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Improving the Health Care of Foster Children Throughout the US: Texas, a Case Example

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Background: Health of Children in Foster Care

What is the state of foster care child health in the United States and Texas?

The 400,000 children in the United States who have been exposed to the foster care system annually comprise a high-risk, vulnerable, and potentially medically complex pediatric population.[1,2] According to the most recent demographic report by the US Department of Health Human Services, the mean age of a child in foster care is 8 years old. The gender distribution of children in foster care (CFCs) is 52% male and 48% female. The majority of CFCs are white (44%) followed by black (23%) and Hispanic (21%). Regarding placement setting, 45% are in nonrelative foster family homes, 32% are in homes of relatives and next of kin, 7% are in various "institutions", and the remainder are in pre-adoptive homes, group homes, supervised independent living programs, or trial home visits or are currently runaways.[3]

CFCs suffer in all facets of health. CFCs encounter physical health issues more often than the general population does.[1,4,5] But the majority of problems that CFCs confront involve developmental, behavioral, and mental health. They often have cognitive development delays and learning disabilities leading to academic challenges[6], which are in turn associated with significant psychosocial consequences later in life[7]. Common psychiatric comorbidities including anxiety, depression, attention deficit hyperactivity disorder (ADHD), and other behavioral problems also impact this group. However, it is important to note that the degree to which these mental health disorders affect these children has been debated, given heterogeneity between studies and diagnostic criteria and discordance between informants, ie, caregivers and children.[8] In the adolescent period, higher risk of maladaptive behavior including substance abuse can

exacerbate these mental health problems.[9,10].. Moreover, adolescents in foster care have their own unique health problems including higher incidences of early childbirth and sexually transmitted infections.[11,12] As these problems are not appropriately addressed, the aging-out process leads to worsening of these health outcomes and overall poor life experience for these newly transitioned adults.[13]

In this case example, we focus on the health of CFCs in Texas for several reasons. Texas is second only to California for having the most children in the foster care system.[14] According to the Annie E. Casey Foundation, Texas continuously ranks low compared to the rest of the nation for overall child well-being and specifically 41st in 2018 for overall health.[15]. Texas also demonstrates great diversity in its composition of CFCs. Of the 50,000 children under the conservatorship care of the Department of Family and Protective Services (DFPS) in Texas, 52% are male and 42% are Hispanic, 31% white, and 20% black.[16]

What is the current state of health care access for children in foster care?

In addition to the relatively poor health of CFCs, several inherent barriers and challenges exist in ensuring appropriate health care access for this population. Per the American Academy of Pediatrics,[17] such barriers include:

- Challenging, time-consuming, and crisis-oriented nature of the health care approach for these children.
- Lack of care coordination, particularly lack of systems for communication and information sharing among stakeholders.

- Health care professionals' lack of familiarity and comfort with the foster care system, welfare agency, and other related issues including consent and confidentiality.
- Inadequate availability of health information and lack of continuity, given the transient nature of the welfare system.

Various financial and legislative mechanisms have been implemented to attempt to overcome these barriers. Medicaid acts as the primary federal and state-level financial mechanism by which these children can access health care. Furthermore, under Titles IV-B and IV-e of the Social Security Act, Congress appropriates additional funding annually for the care of these children via welfare services.[18] According to the President's Budget for 2019, $8.4 billion was allocated towards foster care and permanency in 2018 and an increase to 8.7 billion dollars is expected in the 2019 federal budget for the Department of Health and Human Services.[19] State Medicaid and other federal mechanisms cover most CFCs, but gaps remain.

One omission, particularly before the Affordable Care Act (ACA), is the care for children previously in foster care who have now aged out of the system. Prior to the ACA, the Chafee Foster Care Independent Act of 1999 represented the last major signed federal legislation attempting to directly help adolescents who aged out of foster care. Created in 1999, its primary achievement was to increase significantly the funding support for states and give them more flexibility to offer independent living services for children who have or will likely age out of foster care. Such potential services were broad and varied and included educational assistance, residential services, and independent life skills training. From a coverage standpoint the act gave all states the option to offer

Medicaid to all CFCs on their 18th birthday up until their 21st birthday.[20] The ACA attempted to further extend this support by requiring states to provide full Medicaid benefits to all previous CFCs until 26 years old or up to 65 years old if household income is less that 133% of the federal poverty line. Additionally the ACA attempted to improve overall health care access to adolescents aged out of foster care by broadening mental and behavioral health services and emphasizing and incentivizing integration of care through various services including the medical home model.[13]

In Texas, the DFPS cares for CFCs through a combination of local, state, and federal funds. In the most recently available report on child welfare financing in Texas, for the 2014 fiscal year, $1.4 billion was spent on child welfare in total, with half coming from the federal budget.[21] No specific data estimating health care expenditures for the 50,000 CFCs in Texas are available, though some rough estimates can be made based on the data available. A 2016 Texas Health and Human Services (HHS) report estimated that $38 billion was spent on Medicaid in Texas in 2015 and that the average monthly expenditure for a nondisabled child was $242.[22] However, given the increased health care needs of the CFC population, this is likely a gross underestimate. Campbell et al conducted an analysis of Medicaid expenditures for children who suffered from child maltreatment and estimated that in 2009 the annual healthcare expenditure for a child placed in foster care after child maltreatment was $2920.[23] In 2010 Medicaid agencies reported total health care expenditures of $5.754 billion for all CFCs in the US.[24]

In Texas, STAR Health represents the primary Medicaid managed care program reserved for CFC health care spending. It is a "statewide, comprehensive healthcare system that was designed to better coordinate and improve access to health care [for

children in Texas foster care]… The main goal of STAR Health is to quickly give children in state care the coordinated medical and behavioral health care services they need."[25] Most recent health care utilization data for CFCs in Texas via STAR Health demonstrates that in 2014 there were 62.1 emergency department visits per 1000 member-months and 495.8 outpatient visits per 1000 member-months.[22]

Over the past year significant legislative efforts had been made to improve the care of these children with a particular focus on health care access. The catalyst that prompted these reforms most likely arose from broad public scrutiny around alleged inadequacies of the DFPS to protect and care for abused and neglected children.[26] The enacted Texas Senate Bill 11 of 2017 (Table 1) represents the primary product of these efforts. Key changes included a mandate that CFCs be evaluated by a health care professional within 3 business days of being removed from his/her previous home if one of the following conditions is met: he/she is removed as the result of sexual abuse, physical abuse, or an obvious physical injury to the child; or has a chronic medical condition, a medically complex condition, or a diagnosed mental illness. It also requires notification by the managed care organization to the health care professional regarding placement changes within 24 hours following the placement change.[27]

Apart from SB11, the 2017 legislative session produced additional enacted bills that could have more indirect effects on CFCs in Texas. SB5 made DFPS autonomous and separated it from Texas HHS, though in regards to responsibilities in health care decisions, DFPS will be required to work with HHS. SB4 attempted to promote kin placement by incentivizing relatives caring for CFCs with a stipend of $350 per month.[26]

Table 1. Highlights of Mandates in Texas SB11 2017 Aimed at Improving Health and Health Care Access of CFCs in Texas[27]

Highlight	Summary of Specific Mandates
Expansion of required prenatal care information	Section 6: Requires inclusion of important prenatal information in the child's history including maternal alcoholic intake during pregnancy and history of fetal alcohol syndrome.
Inclusion of coercion to marry as a form of maltreatment	Section 7: Adds coercion to marry as a form of abuse and defines exploitation as an indication for placement into DFPS custody.
Assurance of proper transition of clinical care after change of placement	Section 14: Within 24 hours of a change in placement, DFPS or community-based contractor must inform the managed care organization and in turn the managed care organization must notify the primary care physician (PCP) of the change in placement "before the end of the second business day" from the time the managed care organization is made aware of the change. Section 25 further gives the managed care organization responsibility for ensuring proper transition and continuity of care when change in placement has occurred.
Requirement of a medical exam in specific circumstances following removal	Section 15b: Medical examination by a health care provider must be done within 3 business days of removal, if the child was removed because of abuse or physical injury or he/she has a "chronic medical condition, a medically complex condition, or diagnosed mental illness."
Community-Based Care model	Section 18: Describes the "Community-Based Care" model defining the characteristics that make up an appropriate community-based contractor and the necessary obligations of both the DFPS and a future contractor in future contractual relationships.
Grants for faith-based community programs	Section 19: Creates a program permitting the governor to award grants to specific "faith-based community programs"

Evaluation of effectiveness of early intervention programs	**Section 20: Future evaluations should be done of early intervention programs in place**
Requirement for comprehensive assessments every 90 days	**Section 22: Contractors under the Community-Based Care model in Section 18 must ensure that every CFC receiving therapeutic services by the contractor obtains a "comprehensive assessment… at least once every 90 days."**
Requirement for reception of appropriate health care screening services	**Sections 24 and 30: Both managed care organizations (Section 24) and "child-placing agency or general residential operation" (Section 30) caring for the CFC are responsible for ensuring he or she receives appropriate health care screening services.**

Improving the Health of CFCs in Texas Through Improved, Efficient, and More Comprehensive Health Care Access

Access to comprehensive and cost-effective medical care through integration of care

Given the lack of coordination and continuity that often prevents adequate health care for CFCs, a means to offer comprehensive and coordinated care is essential. Integration of care via the medical home model, improved case management, and facilitation of patient navigation ought to play a critical role. The medical home model has become an important mechanism to achieve integration of care and offer optimal care for CFCs. Per the American Academy of Pediatrics, the medical home model "ideally offers high-quality, comprehensive, coordinated health care that is continuous over time, compassionate, culturally competent, trauma informed, family centered, and child

focused."[17]

Although the literature on the utility of medical homes for CFCs is sparse, evidence is accumulating to support its effectiveness. One program in Illinois has demonstrated some promising outcomes. The statewide Healthworks model created in 2004 offered a coordinated delivery system of comprehensive health services for CFCs. The Illinois state department of health created this model through building a network of primary care physicians, lead agencies or local departments of health, and medical case managers to ensure children receive the care they need. A retrospective cohort study compared outcomes between children obtaining services from this model with Illinois CFCs prior to the model, who had been receiving services through Medicaid. The analysis demonstrated that the new Healthworks model was associated with higher immunization rates, higher rates of well-child visits, and reduced rates of emergency room visits for children with chronic conditions.[28] These outcomes indicate that such an integrated health care model may be associated with improved clinical care. Such a model focusing on integration of care represents an important example for future states looking to offer coordinated and comprehensive health care for CFCs.

In Texas, the STAR Health statewide managed care plan has attempted to create a medical home model for CFCs. The health plan offers two primary objectives: (1) to provide an "integrated medical home where each foster care child has access to primary care providers, behavioral health clinicians, specialists, dentists, and vision services" and (2) to offer "care coordination services to help members understand benefits, get help with appointments, find transportation assistance and identify local community resources." The plan offers specific mechanisms to help ensure integration of care. Such

steps include the utilization of the Health Passport system, "a community health records designed for foster care members and the STAR Health program", and a focus on achieving the critical timeline benchmarks including a Texas Health Steps checkup within 30 days of enrollment.[29] Senate Bill 11, as previously mentioned, further enhanced this continuity of care by mandating that certain CFCs obtain exams within "3 business days" of placement change and that PCPs are made aware of placement changes within 2 business days.[27]

There is limited data available that evaluate Star Health's success in achieving the medical home model. A process evaluation assessing key benchmarks such as the number of CFCs with a health passport and the proportion of children hitting the important exam timeline benchmarks would be an adequate start. Nevertheless, in a recent report, Texas HHS summarized several indicators it used to evaluate the quality and satisfaction of care for CFCs through the STAR Health program from 2014 data (Table 2). In the report, HHS asserted, "children and adolescents in STAR Health generally had excellent access to care in 2014 compared to the national Medicaid population and Texas Standards." However, HHS also noted that most indicators measuring caregiver satisfaction of care remained below those for the national Medicaid population [22].

Table 2a and 2b: Key messages of "Star Health – Significant Quality Findings"[22]

Table 2a: Quality of Care

Measure	Comparison to national standards*

3.8 preventable admissions and 1.62 potentially preventable readmissions per 1000 member visits – the majority due to mental health or substance abuse related issues	**Not commented**
"Rate of members receiving at least 6 well-child visits in the first 15 months of life"	**"middle third of the HEDIS benchmark and exceeded the HHSC Performance Indicator Dashboard Standard"**
"well care visits for 3- to 6-year-olds"	**"top 10% nationally", exceeded HHSC standard**
"well care visits for adolescents"	**"top 10% nationally", below HHSC standard**
"Access to PCPs"	**"top decile nationally", "met or exceeded" HHSC standard**
6 of 10 children or adolescents "appropriately tested for streptococcal pharyngitis when presenting for pharyngitis"	**"between 10th and 32nd HEDIS standard"**
• **Being prescribed "an appropriate medication"** • **Using "more asthma controller medications than quick-relief medications"**	**"very likely relative to national Medicaid population" but below HHSC standards**
"Dispensed controller medications covering at least 75% of days in the measurement year"	**"very likely relative to national Medicaid population"**

*HEDIS is the Healthcare Effectiveness Data and Information Set, a tool "used by more than 90% of Americans to measure performance on important dimensions of care and service"; it is a "registered trademark of the National Committee for Quality Assurance (NCQA)."[30] HHSC standard indicates standards of Texas Health and Human Services.

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Table 2b: Caregiver satisfaction of quality and access to care

Measure	Comparison to national standard**
Getting needed care – 72%	"Below the national CAHPS child Medicaid rate", "similar to other Texas Medicaid programs"
Getting care quickly – 89%	"Below the national CAHPS child Medicaid rate"
How well doctors communicate – 91%	"Below the national CAHPS child Medicaid rate"
Rating a specialist "9" or "10"- 61%	"Below the national CAHPS child Medicaid rate" (report explicitly reports rate of 70%)

**CAHPS is the Consumer Assessment of Healthcare Providers and Systems" survey used by the Centers for Medicare and Medicaid Services to "reliably assess the experiences of a large sample of patients."[31]

Impact of trauma and toxic stress on CFCs' health and the role of trauma-informed care

Understanding trauma and encouraging trauma-informed care is critical to improve the health of CFCs. Exposure to trauma can accumulate in the lives of many children, especially CFCs. By definition all CFCs at some point in the life course have been exposed to some form of trauma, via adverse childhood experiences (ACEs) and toxic stress throughout their lives. ACEs vary and include abuse and neglect (physical, sexual, emotional), poverty, and parental factors including psychopathology, conflict, and stress. In addition to such experiences prior to removal, the uncertainty, disorder, and losses associated with removal add to this trauma that CFCs experience. Approximately 50% of children in Texas have been exposed to at least one ACE.[32] Exposures to ACEs have been associated with structural changes in the brain and poor mental and physical health outcomes.[33,34]

The accumulation of ACEs also leads to accumulation of toxic stress. Toxic stress is a prolonged physiologic stress response that leads to an irregular and unregulated exposure to stress hormones like cortisol.[33] Via cumulative neuroendocrine, neuroimmunologic, and neurogenetic alterations, this unregulated exposure to hormones impacts development of the brain, leads to structural changes in the brain, and in turn influences function of numerous areas of the brain.[34] Moreover, behavioral maladaptations further exacerbate these neurologic changes. Therefore, the combination of biological changes and maladaptive behaviors ultimately effect significant and negative consequences on the child's physical, cognitive, and psychosocial health. Such impacts on health affect the child not only in the short term, but often through adulthood.[33,34]

Given the clear impact that trauma has on the well-being of CFCs, strategies not only to prevent and stop the traumatic exposures but also to mitigate the effects of trauma through healing and rehabilitation and trauma-informed care are paramount to improving their health [33]. Trauma-informed care is a far-reaching term that can be broadly defined as a program or system which "realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization."[35]

At the minimum, physicians and health care workers must become trained in assessing and treating trauma and its related negative consequences. There are numerous resources for health care workers to become educated in trauma-informed care. One

example is the American Academy of Pediatrics' *Helping Foster and Adoptive Families Cope with Trauma*.[36]

It is not only the healthcare worker's obligation to offer trauma-informed care; in order to ensure a safe home environment and secure relationships between caregiver and child, a multidimensional approach involving case workers, caregivers, health practitioners, and other important adults in the child's life is imperative. Caregivers should learn how to care properly for trauma-exposed children so that they can identify trauma-related triggers, foster stability in the household, create responsive and loving relationships, and prevent worsening of the child's toxic stress and its negative effects. The National Child Traumatic Stress Network's trauma-informed parenting workshop attempts to educate caregivers about trauma-informed care and make them more comfortable in caring for trauma-exposed CFCs. It has been demonstrated that caregivers who undergo the workshop have improved knowledge and comfort in caring for children with a history of traumatic experiences.[37] Focus has also been directed on child welfare workers. In Washington state, a training program for case workers improved their competency in using trauma-informed screening tools, identifying related mental health needs, and connecting children with the appropriate evidence-based services.[38]

Numerous trauma-informed services have been created and implemented throughout the nation, but they have not been demonstrated to be equally efficacious. In a systematic review, Leenarts et al assessed the literature's evaluations of different trauma-informed psychotherapies.[39] The review discovered that cognitive behavioral therapy, art therapy, child-parental psychotherapy, and multisystem strategies specifically targeting aggressive and violent children offered the most benefit to children who have

experienced trauma.[39]

In regards to trauma-informed care for CFCs in Texas, the STAR Health plan has implemented strategies to improve identification and mitigation of trauma-related pathology in children. Every child newly placed in foster care requires a trauma screen within 30 days of placement.[40] In Texas, CANS (Child and Adolescent Needs and Strengths) has been the uniform statewide assessment tool following enactment of Texas Senate Bill 125 in 2013. This bill required "children who are entering into DFPS conservatorship to receive a 'developmentally appropriate comprehensive assessment' that includes a screening for trauma and mental health needs."[41] Originally the screen was required within 45 days but now has been decreased to 30 days.[40] Furthermore, through the behavioral health section of STAR Health, the plan offers several trauma-informed treatment modalities: "Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), Trauma-Informed Care (TIC), Parent-Child Interaction Therapy (PCIT), Trust-Based Relational Intervention (TBRI), and Child Parent Psychotherapy (CPP).[29] Lastly the DFPS requires every new foster and adoptive parent to receive trauma-informed care training prior to obtaining approval to care for foster care or adopted children and must renew this training annually.[42]

Screening for mental health and neurodevelopmental disorders

The exposure to trauma, ACEs, and toxic stress leads to an epidemic of mental health disorders and neurodevelopmental disabilities (NDDs) that plague CFCs. Estimates vary but approximately 50%-70% of CFCs suffer from such pathology [8,33].

Therefore, in order to improve the health of CFCs, identifying and treating these disorders are imperative. The first step is to identify all children who are potentially afflicted with mental health illness and NDDs. Such a strategy ought to be sensitive yet cost-effective; not every CFC can or should have a complete psychiatric evaluation. Therefore, it is prudent to implement adequate screening mechanisms that will identify children who require further evaluation. Numerous screening tools have been created and validated for pediatric mental health pathology and NDDs. One resource, the California Evidence-Based Clearinghouse for child welfare, has reviewed and critiqued the validity and reliability of many of the widely used screening tools (Table 3).[43] Furthermore, some novel approaches have been made to conduct mental health screening successfully. One study evaluated a web-based tool used by parents to screen for mental health disorders; it reported that parents found the application easy to use and physicians felt that the tool normalized topics surrounding mental health and allowed for more efficient and comprehensive visits.[44]

Table 3: Mental Health and Neurodevelopmental Screening Tools Evaluated by the California Evidence-Based Clearinghouse

Screening Tool	Description/Purpose of Tool	Psychometric Rating*
Ages and Stages Questionnaire, 3rd edition (ASQ-3™)	"Assesses the developmental performance of children in the areas of communication, gross motor skills, fine motor skills, problem solving, and personal-social skills"	A

Ages and Stages Questionnaire, Social-Emotional (ASQ:SE)	Assesses specifically social and emotional developmental performance	A
Family Map Inventories	Assesses child's home and parental environment, "areas assessed have been identified as those that most impact child development," "a valid screen for Adverse Childhood Experiences (ACES) in young children."	A
Mental Health Screening Tool (MHST)	"screening tool intended to be used primarily by non-mental health professionals to rapidly screen children and youth ages 5 through adult who are being considered for out-of-home placement. The purpose of the instrument is to identify which children/youth should be referred for a mental health assessment."	Not able to be rated
Modified Checklist for Autism in Toddlers (M-CHAT)	Two-stage tool that "screens for risk of autism spectrum disorder"	A
Modified Checklist for Autism in Toddlers, Revised, with Follow-Up (M-CHAT-R/F)	Similar but revised version of M-CHAT	B
Mood and Feelings Questionnaire (MFQ)	Screens for depression in children and adolescents, 33 item questionnaire	A

Mood and Feelings Questionnaire-Short Form (MFQ-SF)	Screens for depression in children and adolescents; 13-item questionnaire	A
Mood Disorder Questionnaire (MDQ)	Screens for bipolar disorder	A
North Carolina Family Assessment Scale (NCFAS)	Examines "family functioning in the domains of Environment, Parental Capabilities, Family Interactions, Family Safety, and Child Well-being"	A
Patient Health Questionnaire for Adolescents (PHQ-9)	Nine-item questionnaire that screens for depression in adolescents	A
Pediatric Symptom Checklist-17 (PSC-17)	"screen for childhood emotional and behavioral problems including those of attention, externalizing, and internalizing"	A
Screen for Childhood Anxiety Related Emotional Disorders (SCARED)	"screen for childhood anxiety disorders including general anxiety disorder, separation anxiety disorder, panic disorder, and social phobia"	A
Strengths and Difficulties Questionnaire (SDQ)	General "mental health screening tool"	A
*Rating based on availability of published, peer-reviewed studies that "have established the measure's psychometrics (eg, reliability and validity, sensitivity and		

specificity, etc.). "A" means 2 or more studies have been published; "B" means one study has been published; "Not able to be rated" means no studies are available.

Nnumerous publications have evaluated the effectiveness of individual screening tools or methods, but studies evaluating the public health impact or utility of mental health screening in CFCs are lacking. One study did evaluate the consequences of the statewide Massachusetts Medicaid pediatric behavioral health-screening mandate. It discovered that the mandate was associated with increased rates of screening and mental health-related outpatient visits.[45] This study substantiated the effectiveness of mental health screening as it demonstrated that perhaps more screening led to more intense evaluations of children who screened positive for possible mental health disorders. Furthermore, if such a study can demonstrate success in a large and heterogeneous population, these results could be confidently extrapolated to CFCs, who have higher rates of mental health disorders than the general public.

Per the Texas Health Steps recommendations, every child in Texas ages 12-18 should undergo a mental health screen annually with one of their accredited tools including PSC-17, PSC-35,Y-PSC, and PHQ-9.[29] As of September 2016, STAR Health further requires that every child in foster care obtain a full mental health assessment via the CANS tool within 30 days of placement,[29] as previously mentioned. Although the CANS tool was created through an expert workgroup consisting of many stakeholders,[46] any published evidence of its validity seems to be lacking.

Access to mental health care

Identifying children who have significant mental health care needs is an important step but is obsolete if the children do not have access to adequate services and interventions to help remediate such problems and allow the children to prosper. In a review of the literature on efficacious mental health interventions in CFCs, specific themes emerged. For example, appropriate yet judicious use of psychotropic medication in the foster care population has been recently emphasized through the literature. High incidences of concomitant use of multiple antipsychotics specifically[47] and psychotropic medicines in general[48], without evidence of effectiveness or safety, have been demonstrated.

Another theme arising from the foster care health literature is a transition from a focus on residential-type services to a focus on home-based and community-based services. Specifically the Centers for Medicare and Medicaid Services (CMS) has emphasized utilizing home-based and community-based services as they believe such interventions are more clinically and cost-effective than residential-type services.[49] Assessing 2 important federal initiatives to remediate mental health needs of children--the Children Mental Health Initiative (CMHI) and the Psychiatric Residential Training Demonstration Program (PRTDP)--CMS demonstrated that both initiatives are associated with improved outcomes for children with mental illness. Based on such analyses, CMS continues to offer a "core package" of traditional services including individual and family therapy and medication management, and a supplementary package including "intensive care coordination (often called wraparound service planning/facilitation), family and

youth peer support services, intensive in-home services, respite care, mobile crisis response and stabilization, and flex funds."[49]

In assessing different outpatient mental health interventions for CFCs aged 0-12 years, one systematic review highlighted and explored 10 different interventions that have been studied and demonstrated efficacy (Table 4).[50] Moreover, it emphasized several important gaps in the literature that need to be filled to determine the optimal mental health interventions for the foster care population. The gaps include effectiveness data, particularly in a randomized controlled trial setting; studies comparing different interventions; subgroup analyses given the heterogeneous nature of the foster care population and the need to determine for whom and in what scenario an intervention should be used; and lack of focus on outcomes related to adequate engagement of family and children, particularly enrollment and retention rates.[50]

Table 4: Mental Health Interventions Studied by Hambrick et al[50]

Attachment and Biobehavioral Catchup (ABC)	Kids in Transition to School (KITS)
Child Parent Psychotherapy (CPP)	Parent-Child Interaction Therapy (PCIT)
Fostering Healthy Futures (FHF)	Short Enhanced Cognitive-Behavioral Parent Training (CEBPT)
Incredible Years (IY)	Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
Keeping Foster Parents Trained and Supported (KEEP)	Treatment Foster Care Oregon for Preschoolers (TFCO-P; formerly Multidimensional Treatment Foster Care for Preschoolers)

While there are several possibly efficacious interventions for CFCs being utilized, there is a lack of literature on such interventions specifically targeting adolescents in foster care. Cognitive behavioral therapy is a ubiquitously effective intervention that has been shown to improve the symptoms in depressed and anxious adolescents.[51] Another

more intensive program, Multidimensional Treatment Foster Care for Adolescents (MTFC-A), has been demonstrated to have wide-ranging impacts on mentally ill adolescents [52]. It involves placing adolescents into short-term foster homes positively supported by well-prepared adults and accompanied by several interventions throughout the home and school setting. The wide range of positive outcomes that have been associated with this program include reduced rates of depression, externalizing and internalizing behaviors, criminal arrests, and teen pregnancy [52].

In regards to mental health care access for CFCs specifically in Texas, Star Health offers several behavioral health services, for children suffering from psychiatric and substance abuse related disorder, and trainings for providers to practice such services. Such services include "Trauma Focused-Cognitive Behavioral Therapy (TF-CBT), Trauma Informed Care (TIC), Parent-Child Interaction Therapy (PCIT), Trust Based Relational Intervention (TBRI) and Child Parent Psychotherapy (CPP)."] The plan also offers intensive case management services and emergency behavioral health services. In order to mitigate the excessive overutilization of psychotropic medications, Star Health recommends that clinicians use the prescribing parameters outlined in the Texas DFPS guide, Psychotropic Medication Utilization Parameters for Children and Youth in Foster Care. The program moreover conducts periodic Psychotropic Medication Utilization reviews or PMURs particularly for those patients that do not seem to follow the parameters outlined by the guide [53].

DISCUSSION

Given the barriers and gaps preventing adequate health of and health care access for CFCs, we have identified certain domains and themes that can be emphasized to improve access and overall health. By focusing on these domains, including optimizing integration of care, directing attention to the impact of trauma and adversity on child health, and improving both mental health screening and access to targeted treatments for mental health pathology, we have identified 2 general ways for Texas and rest of the United States to improve the health and health care access of CFCs.

First, many of the mechanisms described that have been implemented to improve the health of, and health care access for, CFCs seem to lack evidence of quality assurance. Specifically, there is limited data available to quantify the success of STAR Health's initiatives to improve their health care goals for CFCs. For example, in regards to achieving comprehensive medical care and integration of care for CFCs, data process evaluations would ensure that the mechanisms being implemented are actually being done. Studying such indicators like the proportion of CFCs with a health passport and proportion of children hitting the important exam timeline benchmarks, as previously mentioned, would offer assurance. Like Texas, other states should also ensure their health care mechanisms focused on CFCs are being thoroughly evaluated.

Second, there are additional tools that could be implemented to further improve the health and health care access for CFCs in Texas and throughout the US. For example, in regards to ensuring access to comprehensive health care and integration of care, STAR Health could augment or replace the health passport with an online mechanism to ensure appropriate sharing of health-related information. Specifically, we would recommend the creation of a single, portable, readily accessible yet confidential and HIPAA-protected

website containing relevant demographic information and the medical and psychosocial history of each CFC in Texas. Additionally, to improve the ubiquity of mental health and trauma screening, easy-to-use and more efficient online modalities could be implemented. Each state should explore similar additional strategies to enhance the health of and health care access for CFCs throughout the nation.

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