period, 40% of Medicaid-insured children in foster care had been prescribed at least one psychotropic medication with almost 25% being prescribed three or more medications at some time during the two-year period. As indicated in figure 3, the average per child cost of prescriptions among Medicaid-insured children in foster care was approximately three times that of children not in foster care (\$2,139 vs. \$752, respectively) during the two-year period. Notably, the majority of the difference was accounted for by the costs of psychotropic medications.

Figure 3. Mean Cost of Prescription Medication for Medicaid-Insured Children by Placement Type



In May, 2015, the Task force provided a report to the Delaware General Assembly outlining a number of recommendations to improve the quality of care for Delaware’s children in foster care. The recommendations were organized into four main categories:

1. Screening,
2. Access to care,
3. Coordination of care, and
4. Use of data.

Specifically, the Task Force recommended promotion of routine health screening, with integration of physical and behavioral health assessments and treatment plans, as well as improvements in access to trauma-informed services. In response to the pattern of psychotropic medication prescribing for children in foster care, the Task Force recommended implementation of a psychotropic medication monitoring program. Finally, it recommended the state implement ongoing data collection and monitoring of health care service delivery for children in foster care.

The Delaware Department of Services for Children, Youth and Their Families (DSCYF) is the state agency legislatively mandated to provide an array of services (behavioral health, juvenile justice and child welfare) to Delaware’s children and families. The Division of Family Services, (DFS) is the agency that provides child welfare services including investigation, treatment, foster care and adoption. Between 2013 and 2014, DFS began implementing a series of strategies related to psychotropic medication use for children in foster care. First, a workgroup was formed to increase understanding of the current practices around psychotropic medication prescribing. The workgroup examined the national prevalence data and best practice standards and approaches and also initiated data collection and analyses of psychotropic medication prescribing patterns for children in foster care to inform quality improvement initiatives. Second, a unit was established with responsibility for conducting behavioral health screening and consultation for all children entering foster care. Third, DFS established a contract with a pharmacy consultant to begin reviewing the psychotropic medication prescribing for children entering foster care in addition to engaging and providing consultation for prescribers where the medication plan was

not aligned with best practice parameters (e.g. National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) Safe and Judicious Antipsychotic Use in Children and Adolescents).²⁸ It is important to note that these reviews have found that many Delaware children have already been prescribed psychotropic medication prior to entering foster care.

In late 2014, DSCYF applied for and received a Casey Family Programs Technical Assistance grant which provided support for DSCYF to work with consultants at Tufts Medical Center and Rutgers University, national experts in the area of best practices for the use of psychotropic medication for children including those who are placed in foster care. The goals of the original workgroup were expanded to incorporate three interrelated strategies:

1. Engage key stakeholders including children, caregivers, prescribers, health care providers etc. to (a) gather input from stakeholders regarding their perspectives and concerns related to psychotropic medication, (b) communicate information including Delaware data and best practice guidelines and parameters and (c) develop materials and resource links for stakeholders;
2. Ensure a meaningful informed consent process so that children and their families are provided education regarding the diagnosis and proposed treatment and monitoring plan and the risks and benefits of any medications as well as options for alternative or complementary treatments before they give their consent for a medication trial; and
3. Establish a routine mechanism to collect, monitor and disseminate data on psychotropic medication utilization for children in care.

The workgroup has made significant progress in attaining each of the goals outlined above.

This progress is due in large part to partnerships with the Task Force as well as the Delaware Division of Medicaid and Medical Assistance, local managed care organizations, and Nemours Health and Prevention services (a healthcare delivery system that provides comprehensive health assessment for the majority of children entering foster care). In support of the first goal, to enhance stakeholder engagement, the workgroup conducted focus groups and surveys of children, caregivers and prescribers. Based on the feedback from stakeholders, the group developed resource materials, designed specifically to increase awareness of best practices for informed and shared decision-making regarding psychotropic medication use among parents, relative caregivers and foster parents. Findings also informed the development of a Department-level policy regarding the use of psychotropic medication, which is expected to be accompanied by additional information and resources available through the Department's website. The workgroup is also in the process of developing a webinar on psychotropic medication for Department case managers.

To attain the second goal regarding a meaningful informed consent process for all children in foster care, the workgroup created a consent form designed to ensure engagement of children and families which will be piloted for foster care children receiving services through Nemours. Based on the pilot, the workgroup anticipates broadening the use of the form by promoting its use by department contracted providers. The workgroup incorporated language regarding meaningful informed consent in its draft medication policy and has recommended the addition of language in departmental contracts regarding expectations for active participation of children and families in

medication service delivery. Resources developed by the workgroup described above include information for families regarding the core components of the informed consent process to support caregivers' ability to advocate for meaningful participation in decision making.

The final goal of the workgroup is to improve the use of data to inform systems improvements. The workgroup has developed a proposal for psychotropic medication information screens to be developed into the DSCYF management information system. These screens will facilitate the collection and tracking of psychotropic medication data (including monitoring for trends in prescribing) as well as aligning the medication consultation to be consistent with the best practice parameters.

Conclusion

Delaware has adopted a multipronged approach to addressing the issue of health for children in foster care with the ultimate goal of child and family-centered, cost-effective, quality service delivery. Efforts have been implemented both within the child welfare system as well as across systems that serve these children in care. The Division of Family Services has implemented trauma-informed behavioral health screening and consultation to ensure that children who need behavioral health services are identified and connected to effective, evidence-based treatment. The contracted pharmacy consultant service provides review of all medications prescribed for children in foster care and delivers targeted consultation for medication plans that aren't aligned with best practice parameters. The plan to implement updated screens within the management information system will also support ensuring that medication services (type of medication, dosage, laboratory studies) are consistent with the highest standards of care. The department has also worked to build collaborative relationships with systems that also serve children in foster care. The work with Nemours to enhance coordination of care (including ensuring communication of behavioral health screening results) and ensure informed consent by children and their families highlights an example of cross-system partnerships that also meet the goals outlined in the triple aim. The efforts outlined above are essential to the state's commitment to ensure that all children in foster care receive high quality, cost effective services to promote their immediate and long term health and wellbeing.

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