



# **CHILD MIGRANTS IN FAMILY IMMIGRATION DETENTION IN THE US:**

**AN EXAMINATION OF CURRENT PEDIATRIC  
CARE STANDARDS AND PRACTICES**

 **Massachusetts General Hospital**  
Founding Member, Mass General Brigham  
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**FXB Center**  
for Health & Human Rights  
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**HARVARD**  
Global Health Institute

**RAICES**

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# ACKNOWLEDGEMENTS:

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This report is produced by a collaboration with the Harvard University François-Xavier Bagnoud (FXB) Center for Health and Human Rights, the Massachusetts General Hospital (MGH) Asylum Clinic at the Center for Global Health, and the Harvard Global Health Institute with the members of the core study team—Vasileia Digidiki, MSc, PhD, Jacqueline Bhabha, Margaret Sullivan, FNP-BC, DrPH and Dennis Kunichoff, MPH (FXB Center), Matthew Gartland, MD and Shela Sridhar, MD, MPH (MGH Asylum Clinic at the Center for Global Health).

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Cover art by Allison Arteaga Argumedo. Photographs within the report are licensed from stock images and do not portray children or families at Karnes County Family Residential Center in an effort to respect their privacy.

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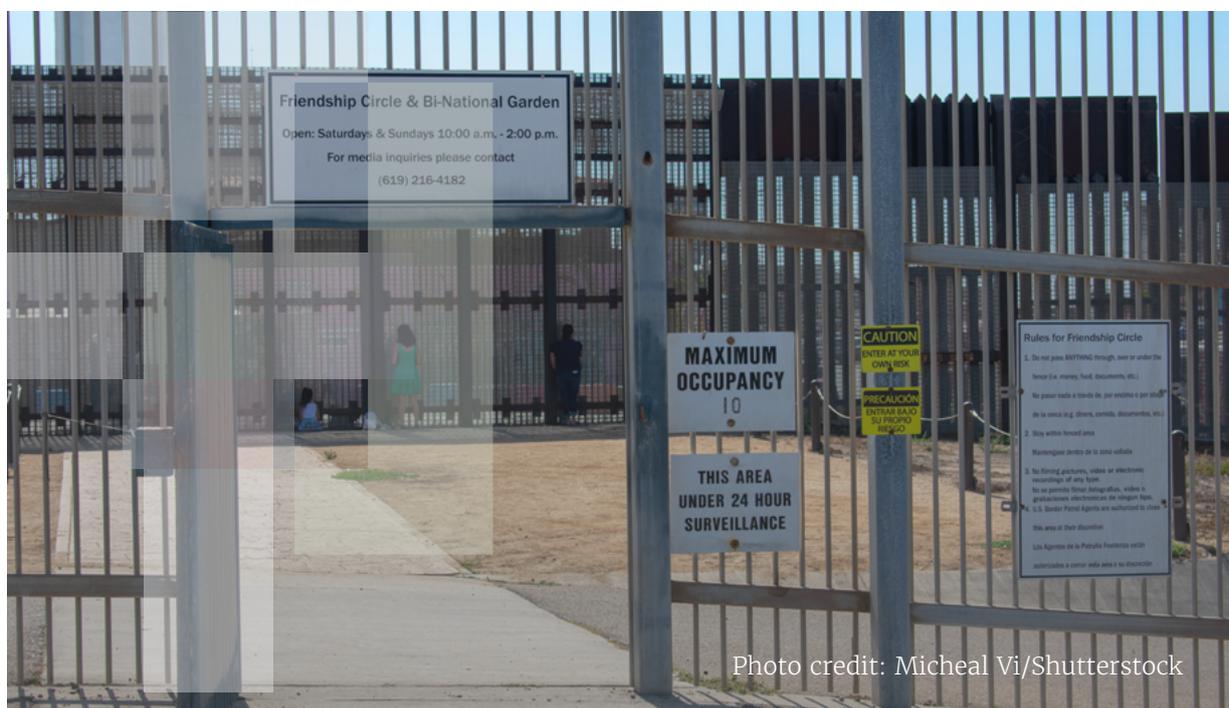


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# ACRONYMS

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<b>BMI</b>	Body Mass Index
<b>CBP</b>	Customs and Border Patrol
<b>DSM-5</b>	Diagnosis and Statistical Manual of Mental Disorders, Fifth Edition
<b>ICE</b>	Immigration and Customs Enforcement
<b>IHSC</b>	ICE Health Service Corps
<b>FNP</b>	Family Nurse Practitioner
<b>FSA</b>	Flores Settlement Agreement
<b>KCFRC</b>	Karnes Country Family Residential Center
<b>LVN</b>	Licensed Vocational Nurse
<b>MD</b>	Medical Doctor
<b>ORR</b>	Office of Refugee Resettlement
<b>PBNDS</b>	Performance-Based National Detention Standards
<b>PTSD</b>	Post-Traumatic Stress Disorder
<b>RAICES</b>	Refugee and Immigrant Center for Education and Legal Services
<b>RN</b>	Registered Nurse
<b>TORB</b>	Telephone Order Read Back
<b>VORB</b>	Verbal Order Read Back

# DEFINITIONS

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<b>Acute medical care</b>	Health care delivery for conditions that require immediate attention and have been occurred over a short period of time (typically days to no more than a few weeks).
<b>Adjustment Disorder</b>	Emotional or behavioral symptoms including depressed mood or anxiety that occur in response to a specific stressor (may be a single event or multiple events) and impair social functioning. The diagnosis and clinical use of adjustment disorder in this report is based on the formal DSM-5 definition (American Psychiatric Association, 2013).
<b>Anxiety</b>	A set of diagnoses which include but are not limited to generalized anxiety disorder, social anxiety disorder, panic disorder, and agoraphobia. Defined by worries and fears in children that are persistent and causing excessive distress resulting in impairment of day-to-day functioning (Bennett & Walkup, 2022).
<b>Calcified granuloma</b>	Cluster of calcium deposits which can occur due a wide variety of diagnoses, including due to an infection such as tuberculosis (Khan et al., 2010).
<b>Chronic medical condition</b>	Condition such as asthma or diabetes that requires monitoring, treatment, and follow-up over several months to years, and in many cases lifelong maintenance.
<b>Congregate living</b>	Facilities that serve unrelated people who live in close proximity and share at least one common room (CDC, 2023).
<b>Depression</b>	A clinical diagnosis defined by syndromic criteria including, but not limited to depressed mood, insomnia, fatigue, difficulty concentrating, feelings of worthlessness and suicidality. The diagnosis and clinical use of depression in this report is based off of the formal DSM-5 definition (American Psychiatric Association, 2013).
<b>Geo Group</b>	The Geo Group Inc: a private company that is contracted by the Immigration Customs Enforcement to operate immigration detention centers in the United States ( <a href="https://www.geogroup.com/">https://www.geogroup.com/</a> ).

# DEFINITIONS

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<b>Higher level of care</b>	Health care facility which provides more intensive and specialty services. In the United States we have primary, secondary, tertiary and quaternary levels of care (Physiopedia, n/d).
<b>ICE Health Service Corps</b>	The program office within ICE Enforcement and Removal Operation responsible for providing “essential health care” for those individuals detained in ICE detention facilities (ICE, n/d).
<b>Joint Commission</b>	An independent organization which sets standards and provides accreditation for hospitals in the United States (Joint Commission, n/d).
<b>Malnutrition</b>	Any form of undernutrition (wasting, stunting, underweight) or inadequate micronutrition and/or protein deficiency including overweight and obesity (WHO, 2021).
<b>Median</b>	The middle point of a data set meaning that 50% of data points have a smaller value and 50% have a larger value.
<b>Medical record</b>	Medically relevant information including physician and nursing notes, test results, growth charts, and intake forms.
<b>Mental health disorder</b>	A disturbance in an individual’s cognition, emotional regulation and behavior that is associated with an impairment in functioning, significant distress or risk of self-harm (WHO, 2022).
<b>Mental Health Progress Record</b>	The form included in client records to identify mental illness in ICE/Geo Group documentation.
<b>Multidisciplinary care</b>	Treatment plans from different fields coming together to form a holistic treatment plan, including social work, interpreter services, nursing and different medical specialties.
<b>Nutritional supplement</b>	Calorically dense drinks and/or foods for weight gain in children who are malnourished.

# DEFINITIONS

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<b>Objective</b>	The portion of the medical note where providers document the relevant physical exam findings based on the healthcare provider direct examination.
<b>Primary provider</b>	The provider directly examining and evaluating the patient.
<b>PTSD</b>	A mental health disorder characterized by several symptoms including, but not limited to intrusive thoughts, nightmares and flashbacks, avoidance and/or hypervigilance following exposure to a specific traumatic event. These symptoms lead to social, occupational, and interpersonal dysfunction. The diagnosis and clinical use of PTSD in this report is based off of the formal DSM-5 definition (American Psychiatric Association, 2013).
<b>Screening tool</b>	This is a test or a survey intended to identify individuals with a particular health condition, to allow for early detection and intervention. The tool is used to identify individuals who should undergo further testing to confirm the diagnosis of a health condition (John Hopkins Medicine, n/d).
<b>Stunting</b>	Low height for age Z-score. Typically defined as a Z-score less than -2 (Ramírez et al., 2017).
<b>Subjective</b>	The portion of a medical note where providers document the history provided by the patient. This typically documents the complaint that the patient has along with any relevant additional information that comes from the patient's recollection.
<b>Supervising provider</b>	The healthcare provider who is providing oversight of medical decision making of the primary provider. This is typically a physician.
<b>Thinness</b>	Low BMI for age Z-score. Used in children over the age of 5. Typically defined as a Z-score less than -2 (Ramírez et al., 2017).
<b>Upper respiratory infection</b>	The “common cold.” It is a self-limiting infection with symptoms that include sneezing, nasal congestion, nasal discharge, sore throat, cough, and often fever. These symptoms usually resolve within 7-10 days without intervention (Pappas, 2022).

# DEFINITIONS

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<b>Wasting</b>	Low weight for height Z-score. Used in children under the age of 5. Typically defined as a Z-score less than -2 (Ramírez et al., 2017).
<b>Z-score</b>	Standardization of growth curves used to describe the distance of a child's height for weight value from mean height-for-weight across an international reference population (Wagle, 2017).



# EXECUTIVE SUMMARY

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Between 2017 and 2021, more than 650,000 children were taken into custody at the border, with more than 220,000 of these children being detained for more than 72 hours (Flagg & Preston, 2022). International norms clearly assert that detention is never in the best interest of the child and should be used only as a measure of last resort and for the shortest possible period of time (UN General Assembly, CRC, Article 6, 2005).

The rights of children in US immigration enforcement have been affirmed in a series of landmark cases resulting in the Flores Settlement Agreement, which acknowledges the unsuitability of child detention as immigration policy, and states that children should not be detained for more than 20 days (Schrag, 2020). Despite this guidance, the US continued to detain children for lengthy and arbitrary periods of time, placing them in detention facilities unsuitable for child health and safety. Furthermore, reporting and oversight from governmental and non-governmental agencies have documented devastatingly harmful conditions for children in family immigration detention including separation from parents, the use of prison facilities inappropriate for housing children, and limited access to qualified medical professionals leading to grave physical and mental health consequences (U.S. ICE Advisory Committee, 2016; Allen & McPherson, 2023; Women's Refugee Commission 2014; Human Rights First, 2022). Medical studies have documented long-term consequences of detention on children in the US and around the world (MacLean, et al, 2019; Zwi, et al 2018; Tosif, et al, 2023; Kronick, Rousseau, Cleveland, 2015); however, to our knowledge there are no systematic studies describing the quality of pediatric health care based on primary medical documentation within the US family immigration detention system.

In collaboration with the Refugee and Immigrant Center for Education and Legal Services (RAICES), the Child Health Immigration Research Team based out of the Massachusetts General Hospital (MGH) Asylum Clinic at the MGH Center for Global Health and the FXB Center for Health and Human Rights at Harvard University, analyzed the medical records of 165 children, between 6 months and 18 years old, detained at Karnes County Family Residential Center (KCFRC) between June 2018 and October 2020. Medical records were collected with the permission of parents by the Refugee and Immigrant Center for Education and Legal Services (RAICES) Family Detention Team to investigate the provision of medical care for detained children, and analyzed in a de-identified form by the Child Health Immigration Research Team.

Broadly, we found that existing health issues and care needs relating to physical and mental health were under-identified due to poor screening and minimal documentation of medical care, resulting in fragmented and inadequate medical care. During prolonged detention the children in the study had limited access to basic healthcare, including key screenings and management of acute medical and mental health issues.

## KEY FINDINGS

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1. The median length of detention was 43 days and 88 percent of children remained in detention for longer than 20 days, in violation of the terms of the Flores Settlement Agreement.
2. A total of 12 languages were documented, among them Haitian Creole, K'iche and Romanian. There was minimal documentation of interpreter use.
3. 4.3 percent of children exhibited moderate or severe wasting, 11.7 percent of children were “at risk of malnutrition,” 22.6 percent exhibited stunting, and 5.5 percent severe stunting. Despite this evidence, none of the children’s medical records documented the risk of malnutrition, nor was there any indication that measures were taken to enhance the children’s diet.
4. Although heights and weights of all children were obtained, there was no analysis or identification of nutritional status by the medical providers in the detention center based on the collected data.
5. The screening tool used to identify mental health needs did not follow a validated tool and did not consider the age of the child. Only 1% of the cohort was identified as at risk for a mental health disorder; a gross underestimation based on existing data.
6. There appeared to be a preponderance of providers practicing outside of their scope. There was a lack of pediatric-specific medical knowledge, evident in many medical records and inadequate documentation of medical reasoning.
7. There was inadequate follow up identified in the documentation of children with chronic illness and a poorly outlined referral process for children after leaving detention.
8. Though 100 percent of the children were screened for tuberculosis upon arrival, they were all screened with the use of chest x-ray, contrary to the 2020 ICE’s Family Residential Standards (FRS) and Center for Disease Control (CDC) guidance. Children with chest x-ray findings suggesting latent tuberculosis were not referred for further testing.

9. Vaccination data was often not recorded or was illegible if recorded, making it difficult to assess influenza vaccination. Furthermore, there was little influenza testing identified in children with fevers, which is concerning for under-identification of a highly contagious condition.

10. There was an overall inadequacy of the documentation of clinical reasoning which can lead to inadequate care in a fragmented health system, such as that in a detention facility.

## Conclusions

Our study documents the mental and physical harm experienced by children in immigration detention at Karnes County Family Residential Center during prolonged detention relating to inadequate and inappropriate medical care. Our findings spanned a broad range of areas including the documentation of interpreter use, supervision, documentation, and delivery of acute medical care, assessment of nutritional and vaccination status, screening protocols for mental distress, and the identification of chronic medical conditions. The evidence of this study supports a conclusion that has been asserted by numerous civil society and medical organizations including the American Academy of Pediatrics (Linton, Griffin and Shapiro, 2017): there is no humane way to detain children and no version of family detention that is acceptable. While data in this study are drawn from only one US family immigration detention center and the sample size is limited, this report presents compelling evidence to support calls to end the practice of detaining children and families.

Recognizing the decades long history of family detention in the US and the likelihood based on current policy discussion that the detention of children will occur into the foreseeable future, the report includes policy recommendations on the standard of medical care needed to meet the basic human rights of children in detention. These recommendations are anchored in ICE guidelines for medical treatment, the Family Residential Standards, as well as national and global medical organizations, such as the American Academy of Pediatrics, Centers for Disease Control and the World Health Organization. They are also supported by the clinical experience of those caring for child migrants, which are rooted in existing international law and practice. The key actions set out in this report are applicable to all venues for detention or custody of children within the immigration system. It should be noted that these recommendations do not negate the only reasonable conclusion based on our findings, that the detention of migrant children is harmful in any form and must be abolished.

# 1. INTRODUCTION

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Between 2017 and 2021, the United States Customs and Border Patrol (CBP) detained roughly 650,000 children, accounting for about a third of migrants detentions during this time period (Flagg & Preston, 2022). Analogous figures for children are transferred and detained by Immigration and Customs Enforcement (ICE) are not publicly available. Many of the children detained by CBP were held for prolonged periods of time, often under unsafe and unsanitary living conditions, in direct violation of applicable federal standards as set out in the precedent-setting Flores Settlement Agreement (FSA).<sup>14</sup> This agreement established the basis for the existing national regulations and standards regarding the detention and treatment of migrant children in federal detention.<sup>15</sup> Key provisions of the FSA require the federal government to keep children in the least restrictive setting possible, to ensure their release from detention within 20 days, and to provide safe and sanitary conditions while in custody (Schrag, 2020). However, despite the FSA ruling, complaints about detention conditions and the lack of adequate medical care have persisted and there have been several news reports in recent years detailing the deaths of children in immigration detention – for example, in 2019, the ACLU reported that at least seven children had died in custody or immediately after being released from detention (ACLU, 2019) and as recently as May 2023, the New York Times reported the death of an 8-year-old girl detained by CBP (NYT 2023).

The Refugee and Immigrant Center for Education and Legal Services (RAICES), a legal non-profit, is among the organizations providing legal services to children and families in immigration detention and advocating for improved conditions, and the release of migrant children. Beginning in 2018, the RAICES Family Detention Team, with the consent of each child's parent or guardian, requested the medical records of children in Karnes County Family Residential Center (KCFRC), one of three family immigration detention facilities operating in the US at the time.

In this study, we analyze the medical records of children detained in KCFRC between June 2018 and October 2020. This report highlights the health status of children entering a family detention center and the quality of medical care provided to children detained at KCFRC. While this study did not represent a complete or randomized sample of children in family detention, the findings in this group are important, particularly given the absence of primary data and the corroboration of previous oversight and investigative reports.

Findings of this study include the prolonged duration of detention exceeding the standards of the FSA, inadequate or inappropriate acute medical, and inadequate screening for chronic medical conditions, mental health conditions, and malnutrition.

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<sup>14</sup> In 1997, the U.S. reached a settlement agreement in the Supreme Court case of *Reno v. Flores* which concerned the detention and release of unaccompanied children (*Reno v. Flores*, 507 U.S. 292 (1993)). The scope of the Flores Settlement Agreement (FSA) was subsequently expanded to all children in immigration custody, including those detained with their parents, and operates as national regulations and standards regarding the detention and treatment of children in federal custody.

<sup>15</sup> *Flores v. Johnson*, 212 F. Supp. 3d 864 (C.D. Cal. 2015).

Detention is never in the best interest of children and child detention must end. Immigration detention harms children’s mental and physical health at a crucial time of physical, mental, and social development. In 2021, the Biden Administration halted the use of ICE family immigration detention, however, detention and residential care of children continue to occur during CBP processing and for children in custody of the Office of Refugee Resettlement, and there is the potential for family immigration detention to be reinstated in the future (the Guardian, 2023). The findings and recommendations in this report should be considered in any policy, current or future, involving the detention of migrant children in the United States.

### 1.1 Accessing Pediatric Medical Records from KCFRC

Between June 2018 and October 2020 RAICES obtained medical charts from clients. The organization requested 326 medical charts of detained children whose families had received legal advice and/or representation by RAICES. Some, but not all families reported medical concerns or complaints. Consent for the medical charts was obtained from the clients regardless of whether a medical complaint was reported to RAICES. The medical records included intake forms, tuberculosis (TB) screening, mental health progress forms and acute care visits to the facility’s medical center. ICE authorities partially acceded to the RAICES request, by providing 165 charts, which form the dataset on which this report is based.

No medical records of children whose families had not requested representation by RAICES were accessed. Medical records were obtained only after each child’s guardian gave written confirmation that they authorized the use of the records for immigration related advocacy and research. It is unclear how many children were detained at KCFRC during the time the data was collected or how many children sought medical care, as Geo Group did not provide that information at the time of the request (Personal Correspondence from RAICES).

Medical records were fully de-identified, meaning any patient names, personal identifiers and dates of health care visits were redacted, before being made available to the research team. As a result, the medical team reviewing the charts did not have access to any identifiable patient information. Ethical review was completed by the Mass General Brigham Institutional Review Board and the

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*In this study, we analyze the medical records of children detained in KCFRC between June 2018 and October 2020. This report highlights the health status of children entering a family detention center and the quality of medical care provided to children detained at KCFRC.*

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research protocol (Protocol Number: 2021P002342) was exempted from human studies research status given the minimal risk posed by the study to the subjects.

### 1.2 Analyzing the data

The Child Health Immigration Research Team that conducted the study included Pediatricians (4), Internal Medicine and Pediatrics physicians (4), a resident in Internal Medicine and Pediatrics (1), a Family Medicine nurse practitioner (1), and a medical student (1). Harvard University faculty with a focus on child protection (2) and a senior Harvard University data analyst with the Harvard FXB Center for Health and Human Rights<sup>16</sup> collaborated with RAICES to analyze the medical records obtained.

This research team developed data collection forms, analyzed and organized the data into the following relevant sections: acute medical care, standard screenings and vaccines (nutrition, mental health, chronic medical care, tuberculosis, vaccines and dental care).

### 1.3 Limitations and Challenges

This report’s conclusions must be evaluated in context. The scope of our study is limited due to a sample size of 165, a defined 27-month period of detention, and inclusion of only one out of three family immigration detention facilities in the US at the time of data collection. Further, in person visitation restrictions compelled RAICES to request access to medical records through mail, a more bureaucratic and time-consuming process than an in-person request would have been. This limitation enabled the contractor, Geo Group to not fully meet RAICES’ data requests, resulting in limited access to the medical records requested (Personal Correspondence from RAICES). As a result, this report inevitably provides only a partial picture, rather than a comprehensive assessment of the detained children’s medical needs at the KCFRC.

In addition, there may be aspects of diagnostic consideration and medical care that despite being adequately performed, were poorly documented within the medical chart. We were only able to assess the medical

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<sup>16</sup> The research team was based at Massachusetts General Hospital, Brigham and Women’s Hospital and the Harvard T.H. Chan School of Public Health (Boston, MA)

care that was documented. Additionally, documentation was not provided for medical care received outside the detention facility, and as a result no comments on the quality of this care can be offered. Finally, the records do not provide an account of children and families' experience of health medical care while in detention, and may not capture inadequate communication around medical care or attempts by families to seek care.

Despite these limitations, we hope this study, as one of the first and most comprehensive analyses of medical records from family immigration detention, represents a significant contribution to our current, highly deficient understanding of the access to and quality of medical care afforded to child migrant detainees.

#### **1.4 Framework of Existing Pediatric Medical Care Regulations in US Immigration Detention Centers**

Health care in ICE facilities is administered by the ICE Health Service Corps (IHSC). ICE operates under a set of “Performance-Based National Detention Standards” (PBNDS) which outline mental health and medical service standards that immigration detention facilities must adhere to (U.S. ICE, 2023). This set also includes the principles related to the transfer of medical records between CBP, Office of Refugee Resettlement (ORR), and ICE.

In addition to the PBNDS guidelines, ICE is expected to follow the Centers for Disease Control (CDC) and the Occupational Safety and Health Administration (OSHA) guidelines for prevention and control of infectious disease. ICE also adheres to the Family Residential Standards (FRS), released in 2007, and updated in 2020 (ICE, 2007; 2020). The analysis of the medical records are interpreted in the context of the 2007 FRS in place during the time of this study while recommendations from this report are based on the 2020 FRS guidelines, which were generated in response to feedback received from private sector agencies and NGOs to ensure implementation of best practices (ICE, 2007, 2020).

The analysis of medical records and the conclusions regarding the quality of care and general adherence to medical practice standards at KCFRC, were based on the guidelines described above.

## 2. KEY FINDINGS

### 2.1 Profile of the Detainees

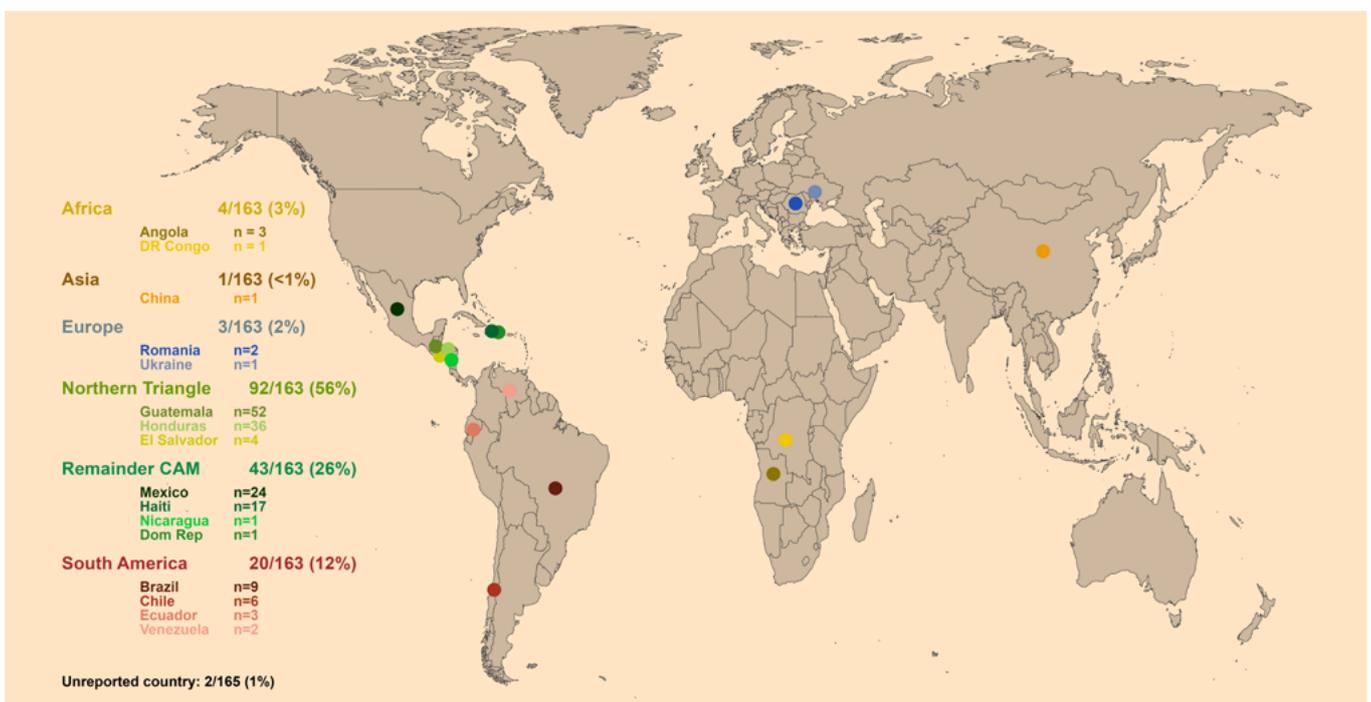
#### **Key Takeaways:**

1. 88% of children were held for more than 20 days, in violation of the Flores Settlement Agreement.
2. Children of all ages were held in family immigration detention, with 30% under the age of 5 years old.

Medical records from children originating from a total of 16 countries (Figure 1) were included in this study. The majority of children were from Central America, Mexico and Haiti. Though, 80% (132/165) of children were recorded as speaking Spanish, a total of 12 languages were documented, among them Haitian Creole, K'iche', and Romanian. Five percent (9/165) were documented as speaking more than one language. The child's proficiency in the second language was not documented.

Ninety percent (148/165) of the children in this cohort were male. However, this finding should be interpreted with caution. Through personal correspondence with key stakeholders, the research team learned that for most of the study period ICE utilized KCFRC to house men with their sons, while families with female children were housed at other facilities due to regulations preventing the housing of unrelated adult males with female children.

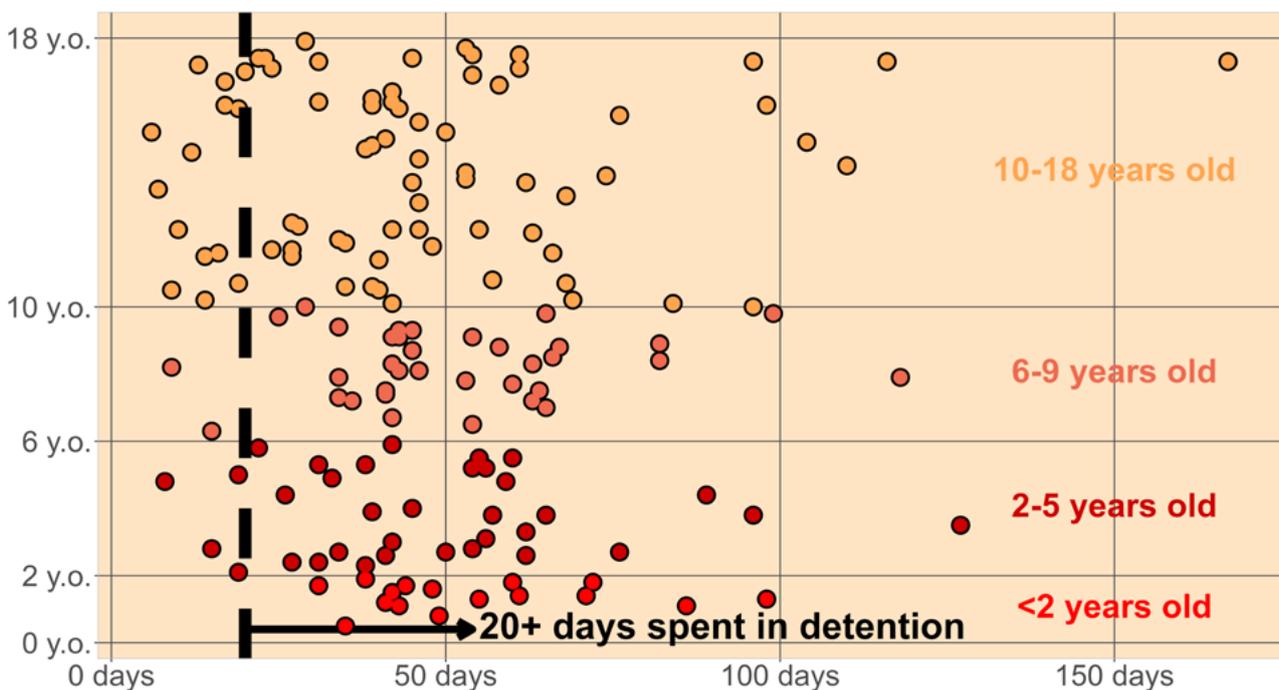
**Figure 1: Country of Origin**



While the median age was 9 years old, nearly one third (42/165) of children were under the age of five.

The median number of days that the children in our cohort spent in detention was 43 days. Eighty-eight percent (145/165) of them remained in detention for over 20 days, in direct violation of the 20-day detention maximum mandated by the Flores Settlement. Nearly 8% (13/165) of these children were detained for more than 90 days.<sup>17</sup>

**Figure 2: Age at Arrival by Days in Detention**



There were a total of 418 acute medical visits across 165 medical charts. According to the records obtained, interpreters were documented as present for 9% (39/418) of medical visits. While interpreter use was not documented in the majority of cases, it is possible (though not recorded in the documents reviewed) that some providers and intake staff were bilingual. Given the absence of data, the extent of unmet interpretation needs remains unclear.

<sup>17</sup> One chart was excluded due to ambiguous documentation of the child's length of detention.

## 2.2 Acute Medical Care

### **Key Takeaways:**

1. There was inadequate staffing and supervision of clinical care.
2. The lack of pediatric-specific medical knowledge was evident in many records and may have contributed to missed physical examination findings, likely inappropriate medication prescribing and inappropriate clinical reasoning.
3. Inadequate documentation, particularly relating to diagnosis, made it difficult for the research team to fully assess the quality of acute care.

Access to medical services for acute medical needs is a vital part of any pediatric health care delivery system. Children in detention are at a higher risk for infectious diseases in family detention facilities due to the higher rates of transmission and outbreaks in congregate living settings. Additionally, these diseases tend to disproportionately affect children due to their developing immune systems (Blumberg et al., 2021). Because some family immigration detention facilities in the US were originally constructed to house adults only, including KCFRC, they contain several safety hazards such as heavy doors, that expose children to a higher risk of injuries requiring acute care than would be expected for adults held in such circumstances (Jordan, 2018). Given the numerous risk factors for acute illnesses and injury, timely access to appropriate, including, when necessary, emergency care—delivered by skilled pediatric health care providers—can be lifesaving. Such care can also prevent suffering and long-term disability for affected children (Andermann, 2016).

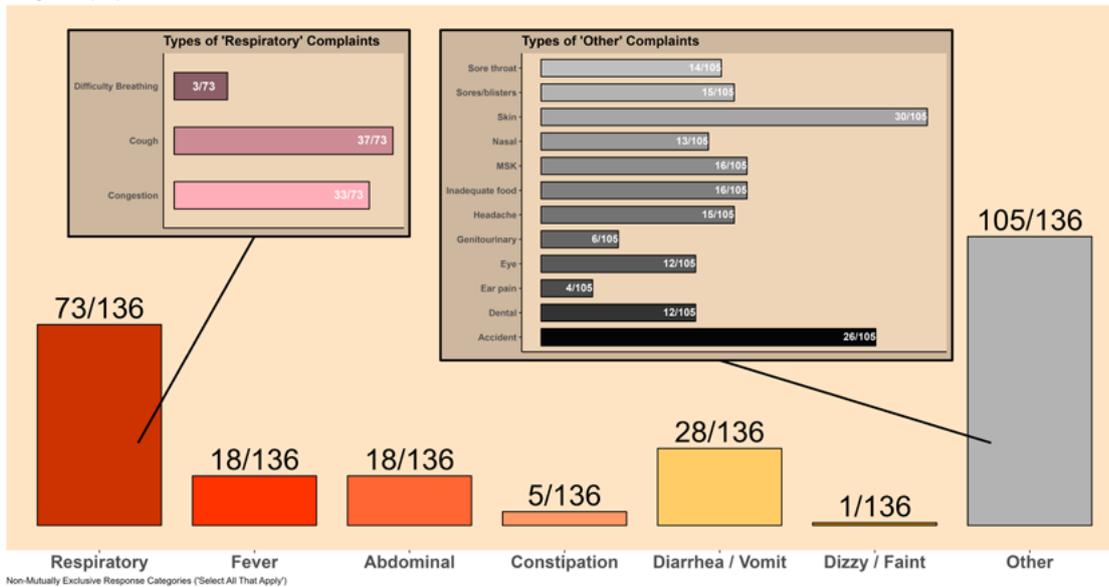
### **Acute Medical Care Needs**

Based on our medical record review, visits for acute medical problems were very common: Eighty-two percent (136/165) of the children were seen for at least one “acute medical visit” due to illness, injury, or other health concern. Forty percent (54/136) of these children were brought in for more than three acute visits during their detention. In total, 418 acute medical visits were documented across the 165 children included in our study over the 27-month period, making acute medical care a significant component of the pediatric medical care provided in the facility. The most common complaints during the acute medical visits were cough, nasal congestion, diarrhea, fever, abdominal pain, and vomiting.

Two percent (8/418) of the visits resulted in transfer to the on-site infirmary and 3% (14/418) to a local hospital. It is certainly possible that the number of transfers outside of KCFRC was higher than what was captured in our medical record review, as children may have been transferred to a local hospital directly or emergently without an acute medical

**Figure 3: Breakdown of Chief Complaints at Acute Care Visits**

Among 136/165 (82%) children that had acute care visits



visit at the detention facility. Medical records from outside medical facilities were not made available for analysis to the research team, so we are not able to draw conclusions about the incidence of severe acute medical illness, access to a higher level of medical care, or the appropriateness of referrals.

### Inadequate staffing and supervision

Appropriate staffing is key to providing quality care. According to the FRS, all care should be provided by licensed and qualified health care staff (ICE/DRO). Practicing outside the scope of one's license or certification has been cited as one of the principal causes of medical errors in the wider field of health care by the Joint Commission, a major accrediting body of quality and safety health care organizations (Lenoci-Edwards, Allen and Cox, 2016).

In the medical records, acute medical visits were physically signed with date/time by a "Nurse," a Licensed Vocational Nurse (LVN); this was the case in 46% or 193/418 medical visits, or Registered Nurse (RN); in 37.8% of the cases or 158/418 medical visits, and separately by a "Provider," a Medical Doctor (MD) or Family Nurse Practitioner (FNP). From the analysis of medical records, it is unclear who was present to evaluate the child in person as this was not stated explicitly. This information is important because assessment and supervision by a licensed and qualified pediatric provider is essential for appropriate clinical decision-making, ordering of medications and laboratory tests, and triage to higher levels of care.

Only 41% (175/418) of visits had clearly documented dates and times next to both the "Nurse" and "Provider" lines. In 52% (92/175) of those acute medical care visits, the date

of the supervising provider was at least 1 day after the date of service, which could indicate that the provider was not present during the evaluation of the child. It should be noted that this may also indicate the date the supervising provider reviewed and signed the record after being an active participant in the evaluation.

**Table 1: Number of Days Between Primary and Supervisory Signatures**

Time between RN/LVN and MD/FNP signatures	Number of acute medical visits (%)
Same day	83 (20%)
1 day	36 (9%)
2 days	27 (6%)
3 or more days	29 (7%)
Missing time documentation for either the primary provider or the supervisor or both	243 (58%)

A commonly used documentation practice also provides insight into the potential lack of physical presence by the supervising provider. In the documentation of acute medical visits, we observed frequent use of the notations “TORB” (telephone order read back) and “VORB” (verbal order read back) in the documentation of an order for a medication or diagnostic test. Verbal and telephone orders allow a qualified supervising provider to place an order via a nurse. This can be an important tool in after-hours triage or at times when a qualified provider is unavailable in person to make an important clinical decision or place an order, however, this practice should generally be limited, and avoided completely when the assessing provider is not qualified to perform a triage or assessment that is the basis for a remote order. According to the Texas Board of Nursing (BON) “...LVNs are not educationally prepared to perform triage assessments, either telephonically or in the role of the health care professional initially assessing a patient face-to-face to determine treatment priorities in any setting.” (Texas Board of Nursing, n/d.)

Forty-five percent (191/418) of the total number of acute visits had at least one TORB documented and 9% (39/418) of visits had one or more VORBs. Fifty-four percent (104/191) of the acute care visits with TORBs and 38% (15/39) of acute care visits with VORBs were signed by an LVN.

Our analysis of staffing and supervision is limited by the inadequacy of documentation and does not provide conclusive evidence of inappropriate staffing and supervision. Based on the documentation available — the date discordance between “Nurse” signature and “Provider” signature, and the high utilization of VORB/TORB ordering—there is a significant concern raised that supervising providers (MD or FNP) are providing consultation remotely or without personally assessing the patient while making critical triage and ordering decisions. In the absence of appropriate supervision, staff may be performing assessments determining treatment priorities in conflict with their scope of practice.

### **CASE STUDY: Inadequate follow up in an acutely ill child**

A 17-month-old boy from Mexico was seen in the facility’s clinic by a licensed vocational nurse for fever on the fourth day of his detention. He was found to have a rapid heart rate while crying. On exam, the child had a “firm abdomen,” raising concern for a possible serious abdominal infection. His weight was 20 pounds, but there was no mention that this was 1.6 pounds down from his weight on arrival four days prior (-7.4% of initial body weight), raising concerns for dehydration. In telephone consultation with a physician, the child was prescribed ibuprofen and Pedialyte. There is concern that the child was never evaluated by a physician during this illness because the physician did not sign the chart until the following day which was recorded as including a telephone consultation only with a physician. The absence of documentation of an in-person evaluation by a provider qualified to assess for serious acute illness raises concern for practice outside of a provider’s scope and a risk for missing a serious and potentially life-threatening illness. Additionally, despite the abnormal vital signs, physical examination, and concern for dehydration warranting the prescription of oral rehydration, no follow-up was documented during the child’s 42-day detention.

### **Lack of appropriate workup and delays in care**

Ready access to acute medical care at the appropriate level of care (i.e. nonurgent, urgent, emergent) is also critical for meeting the needs of detained children. According to FRS, acute care via sick calls (i.e. written visit requests by detained individuals) should be freely available to all residents, in the language of their preference, and reviewed by the medical department within 24 hours to schedule an appointment. In addition, every facility should have 24-hour emergency medical care, including access to an on-call medical provider and hospital transfer when necessary. When presenting for an acute visit in detention, a comprehensive assessment must be performed, that takes into account any underlying health conditions the child may have and performs testing for potential diagnoses to avoid delays in diagnosis and treatment.

## CASE STUDY: Delayed influenza treatment

A 16-month-old boy of Haitian descent presented to the health care staff with reports of subjective fever, cough, and congestion. In the clinic, he had an elevated HR and an elevated temperature (99.7 degrees Fahrenheit) not meeting the generally-accepted medical threshold for a fever (>100.4 degrees Fahrenheit). He was diagnosed with allergic rhinitis and prescribed an allergy medication. The next day he returned and had a documented fever of 100.7 degrees Fahrenheit. He was diagnosed with a viral illness, instructed to drink a lot of fluids, and told to return if he didn't improve in 2-3 days. The following day, he returned and had a high fever of 102.7 degrees Fahrenheit. He was tested for influenza and diagnosed with influenza A and B. He was admitted to the infirmary for 5 days. On the second day of his admission (day 4 of illness), oseltamivir (Tamiflu), an antiviral medication that shortens the duration of influenza symptoms, was started.

This case demonstrates a clear delay in care. The child should have been tested for influenza on his first day of presentation of an upper respiratory infection and subjective fever, especially given the high-risk, congregate setting. If diagnosed sooner, this child could have also been started on oseltamivir sooner as efficacy is highest when started within 48 hours of symptom onset (Whitley, 2001). This might have shortened his illness course and reduced risks of complications, such as pneumonia, bronchitis, dehydration or, in severe cases, acute respiratory failure, which can be deadly. His delayed diagnosis also put other children and adults at risk of contracting influenza during his first 2 days of illness.



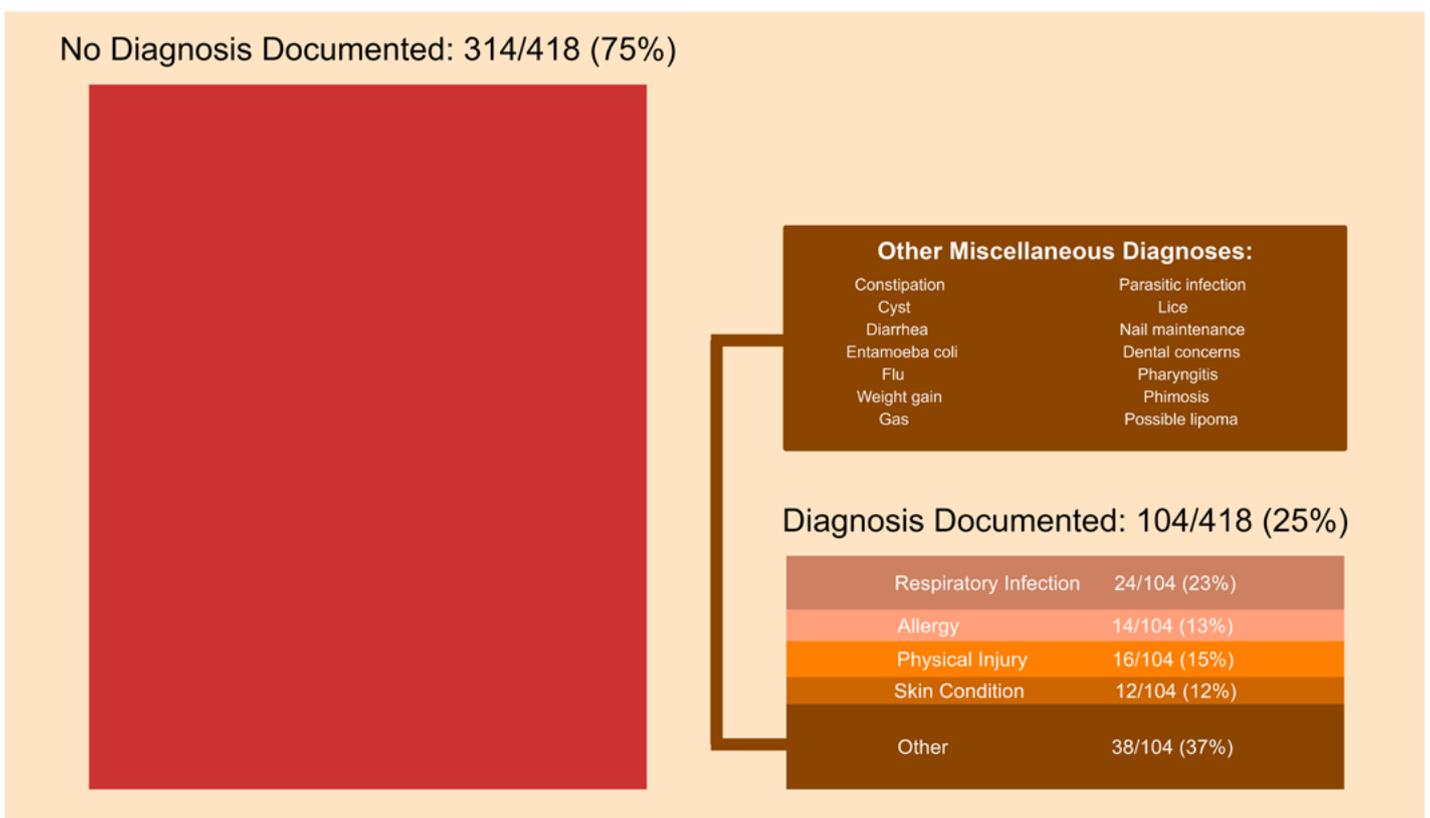
Photo credit: Eric Lee/Shutterstock

## Lack of appropriate documentation of clinical decision making

Our medical record review also revealed a pattern of insufficient clinical documentation describing clinical decision making. It is standard practice for an acute care medical note to include at least four sections—*subjective findings* (patient or parent’s description), *objective findings* (vital signs and physical exam), *assessment* (the diagnosis and possible alternative diagnoses), and *a plan of care* (the clinicians plan for treatment and follow-up). However, in 75% (314/418) of the visits, no diagnosis was recorded. When documented, the most common diagnoses were respiratory infection, allergy, physical injury, and skin condition.

Incomplete documentation of diagnosis can reflect inadequate or incomplete clinical decision making and may have contributed to incomplete testing for specific diseases like influenza, as described in the case study. Complete documentation is particularly essential for quality of care in a fragmented system such as the detention facility (Douglas-Moore, Lewis and Patrick, 2014). It also represents a potential harm in circumstances where children return for follow-up or are referred for a higher level of care, as subsequent providers will not have access to previous testing and decision-making processes leading up to the visit.

**Figure 4: Diagnosis Documentation and Type Across Acute Medical Care Visits**



## CASE STUDIES: Inadequate assessment of acute medical issues

### **Case 1: Inadequate assessment of head trauma**

A 6-year-old boy from Honduras sustained head trauma after running into a pole. He was assessed by a Licensed Vocational Nurse (LVN) in the late afternoon and scheduled to see the MD provider the following morning. Head trauma requires prompt assessment for signs and symptoms of dangerous head injuries such as intracranial bleeding (bleeding on the brain) or concussion. The assessment should include a detailed history, a physical, and a neurologic exam. Appropriate counseling to look out for early warning signs is critical to avoid irreversible harm such as disability, stroke, and even death. In this case, the evaluating MD did not document any of the relevant information, such as whether or not there was a loss of consciousness or a seizure, and whether there was any evidence of, or concern for, neurological injury. Days later, the child presented with a headache, and no mention of the prior injury was made in the assessment note.

### **Case 2: Inadequate assessment of possible neurologic abnormalities**

A 16-month-old girl from Brazil, of Haitian descent, presented with two hard nodules near her anus. The provider documented a bump on “mid-anus” which was nontender and mobile. The provider suspected the nodule was a lipoma, a benign and harmless subcutaneous fatty tumor. The child received an x-ray and ultrasound of the spine. The ultrasound showed two small hypoechoic nodules in the subcutaneous tissue that the interpreting radiologist thought might have been cysts. There was no documentation of follow up of the child’s head circumference, which at the time of intake, was 19.5 inches, placing her in the 99th percentile for her age. There was no re-check at the time of her acute care visits or documentation regarding developmental delay or neurologic deficits. An enlarged head circumference could be indicative of increased fluid around the brain, correlating with several neurologic disorders. There is no documentation addressing more serious potential diagnoses or plans for continued follow up which is crucial in the setting of enlarged head circumference in case of rapid enlargement which can result in death.

### **Inappropriate medication prescribing**

With no diagnosis listed in three-quarters of the acute medical visits, it is impossible for us to determine whether the medication prescribed was appropriate to the diagnosis. However, the documented symptoms, in conjunction with any recorded physical exam findings, provide useful data regarding the need for particular types of medication. Upon review of the

medical records, 63% (265/418) of acute medical visits resulted in at least one medication provided. Thirty-eight percent (52/136) of all children seen for at least one acute medical visit were prescribed either cetirizine, loratadine, or chlorpheniramine, all antihistamines that are typically used to control the symptoms of environmental allergies. Based on the documentation available, it is unclear as to whether this medication was provided for true environmental allergies rather than symptoms that may have significant overlap with acute upper respiratory viral infections (i.e. the “common cold”) rather than environmental allergies.

Available research has already shown that Cetirizine and its related antihistamines have not been effective at treating the symptoms of the common cold (de Sutter, Saraswat and van Driel, 2015). It follows that over prescription of these medicines can expose a child to adverse medication effects with no benefit gained. First-generation antihistamines, such as chlorpheniramine, are likely to cause drowsiness and may interfere with a child’s ability to focus. Alternatively, especially in younger children, they may have a side effect of hyperactivity (ten Eick, Blumer and Reed, 2001). Newer antihistamines, such as cetirizine and loratadine, have fewer side effects but may still cause drowsiness.

#### INTERSECTIONAL CASE STUDY: Child with low weight and acute medical illness

A 15-month-old girl from Brazil was underweight on intake to the detention facility. Clinicians plotted her weight below the 5th percentile line on the CDC weight-for-age growth chart. Her calculated weight-for-age percentile using the CDC growth standards would be 0.2 percentile. However, the CDC recommends using the WHO growth standards for children age 0 to 2 years. Using these data references, her weight-for-length Z-score is -2.10 which is < -2, indicating moderate acute malnutrition; a diagnosis that requires prompt attention.

In the first 10 days of her detention, she presented for acute medical visits on 3 consecutive days, with the parents reporting cough, congestion, poor appetite, and vomiting associated with coughing. The providers did note she was underweight for age on her 3rd visit (to an MD clinic—the first 2 visits appeared to be with an LVN or RN only). She was provided Pedialyte, a treatment for acute dehydration but not one that addresses malnutrition, and parents were encouraged to provide small frequent meals. Over the more than 3 months she spent in detention, she was seen for medical visits 10 times with similar complaints of congestion, vomiting, and poor appetite, including a brief stay in the infirmary for a viral illness. Each time she attended the facility clinic, she appeared to receive care responsive to her presenting symptoms.

Toward the end of the family’s time in detention, there was a rare documentation of the parents’ experience of their child’s malnutrition and illness: *“the father continued to complain*

*about the food for his child[The] father stated that child drinks breast milk all day long and does not like baby food here...[The] father stated that he wants nurse to report to ICE that their child is ill and needs to leave facility so she can eat other foods.”*

This case illustrates inappropriate use of growth charts, underrecognized malnutrition with inadequate therapeutic intervention, and inadequate daily provision of nutritional foods. Malnutrition may have been a contributing factor to recurrent acute medical illnesses, and placed the child at greater risk for worse consequences of illness.

## 2.3 Standard Screening and Vaccines

### 2.3.1 Malnutrition Screening

#### **Key Takeaways:**

1. There is inadequate screening for malnutrition both at intake and on a recurring basis at subsequent medical visits, particularly in the under 5 age group.
2. The health care staff at KCFRC failed to adequately address malnutrition in children who met criteria for severe and moderate malnutrition and there was no consideration of micronutrient deficiencies.

#### **Malnutrition Screening Practices**

Major US-based and international health organizations recommend screening for malnutrition in all children to identify those at risk of clinical deterioration and long-term sequelae who require additional testing, close monitoring, and medical intervention (WHO (n/d); CDC, 2022; Becker et al., 2015). Migrant children from countries highly represented in our cohort are at increased risk of malnutrition at the time of entry into the US (Dawson-Hahn, et al., 2016; USAID, 2018). Further, screening and subsequent prompt intervention are critical given the devastating lifelong consequences of malnutrition, including increased susceptibility to infections and disease risks, physical delays in growth and development, and cognitive and behavioral impairment (Wachs, 1995; Thurstans et al., 2021; and Bergen, 2008; Horta et al., 2017; Rytter et al., 2014). Given the prolonged detention of very young children, who are most vulnerable to faltering growth and the altered trajectory of long-term consequences, identifying and treating malnutrition in this population is of paramount importance (Victora, et al., 2010).

**Wasting or Thinness**, also referred to as acute malnutrition, is defined by a low weight-for-height (Z-score less than -2) in children under five and BMI based Z-scores in children over 60 months (5 years).

**Underweight** is defined by a low weight-for-age (Z-score less than -2).

**Stunting** a result of chronic or recurrent undernutrition, is defined as low height-for-age (Z-score less than -2) (WHO child growth standards 2009).

While stunting may reflect chronic malnutrition resulting in the decline of vertical growth, it may also indicate that a child is vulnerable to the consequences of ongoing malnutrition including an increased risk of mortality when concurrent with wasting.

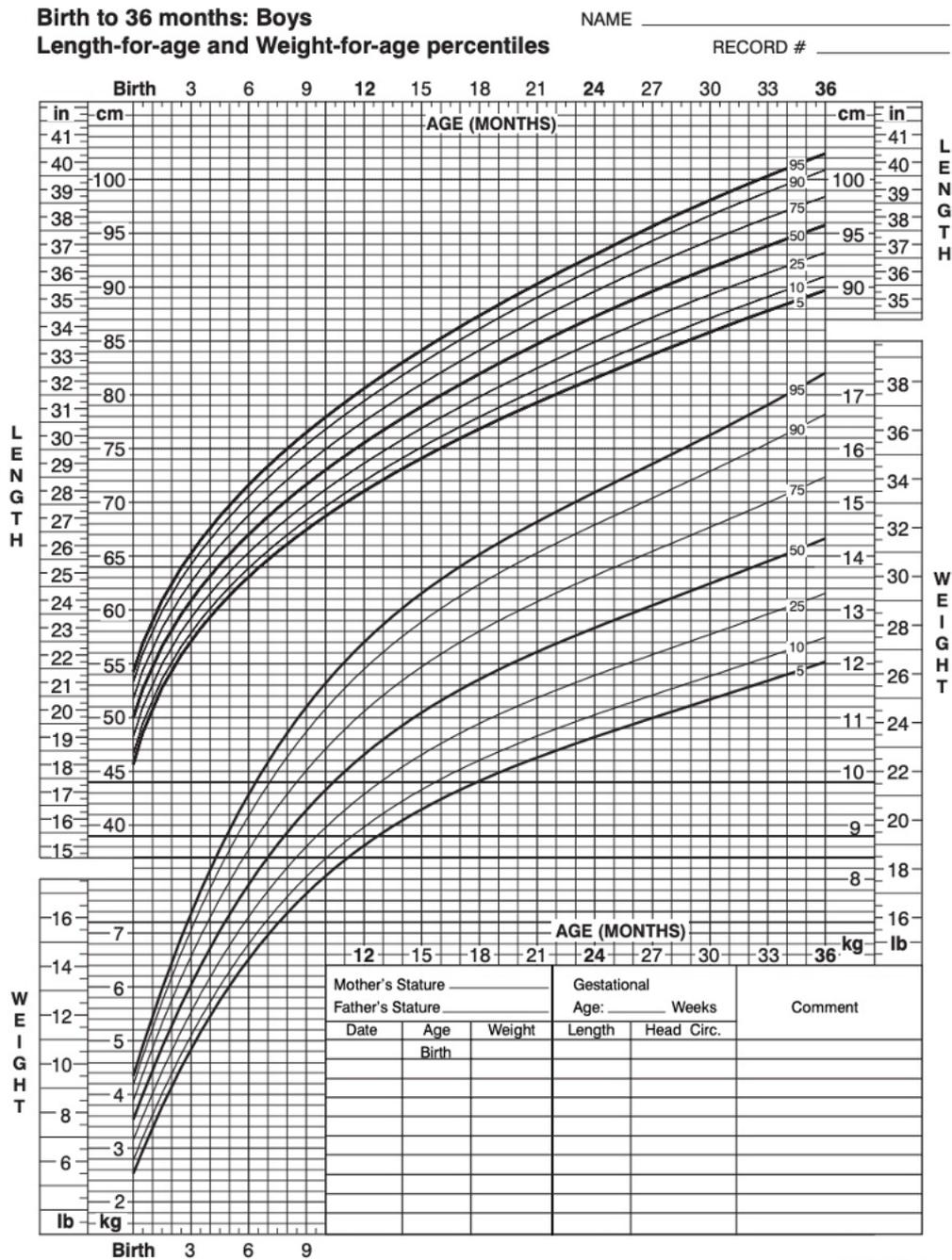
The “ICE Health Service Corps Pediatric Intake Screening (795-J, version 12/2011)” form was completed for all admitted children as part of the KCFRC intake process. This form includes details of height or length and weight, the first objective measurement obtained that provides information to the detaining authorities regarding the child’s nutritional status. The forms included Body Mass Index (BMI) for children over 2 years old. Height and weight for children of all ages were plotted on CDC/National Center for Health Statistics growth charts by gender and age.

The analysis indicated that two out of the 16 children under the age of 2 years old (13%) were considered wasted. There was no documentation of protein or caloric supplementation in these children. It is unclear whether this number accurately reflects the prevalence of wasting because the facility utilized CDC growth curves to plot children’s weight. The CDC recommends usage of the WHO growth standards for infants and children 0 to 2 years (CDC, 2022) rather than the CDC growth charts. The WHO growth standards were developed using breastfed children, leading to norms of faster weight gain in the first few months of life followed by slower rate of weight gain. The American Academy of Pediatrics (AAP) notes that the breastfed infant “is the reference or normative model against which all alternative feeding methods must be measured with regard to growth, health, development, and all other short- and long-term outcomes.” (Gartner, et al., 2005) Inappropriate use of the CDC growth curves could lead to an under-recognition of malnutrition in younger children and misinterpretation of growth rates against the norms generally in this age group.



Photo credit: Mohammad Bash/Shutterstock

Figure 5: Example of a typical pediatric growth chart as provided by the CDC



Published May 30, 2000 (modified 4/20/01).  
 SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000).  
<http://www.cdc.gov/growthcharts>



Across all ages, 4% (7/162)<sup>18</sup> of children had anthropometric measurements consistent with moderate or severe wasting. An additional 12% (19/162) of children fit the criteria for “at risk of malnutrition<sup>19</sup>” and 23% (37/163) for stunting, with 6% (9/163) experiencing severe stunting. The medical records provided document height/weight and plot a dot on the growth curves. Despite this relatively high number of children at risk of malnutrition, the medical records do not document nutritional status with any Z-score or categorization and there was no documented follow-up testing, monitoring, or treatment. There was no evidence that Z-scores (international standardized height for weight measurement that is used to identify children with malnutrition) had been calculated or plotted on a chart.

### CASE STUDY: Undiagnosed malnutrition

A 3-year-old from Honduras detained for 56 days had a weight of 27 pounds and a height of 39 inches on arrival to the facility. This would place his weight-for-height Z-score at -2.7, qualifying as moderate wasting. However, in the medical record, the initial health screening was summarized as “normal,” with “no acute follow-up required.” There was no evidence that he and his family were asked about recent weight loss, illnesses affecting nutrition, or dietary patterns. The check boxes for his physical examination were all marked “normal.” He was not prescribed any special diet for increased caloric intake. There were no monitoring visits or weight checks. When he was released from the detention facility there were no medical problems or follow-up recommendations noted. This missed diagnosis of malnutrition is a lost opportunity to intervene and improve his nutritional status. As a result, the child was placed at increased risk of illness, stunting and long-term impaired development.

### CASE STUDY: Possible undiagnosed severe acute malnutrition

A 7-year-old boy from Honduras was detained for 63 days with his father. On intake, his recorded growth parameters indicated a height of 48 inches, weight of 40.8 pounds with a calculated BMI of 12.4. By our research team’s calculations, this translates to a BMI-for-age Z-score of - 3.5, indicating severe acute malnutrition or wasting. There was no comment on his nutritional status in the medical record and his past medical history was marked as

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<sup>18</sup> From 165 medical records, 162 records had complete information on the weight and height of the children

<sup>19</sup> Risk of malnutrition was defined as a weight-for-height Z-score (for children under 5 years) or BMI-for-age Z-score (for children greater than 5 years) Z-score of -1 to -2 (Beer et al., 2015)

non-contributory. This last detail conflicts with a referral form<sup>20</sup> in the medical record written three days prior to the child's arrival to the facility noting a need for health facility referral due to calcium deficiency. The referral form also had a discordant height and weight, 42 inches, and 45 pounds, which by our calculation would correspond to a BMI-for-age Z-score of 1.2. This set of measurements does not indicate the presence of malnutrition. Based on the trend of measured height and weight during other visits while in detention, a measurement or transcription error in the intake growth measurements is likely.

This child had multiple subsequent medical visits with "poor appetite" noted by the father with no consideration of his initial nutritional status. The calcium deficiency that had been noted in a medical document ahead of his intake to the facility was never followed up with additional history, testing, or treatment, despite the fact that the father mentioned that the child complained of leg pain, a potential symptom of calcium deficiency.

This example illustrates errors in recording and interpreting growth parameters as well as inadequate screening and follow up for possible malnutrition, including management of micronutrient deficiencies and electrolyte imbalances.

### 2.3.2 Mental Health Screening and Management

#### **Key Takeaways:**

1. Both the intake screening tool and the mental health progress record used by the detention facility were inadequate to identify and monitor children across the age and developmental spectrum at risk for mental health disease including suicidality.
2. There was inadequate follow up of those who were identified as at risk for mental health disease during the weekly screening.
3. There were multiple instances of under- or mis-diagnosis of psychiatric disorders among those children who received an acute mental health evaluation.

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<sup>20</sup> This referral form is the "Treatment Authorization Request," and was written by the US Custom and Border Patrol Office of Field Operations while the child was in CBP custody. The only medical information the form contains is under "Diagnosis/Symptoms: Calcium deficiency[sic]."

The American Academy of Pediatrics (AAP) calls for screening asymptomatic adolescents aged 12–18 years for major depression and youth aged 8–18 years for anxiety. This recommendation was reinforced by the 2020 Family Residential Standards (FRS), which require that “each center...provides intake screening...for mental health concerns” and “at least one individual counseling session per week for each minor resident, conducted by trained social work staff” (FRS, 2020). Of note, the 2007 FRS included, but did not specify, a time-specific course for mental health screening. Our medical record review indicated that a “Mental Health Progress Record” (Figure 6) was completed an average of every 8 days.

### A. Mental health screening

At the time of entry into detention as part of the Pediatric Intake Screening, a Mental Health Screening component was documented for 100% (165/165) of children. The screening comprised the following questions<sup>21</sup>:

1. “Have you ever tried to kill yourself?”
2. “Are you currently thinking about killing or harming yourself?”
3. “Do you have a history of assaulting or attacking others?”
4. “Do you know someone at this facility that you want to attack or harm?”
5. “Have you ever had an auditory or visual hallucination?”
6. “Have you ever received counseling, medication or hospitalization for mental health problems?”
7. “Have you have been a victim of physical or sexual abuse or engaged in behaviors that would put you at risk?”
8. “Do you feel that you are currently in danger of being physically or sexually abused?”
9. “Have you ever sexually assaulted anyone?”
10. “Have you ever been treated for drug or alcohol problems or suffered withdrawal symptoms from drug use or feel you have a substance abuse problem?”
11. “Do you now or have you ever used tobacco products, drank alcohol, or used drugs?”

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<sup>21</sup> ICE Health Service Corp Pediatric Intake Screening (795-J), version 12/2011

While these questions may address immediate threats to a child’s or other detainee’s safety, they do not follow any validated screening method, such as the Refugee Health Screener 15 (RHS-15), to identify mental distress in a child.

The major design principle of an effective mental health screening tool is to identify children who may have, or be at risk for mental health issues. The tool must therefore have a high sensitivity, meaning it captures the highest proportion of children at risk while minimizing the chances of a child being missed. A screening tool should be followed with appropriate referral for more in depth evaluation and care. In our sample, 1% (2/165) children had a positive screen, meaning that a child (or family member, this was not specified in the documentation) responded yes to one of the questions above. Both cases noted that they had been a victim of physical abuse that would put them at risk. One noted that that the child had been previously kidnapped. In the other, the child was noted to have been the victim of gang violence two years prior.

**Figure 6: Mental Health Progress Record**

**MENTAL HEALTH PROGRESS RECORD - CHILD**

**FACILITY:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Name:** \_\_\_\_\_

**Time:** \_\_\_\_\_ **AR:** \_\_\_\_\_ **D.O.B.:** \_\_\_\_\_

**CHILD WEEKLY CHECK**

**SUBJECTIVE:** Parent \_\_\_\_\_  
 Data was obtained via resident feedback regarding social, behavioral and emotional functioning this week. Feedback suggests that this resident is:

Presently having problems in: social \_\_\_\_\_ emotional \_\_\_\_\_ behavioral \_\_\_\_\_ adjustment \_\_\_\_\_.

Presently struggling with: aggressive behaviors \_\_\_\_\_ being withdrawn and sad \_\_\_\_\_ being anxious \_\_\_\_\_  
 Insomnia/nightmares \_\_\_\_\_ worry, clinging \_\_\_\_\_ appetite \_\_\_\_\_ Other \_\_\_\_\_

**PARENT PRESENTS NO CONCERNS; CHILD IS DOING WELL IN ALL AREAS**

---

**OBJECTIVE:** Resident was observed:  
 with parent \_\_\_\_\_ in the classroom/daycare \_\_\_\_\_ playground \_\_\_\_\_ dorm \_\_\_\_\_

Child presented as poorly-groomed and disheveled \_\_\_\_\_ Neatly dressed and groomed \_\_\_\_\_

Resident was: verbal and interacted well with peers and adults \_\_\_\_\_  
 Nonverbal and did not interact with peers or adults well \_\_\_\_\_

Resident appeared: alert/attentive \_\_\_\_\_ lethargic/inattentive \_\_\_\_\_ confused \_\_\_\_\_ distracted \_\_\_\_\_

Child's mood was: calm \_\_\_\_\_ anxious \_\_\_\_\_ sad \_\_\_\_\_

Affect was: appropriate to mood \_\_\_\_\_ cheerful \_\_\_\_\_ tearful \_\_\_\_\_ flat \_\_\_\_\_.

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**ASSESSMENT:**  Resident is presenting no social, emotional, or behavioral problems based on parent contact and observation.  
 Resident is presenting adjustment problems.

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**PLAN:**  Resident does not require any other services at this time.  
 Resident requires referral to: individual \_\_\_\_\_ Family \_\_\_\_\_ Group \_\_\_\_\_  
 Resident is currently in/will continue with therapy

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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Mental Health Case Worker Signature \_\_\_\_\_ **Resident Signature/Firma de Residente** \_\_\_\_\_

I understand that my signature is a recognition that a mental health worker checked on me and asked if I needed any services at this time.  
 Entiendo que mi firma es el reconocimiento de que un trabajador de salud mental se verificó en mí y me preguntó si necesitaba cualquier servicio en este momento.

It is likely that this screen is under-identifying children at risk for mental health disorders given that previous studies (Lemonjava et al, 2020; Blackmore et al., 2020) have noted high prevalence of post-traumatic stress disorder or PTSD (23%) based on clinical assessment, depression (14%), and anxiety (16%). While there is a wide range in prevalence of mental disorders depending on country of origin, circumstance, and many other factors, our results suggest a significant underestimation of the number of children even at risk of mental health disorders based on a positive screening via the mental health screening tool at the time of intake.

### **B. Limited utility of the mental health progress record**

The “Mental Health Progress Record” was included as part of the medical record and performed on a weekly or near-weekly basis with each child, including often, on day zero of detention. This is shown in figure 6 above. The figure depicted is an example of a de-identified form obtained from a medical chart that was reviewed by the research team. While the FRS does recommend weekly screening, it is unclear whether ICE protocols intended this form to function as the weekly screen.

Our analysis found that only 5% (8/162) of the children in our cohort had an *abnormality* noted on the mental health progress record at any point during their detention. In four cases with documentation of possible mental health issues, such as bed-wetting, nightmares, and aggression, the mental health progress record within five days of the reported issue did not identify any mental health concern. Further, documentation in acute mental health notes showed that visits were typically initiated by parental concern rather than a positive screen on the Mental Health Progress Record.

The “Subjective” and “Objective” portions of the Mental Health Progress form are inadequate to assess the range of potential conditions across age groups. As the figure above shows, questions on behavior, grooming, appearance, mood and affect (the expression of emotion) allow for only very limited and dichotomous answers to describe the child’s emotional state and behavior. If none of these are present, the option is to check “Parent presents no concerns, child is doing well in all areas” without space for reporting intermediate or alternative signs of mental distress which may be a sign of a more significant mental health condition. These limitations clearly affect the utility of the tool in identifying mental distress.

Furthermore, the Mental Health Progress Record form included a standard documented disclaimer “*data was obtained via resident feedback, behavioral and emotional feedback this week,*” however it was not clear whether the feedback collected came from the parent, child or both. This is important context as younger children are not often able to articulate anxiety and other typical symptoms of mental health disorders (Kuhn, et al., 2017). It was also unclear whether the process took place in the preferred language of the child, which can affect responses, given that the diagnosis of many mental health disorders requires a

comprehensive and nuanced history. Finally, in both the mental health progress record as well as the initial screening tool, there was no information about if, when, or how permission was granted or if confidentiality was discussed, which is critical to creating trust between the provider and child.

The “objective” portion of the screening tool did not identify any specific objective measure of disease. For instance, the first question asks the provider to classify the child’s clothing and attire as either “poorly groomed and disheveled” or “neatly dressed or groomed,” a strict binary choice that does not allow for the consideration of non-mental illness factors that may affect a child’s appearance. Indeed, children may have a “poorly groomed” appearance due to social and environmental circumstances, such as such as lack of access to clean water, soap, clean clothing, and regular grooming. While we do not have specific data regarding access to clean water and sanitation at the KCFRC, one study of 22 ICE facilities showed that 42 percent of detainees did not have access to soap and often washed their hands with shampoo or toothpaste (Peeler et al, 2021).

### **C. Lack of age-appropriate screening**

Because children manifest mental illness differently at different ages, it is imperative that mental health screening is targeted towards specific age groups, taking note of the appropriate developmental and emotional stage of the child (Fusar-Poli, 2019). The mental health screening tool used at the time of intake as well as the mental health progress record was inadequate to identify issues across different ages and developmental stages, yet the same forms were used for all detained children (6 months to 18 years).

In the initial intake screen, younger children may not be able identify individuals who will harm them or understand the concept of a visual hallucination. In the “Subjective” section of the Mental Health Progress Record, problems in social, emotional, behavioral, and adjustment domains are not specified for any particular developmental stage. Signs of PTSD are particularly challenging to identify in young children and behavior changes such as bed-wetting or other developmental regression, irritability, and attachment issues may be underrecognized in a tool without developmentally-appropriate prompts (Pynoos, et.al, 2009). Additionally, questions like, “Resident was: \_\_\_\_ verbal and interacted well with peers and adults,” or “Presently struggling with... \_\_\_\_ whiny/clinging,” clearly miss manifestations of mental distress across different age groups and developmental stages as the same questions are being asked to the child and/or parents of a 6-month-old or an 18-year-old.

This failure to appropriately target the questions in relation to the children being screened raises questions about the accuracy of mental distress identification.

## CASE STUDY: An abnormally normal screen

A 10-year-old male from Haiti was detained for a total of 29 days. At the time of entry to detention, the child's father reported a prior history of erratic behavior (yelling in the streets), but the child had never had a formal psychiatric evaluation or diagnosis. His Mental Health Progress Record documented no concerns on days one, six, 14 and 21 of detention. The initial intake form noted that a mental health screen was completed and no mental health follow up was requested. Despite having these normal evaluations, on day two of his detention, at the request of his father, the child was given a formal mental health evaluation by a clinical psychologist. During the evaluation, the father reported inattention, a term that in a general medical context denotes an inability to maintain focus or stay on task. It is not clear whether this was what the father meant, as the term was not further described in the documentation. The father also reported nightmares, as well as significant anxiety and fear following threats to his father's life and the safety of his siblings who were still at home. Based on the reported symptoms, the provider in the facility documented a diagnosis of an Adjustment Disorder with mixed disturbance of emotion and conduct. This is a condition defined in the DSM-5 and is characterized by marked distress out of proportion to the severity of an identifiable stressor and not meeting criteria for another mental disorder (DSM-5). Stressors can include interpersonal problems, changes in personal life, or adverse situations such as the death of a loved one, bullying and problems at work or at school. In this case, the clinician specified a subtype with emotional symptoms such as depression or anxiety, and a change in conduct or behavior.

Despite a formal DSM diagnosis of a mental disorder, the intake Mental Health Screening Progress Record reported no concerns, a further sign that the screening tool was inadequate in design to capture mental distress or ineffectively used to assess a child in clear distress.



Photo credit: Juliana Morris

#### D. Lack of adequate follow up practices:

As in other medical conditions, the provision of safe and thorough mental health conditions depends on follow up with the interval, and the type of follow up conducted, based on the initial findings. In the medical records examined, when abnormalities were identified during the intake or even subsequent weekly Mental Health Progress Record, there was no evidence that subsequent follow-up took place.

### INTERSECTIONAL CASE STUDY: Child with traumatic stress and poor intake

An 8-year-old child from Honduras weighed 65 pounds on arrival to KCFRC with a BMI of 17.6, placing him within the normal range. On day 21 of his detention, he was taken to the acute medical care facility within the detention center. He was seen by a mental health provider for reported “inappropriate touching by another adult resident.” There is limited documentation of any investigation or action in the medical records, however, a note is made that the child would be referred to mental health. The mental health progress record on the following day records no concerns and does not document any report of inappropriate touching. The child did not have an acute mental health visit until day 36 when he is diagnosed with an adjustment disorder with depressed mood (there is no documentation of the incident of inappropriate touching at this visit).

Additionally, the mental health provider who saw him on day 36 referred him for a medical visit out of concern for weight loss. In a medical visit on day 38 the child’s weight was down 3 pounds and the clinical team noted “weight loss due to emotional causes.” The child was provided with a nutritional supplement. Despite this, the child’s weight was down an additional 1.4 pounds just 4 days later. Thereafter, his weight stabilized and he continued to receive supplements until they were discontinued on day 72 of detention. The clinician’s notes at the time of discontinuation read: *“Patient maintained a weight of 62–64 pounds for close to 3 months. Daily weight x 2 weeks. Offer snacks throughout day. Encourage child to stay healthy.”* The child would finally leave detention with his family after 82 days.

On day 39, the child’s teacher reported that the child said “he wanted to die and if he had a pistol, he would kill himself.” During this visit the child related traumatic experiences witnessing violence including threats to his family. The child was again diagnosed with an adjustment disorder with depressed mood. The family began to have 4 times a day “wellness checks” to follow-up for any suicidal ideation or behavior. The child was also seen for daily visits with a psychologist for therapy for approximately two weeks and then regular visits thereafter.

From one angle, the facility provided multidisciplinary care enabling clinicians to identify and refer the child for weight loss. He received intermittent mental health visits as well as nutritional supplementation that helped him to maintain his weight. From the perspective

of the child and the family, however, these interventions were reactive and inadequate because they did not get at the core issue of depression and suicidal ideation precipitated by prolonged detention including potential exposure to sexual abuse, that continued for almost two months after these symptoms were identified.

Our medical record review indicated multiple instances, like the case described above, in which parental concerns of anxiety or behavioral disturbances were inadequately addressed. As outlined in the case, even parental concerns of reported sexual abuse while in detention were not addressed if the lack of documentation in fact accurately reflects that no action was taken. This is particularly concerning given that research demonstrates this conduct can be linked to mental health morbidity leading to suicidality (van Egmond, et al., 1993; Nicholas, Krysinska and King 2022).

### **2.3.3 Standard Screening for Tuberculosis, Dental Disease and Influenza Vaccination**

Screening asylum seekers for signs of medical disease is critical to preventing the spread of communicable disease such as tuberculosis and the flu which have known high rates of spread in detention facilities. The AAP and CDC have created guidelines specific for immigrants, asylum seekers and refugees (Linton & Green., 2019; CDC, 2021) to be screened and prevent the spread of disease. In addition to infectious diseases, further research has shown that migrant children are more likely than US-born children to have untreated dental decay (Cote et al., 2005) and are also less likely to have reliable access to dental care in the US (Okunseri et al., 2020). Standard dental screening and care are particularly critical to child health, and must be included along with all other standard medical screenings.

#### **Key Takeaways**

1. Children with chest x-ray findings suggesting latent tuberculosis infection were not referred for further testing.
2. Given the highly contagious nature of influenza, cases were most likely missed given the low rate of testing.
3. Appropriate follow up for dental care was inadequate.

#### **Tuberculosis Screening**

The 2007 FRS states that screening for tuberculosis should be performed at intake in accordance with CDC guidelines. The CDC guidelines mandate an Interferon Gamma Release Assay (a blood test) for children 2–14 years and a tuberculin skin test for those under 2 years

(Tuberculosis: Guidelines, 2021). However, the 2007 FRS contradicts the initial statement, by later stating that the appropriate screening for TB in children by specifically designating chest x-ray as the primary screening method and PPD skin testing as the secondary screening method (2007 FRS). The 2020 FRS would be updated to require, “All new arrivals will receive screening for symptoms consistent with pulmonary tuberculosis (TB) within 12 hours of intake and in accordance with CDC guidelines (2022) and the American Academy of Pediatrics Red Book (FRS, 2020).”

Our medical record review indicated that all children (100%, 155/155) with available information in our sample were screened for TB, with chest x-ray as the modality used for all screening.<sup>22</sup> There was no documentation of symptom screening prior to chest x-ray.

A chest x-ray is the appropriate screening modality only if a child is showing clinical signs of active pulmonary TB. Tuberculosis screening with a blood or skin test is the more appropriate test for latent TB (Nolt & Starke, 2021; Taylor et al., 2016), however not a single child was screened with one of these modalities. This finding contrasts the results published in the 2016 Report of the ICE Advisory Committee on Family Residential Centers indicating that children were being screened for tuberculosis with a TST (tuberculin skin test) at both KCFRC and another ICE family immigration detention facility in Dilley, TX.

Our record review further indicated that 8% (13/155) of children were found to have a calcified granuloma present on the screening chest x-ray. This finding raises concern for latent tuberculosis infection following prior exposure to TB and further testing should have been pursued. There is no documentation that these children underwent additional evaluation for latent tuberculosis infection while in detention or were provided record of these abnormal results, or advice about seeking follow up care after detention.

## CASE STUDY: Inadequate TB Evaluation

A 16-year-old boy from Guatemala with a calcified granuloma reported on his chest x-ray was noted to have a cough at the time of the intake screen as well as poor growth with the intake height and weight less than the fifth percentile. These signs are concerning for possible active pulmonary TB, however the child was started only on an allergy medicine without further details documented about history of TB or relevant exposures. Inadequate evaluation placed not only the child at risk of harm from unidentified TB, but also put the entire community of detainees and staff at risk of possible TB infection because no further testing or precautions were taken.

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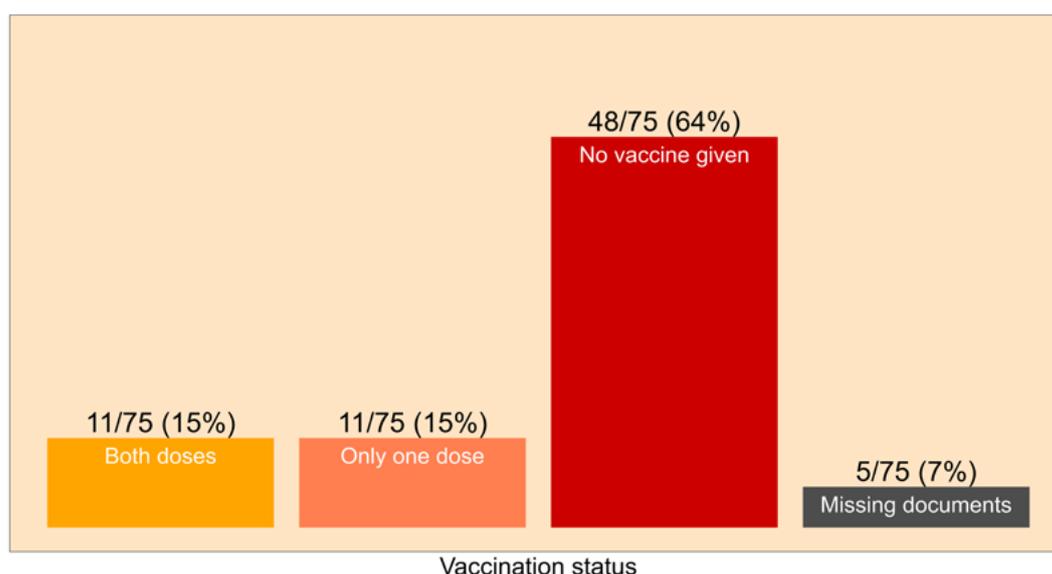
<sup>22</sup> 155 of the 165 medical records included information about screening for tuberculosis.

## Influenza Vaccination

Children are often more prone to acute infection due to inadequate immunity and outbreaks of infectious diseases, such as influenza, are of particular concern in congregate living settings such as detention facilities (Blumberg et al., 2021). Despite the clear benefit of vaccines and their role in preventing infectious diseases such as influenza, our medical record review indicated that only 32% (47/149) of children in our sample<sup>23</sup> had received the influenza vaccine during their time in detention. Interpretation of this statistic merits caution, as redaction of dates of detention makes it challenging to ascertain how many children were detained immediately before or during influenza season when the administration of the annual influenza vaccine is available and recommended.

Among children ages 6 months to 8 years (75 children in total), for whom two doses of the influenza vaccine is indicated, the first time a child is vaccinated, 30% (22/75) received at least one dose and only half (11/22) of this group were documented as receiving a second dose.<sup>24</sup> Prior vaccination was not noted in the context of determining whether a child required a single dose or a two-dose series. Furthermore, we do not have records to indicate whether a second dose was given after release. Finally, given that our records were fully de-identified, we do not have information about the seasonal distribution of children receiving the influenza vaccine. For those who were subsequently vaccinated, many records indicated a vaccine had been administered but did not identify which vaccine.

**Figure 7: Distribution of Influenza Vaccines Among Children 6 months to 8 years old (N=75)**



<sup>23</sup> 149 of the 165 medical records included complete information about influenza vaccine so were included in this analysis

<sup>24</sup> Two doses of the influenza vaccine is indicated the first time a child is vaccinated

Valid conclusions about other vaccinations cannot be drawn from the review of the medical records, due to the inadequate, illegible or unavailable documentation in the medical records. The history of varicella was part of the intake screening, however based on inadequate documentation we are not able to make conclusions about the provision of the varicella vaccine to children without immunity from prior infection or vaccination who would be at high risk for infection while in detention.

### Dental Health

In our review of the medical records, 93% (153/165) of the children had at least one dental visit documented, 87% (133/153) of which were documented as performed by a doctor of dental surgery (DDS). The FRS guidelines state that the first exam should be within “7 calendar days for a minor.” This first dental visit happened a median of eight days after intake in our cohort. Seventy-two percent (79/110) of the children for whom documentation was available had abnormal objective findings on their dental exam including multiple caries (cavities) and gingival inflammation. Only nine of those children underwent a second dental visit at the facility and six of those children were referred for comprehensive dental care.

The FRS guidelines indicate that “Emergency dental treatment will be provided for immediate relief of pain, trauma, and acute oral infection,” yet this was not consistently followed. Indeed, some children experienced medical complications from dental issues while detained, with two children visiting the infirmary for dental concerns.

### CASE STUDY: Delayed dental care

A 7-year-old boy from Guatemala who was detained for 118 days exhibited severe dental pain and visible cheek swelling concerning for dental infection at intake, prompting a physician to prescribe antibiotics at that time; yet when the child was seen by a dentist for his screening exam on day three of detention, he was simply given ibuprofen for pain and advised to follow up for dental care promptly upon release from detention. The child developed problems maintaining his weight due to “10 out of 10” pain with chewing, but did not receive dental treatment until day 16 of detention where he required transfer to an outside dentist where his exam was notable for severe dental decay and an extensive dental abscess. This delay in care could put the child in danger of serious consequences including worsening infection and sepsis.

## 2.4 Access to Care of Chronic Medical Conditions

### **Key Takeaways:**

1. There was inadequate screening of chronic illness at the time of intake likely leading to under-recognition of medical needs in detention.
2. There was inadequate follow up of the few children who were identified with chronic illnesses.

The analysis of the medical records indicated concerning gaps in identification and management of chronic pediatric illnesses in the detention center. Non-communicable and chronic disease management is an increasingly important part of pediatric care as children around the world experience both non-communicable chronic illnesses such as asthma and diabetes, as well as chronic sequela from infectious disease. Diagnosis of new chronic diseases is also particularly important, especially in young children, when early intervention can dramatically change the course of an illness and mitigate long-term medical sequelae.

### **Chronic Medical Condition Screening and Identification**

The Pediatric Intake Screening Form completed in all medical records included a question capturing “significant medical problems.” Eight percent (13/165) recorded the presence of medical conditions at the time of intake. Three percent (5/165) of children had a chronic medical condition documented, while 5% (8/165) had an active injury or infection, or a prior infection or prior surgery for an acute condition now resolved, documented (Table 2). At intake, active medication use for a chronic medical condition was recorded for 2% (3/165) of children. Though there may be confusion based on the terminology of the intake form, intake staff should differentiate between acute illnesses and chronic medical conditions that may require active follow-up and monitoring, or long-term medication use. If this is not possible at the intake stage, any child who is reported to have a medical condition or to be taking medication at the time of intake, should be evaluated by a health care provider. Given the lack of transparency in the medical processing of detained children, it is unclear if there was a process for this in place.

The very low rates of chronic medical conditions and medication use identified in the study cohort do not align with previous studies of newly arrived pediatric refugee populations. Globally, the rates of non-communicable diseases such as asthma, diabetes, mental

health disorders, epilepsy and developmental delays are also rising, especially in pediatric populations (Akseer et al., 2020; Guarigata & Jeyaseelan, 2019; Olusanya et. al., 2020; US Department of Health 2017).

This analysis may be limited by several factors. First, identification of some chronic medical conditions depends on the adequacy of prior medical care in children's country of origin. However, many common medical conditions such as asthma, malnutrition, and cerebral palsy (a group of neurological disorders affecting brain development in young children), just to name a few, are often evident without laboratory or other intensive diagnostic testing. Second, children with chronic diseases may have been identified in earlier stages of custody prior to intake at ICE family immigration detention and released into the community, thus skewing our study population for healthy children. We are unable to assess this without information on these protocols or data from ICE, however, the poor quality of screening for mental health issues and malnutrition described above make this less likely. Finally, gathering a comprehensive medical history for a child requires building trust with the caregiver and child through rapport building using appropriate language interpretation services. Families may have mistrusted health care providers working in family detention or had concerns that chronic diseases could lead to an adverse outcome in the immigration process.

Given the prolonged duration of detention for children in our study—8% (13/165) of children being detained for greater than 90 days—adequate identification of chronic medical diseases, and prior medication use is of increased importance, and the consequences of failing to take an adequate history and provide appropriate treatment could be devastating. Appropriate care may include short term specialty evaluation particularly when chronic medical conditions have not been adequately characterized or addressed in a child's country of origin. Additionally, there is a responsibility not only to screen for, and offer, appropriate care to the child while they are in detention, but also to provide caregivers with information about accessing care and medical records from care received in the facility.

In our review, all 16 children under 2 years old did have their head circumference documented, however the results were not plotted on the appropriate growth charts to determine the growth of these children in comparison to age norms. In our assessment, we identified two children under the age of two with microcephaly (meaning the head circumference was too small for age) and one child with macrocephaly (meaning the head circumference too large for age). The identification of micro- and macrocephaly are important as they may indicate underlying medical issues such as prenatal infection or the effects of malnutrition on brain development for children with small head circumference, or increased intracranial pressure in children with large head circumference (Jones & Samanta, 2022). If these conditions are not identified early, long-term neurological and developmental delays can occur.

**Table 2: List of Medical conditions Identified at the Time of Intake**

<b>Chronic Medical Conditions</b>	<b>Acute or Resolved Acute Conditions</b>
Chronic Bronchitis	History of dengue (No recurrent issues)
Acne	History of surgery on left ankle
Asthma	Otitis Externa
Hydrocephalus (shunt in place)	Left foot injury
Dextrocardia (heart on reverse side of the body) and Pancolitis	Conjunctivitis
	Dental infection
	Eye Infection
	History of Tonsillectomy

## CASE STUDIES

### Case #1: Inadequate follow-up of known hydrocephalus

A 5-year-old boy from Angola, with a history of prematurity (“born at 7 months”) was documented as having known hydrocephalus on intake. Hydrocephalus is a condition where fluid builds up in the cavities and spaces of the brain and can cause intellectual and developmental disabilities over time. It is usually treated by placing a shunt that drains the fluid from the brain. This child had a shunt in place and had not had any follow-up for over two years when they arrived at the detention center. The child was seen by a pediatrician on day 12 of their stay. The physician noted a past medical history of a shunt; however, no head measurements, eye exam, or head imaging was performed and no imaging, follow-up or access to specialty care was provided during the child’s stay of 19 days in detention. Furthermore, there was no documentation of follow up scheduled or arranged upon release. Follow up with “neurosurgery in future” was documented, however we do not have access to documentation of referral to confirm that this was done at the time of release.

## Case #2: Inadequate management and further evaluation of inflammatory colitis

A 5-year-old boy from Guatemala had a prior diagnosis of inflammatory pancolitis, a general description of general inflammation that had been diagnosed on a prior endoscopy performed in their country of origin. The family had brought these endoscopy records to the detention center. Inflammatory bowel conditions can be very severe and require close follow-up and treatment by a gastroenterology specialist. This is especially important when a patient is having diarrhea or abdominal symptoms, as this could indicate a flare of the inflammation that requires specific treatment. Untreated inflammatory pancolitis can lead to anemia, bowel damage, severe infections, and can be fatal. On day 26 of his detention, he was evaluated for an upset stomach. He was given Pepto Bismol and told to return as needed. Two days later he had continued pain with some tenderness noted on his abdominal exam. Intermittent diarrhea was noted and he was ultimately diagnosed with *Entamoeba coli* and treated with antibiotics during a short stay in the infirmary. Though this protozoan can be benign, some strains can lead to diarrhea and other gastrointestinal symptoms. Particularly with this child's history of pancolitis, consultation with a specialist and immediate treatment would have been appropriate. During the child's visits to the clinic, the child's history of inflammatory pancolitis was never mentioned in the documentation. The clinicians may have missed worsening inflammatory bowel disease in this child and certainly did not assess his diarrhea in the context of his significant past medical history.

### INTERSECTIONAL CASE STUDY:

#### Inadequate recognition of reactive airway disease leading to recurrent acute visits

A 16-month-old girl from Brazil, had no reported chronic, pre-existing medical condition recorded on her intake form, but the form documented that the child required albuterol nebulizer treatments, a typical treatment for acute asthma in her home country. During her 61-day detention, the child had multiple acute medical visits in the facility clinic for cough, congestion and difficulty breathing. In one visit for difficulty breathing, the child had what appeared to be classic symptoms of reactive airway disease (asthma in younger children) including recurrent cough and a nighttime cough. During her visits, she primarily received allergy treatment, with no improvement. She received albuterol on two separate occasions, but she did not receive the standard asthma care including oral steroids which is critical to the management of this condition. There was no consideration noted of preventative therapies like a controller medication, placing the child at risk of future asthma attacks and decreased lung function over time. This is especially important in children who may be in

conditions where they are exposed to common triggers including infectious diseases, such as the flu or even common cold as well as dust or rodent and insect infestations.

This lack of recognition of symptoms as likely asthma vs reactive airway disease also placed unnecessary burden on the facilities health clinic.



Photo credit: Eric Lee/Shutterstock

### 3. CONCLUSIONS AND POLICY RECOMMENDATIONS

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Our study documents the mental and physical harm experienced by children in immigration detention at Karnes County Family Residential Center during prolonged detention relating to inadequate and inappropriate medical care. Our findings spanned a broad range of areas including the documentation of interpreter use, supervision, documentation, and delivery of acute medical care, assessment of nutritional and vaccination status, screening protocols for mental distress, and the identification of chronic medical conditions.

The evidence of this study supports a conclusion that detention is never in the best interest of children and child detention must end. Immigration detention harms children’s mental and physical health at a crucial time of physical, mental, and social development (AACAP & NASW Amicus Brief, n/d). A Policy Statement by the American Academy of Pediatrics states, “Children, especially those who have been exposed to trauma and violence, should not be placed in settings that do not meet basic standards for children’s physical and mental health and that expose children to additional risk, fear, and trauma” (Linton, Griffin and Shapiro 2017). However, as long as child detention continues to exist in any form, children must be afforded one of the most basic of human rights, adequate medical care, and oversight must be in place to ensure this responsibility is met.

This study provides a dynamic understanding of the health status of a cohort of 165 child detainees, the quality of care they received and the gaps in medical care they experienced, based on the data collected from their medical records, while detained at one of three US-based migration detention centers for families at the time of medical record collection. It further contributes to the body of the existing literature by quantifying the documented burden of mental and physical health needs of migrant children detained in family detention centers, and describing the gaps in the provision of medical care as well as the impact of these gaps on the health of this population. To the best of our knowledge, this is the only study to document the state of pediatric-specific medical care in migration detention centers in the US, based on a primary review of medical records. This paucity of data is in part due to significant challenges accessing pediatric medical records and a lack of transparency around detention facility medical practices.

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***Access to adequate healthcare is a basic human right that should be afforded to all persons, including children, without discrimination. The fact that migrant children arriving in the US may not have an authorized migration status is no justification for denying them access to the best available standard of care.***

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Conclusions drawn from this data, widely supported by decades of experience caring for child migrants and rooted in prevailing international law and practice, frame the recommendations that we offer.

First, migrant children originating from impoverished countries and exposed to arduous journeys prior to their entry into the US, are likely to present with complex health issues when placed in detention (Ataiants et al., 2018). Given the vulnerability of this population, there is a particular responsibility on the state actors in whose custody these children are placed, to attend to the predictable health issues arising while detained.

Second, deprivation of liberty, often times accompanied by limited access to basic healthcare whilst in detention, exacerbates existing health problems and may precipitate new morbidities. Awareness of this predictable and serious possibility is one of the reasons why, as a matter of international policy, it is widely accepted that children should never be detained solely because of their migration status; more generally, all children should only be detained as a matter of last resort, in the absence of possible alternatives (UN General Assembly, CRC, Article 6, 2005).

Third, access to adequate healthcare is a basic human right that should be afforded to all persons, including children, without discrimination. The fact that migrant children arriving in the US may not have an authorized migration status is no justification for denying them access to the best available standard of care.

While there is no question in our minds that the detention of migrant children in the US should end, as long as such detention persists, national standards of medical care must be adhered to. In order for the medical responses provided to detained migrant children to be effective, they must be age-specific, utilize validated screening tools, and take into account the heterogeneity of the child migrant population in custody. Both the targeted and general recommendations below, are anchored in ICE standards for medical treatment, the FRS, as well as the standards established by national and global medical organizations such as the American Academy of Pediatrics, Centers for Disease Control and the World Health Organization. We set out a series of key actions applicable to all migrant holding centers which care or will care for pediatric populations.

## Targeted Policy Recommendations:

### *Access to Acute Medical Care*

1. Children with acute medical needs must be triaged, evaluated, and managed by a licensed provider operating in the appropriate scope of work. Medical assessment and decision making must be consistently performed by a licensed provider with appropriate level of training, such as an MD, DO, PA, or NP.
2. Fully licensed providers with pediatric training must be present on site at any facilities housing children, either continually or on call as needed. Protocols should be implemented to ensure on-call providers are contacted in the off-hours when certain red flags indicating potential emergent medical needs are present.
3. Adequate documentation is critical to enable subsequent providers to understand the diagnostic and management process of a previous provider, particularly in the case of a pediatric population whose care is fragmented with multiple medical providers. Documentation should include a subjective, objective, assessment and plan with documentation of questions asked and alternative diagnoses considered.
4. Infection prevention and control measures including comprehensive plans about detection, prevention, and screening as well as outbreak response plans must be adhered to and adequately implemented.
5. Standard medical practices of quality and safety should be implemented with validated reporting metrics on quality of care and oversight from appropriate medical bodies.

### *Screening for Malnutrition and Access to Appropriate Nutrition:*

1. The approach to screening for malnutrition must be thorough, encompassing an assessment of all growth parameters and recording of percentiles or Z-scores for age-based norms using the appropriate WHO (0 to 2 years) or CDC (2 years and older) growth standards, a comprehensive medical history, and a complete physical exam looking for signs of acute and chronic malnutrition.
2. Children identified as having moderate and severe malnutrition on arrival, or anytime during their detention, should be evaluated for release to the community where more appropriate and intensive therapeutic interventions can be delivered.

3. If children with evidence of malnutrition remain in immigration detention, they should be placed on an age-appropriate, and culturally focused feeding plan for supplemental nutrition with weights measured at least weekly to monitor growth.
4. Any facility staff providing guidance on screening for malnutrition, monitoring for children at risk of malnutrition, and interventions for malnutrition should have specific training in pediatrics and/or nutrition.
5. Comprehensive documentation including relevant evaluation for underlying conditions, weights and interventions delivered while in detention should be available and provided to families at the time of release.

### ***Mental Health Screening and Access to Mental Health Services***

1. Children with signs of mental health conditions or diagnosed mental disorders should be reviewed in a formal mechanism with consideration for release with their families. Suicidality should be treated as an emergency and requires evaluation by a trained provider to determine the immediate safety needs including the impact of continued detention.
2. Age-appropriate and validated screening tools, such as the Refugee Health Screener 15 (RHS-15) should be used at the time of intake to identify signs and symptoms of mental health disease.
3. All screening tools and subsequent interactions should be translated and performed in the child's preferred language and in a safe and confidential environment. All assessments should take into account the cultural background and influence of the manifestation of mental health disease.
4. Staff must be appropriately trained to conduct and document mental health evaluations across all age groups.
5. All facility staff should have appropriate training in providing trauma-informed care up to the highest expected professional standards.
6. For any child who is identified as having a mental health concern and remains in detention, appropriately trained mental health professionals should be available to initiate and implement a treatment plan.
7. Documentation of any mental health care delivered in detention should be provided to families at the time of release from detention.

### ***TB/Vaccines/Dental Screening:***

1. Consent for vaccination should be done in the parent's language and families should be allowed an opportunity to ask questions and address concerns.
2. Chest x-ray as screening for tuberculosis infection is not appropriate in children in the United States according to multiple expert guidelines (AAP, CDC, WHO) and as acknowledged in the 2020 ICE FRS. Therefore, appropriate testing such as a tuberculin skin test (TST) should be implemented.
3. Treatment of active tuberculosis disease should never be delayed given risk of severe illness, death, or spread of disease to others. Latent infection is also sometimes treated more urgently in high-risk children and family screening should be considered.
4. Any children with positive tuberculosis (TB) screening or abnormal findings such as a calcified granuloma on chest x-ray should have this clearly documented at the time of release with paperwork provided to the family and recommendations for treatment or follow-up. For any child with a calcified granuloma and associated symptoms such as weight loss or cough evaluation should be considered while in detention or at the time of the release.
5. Influenza testing should be routine for any child with any flu-like symptoms to ensure timely treatment and prevent outbreaks.
6. Children under 5 years old and those with chronic respiratory issues should be prioritized in immunization campaigns, as they are particularly susceptible to severe influenza disease.
7. Documentation of all vaccines should be clear and legible at the time of intake to the facilities and any missing vaccines or unavailable records should be clearly indicated.
8. Criteria for dental follow-up should be clearly indicated and children should have adequate access to urgent follow-up for acute dental issues. For children with caries, this should be documented and referral to a pediatric dentist should be placed at the time of release.

### ***Access to Care of Chronic Medical Conditions***

1. All children should be screened for chronic illness at the time of intake. Caregivers should be aware of their right to medical care and that medical needs do not negatively impact their legal proceedings.
2. Screening for developmental delays and medical conditions should occur at age-appropriate intervals based on recommendations by the American Academy of Pediatrics (AAP).
3. Children with chronic illness should have access to the necessary medications and referrals to relevant specialists. Children with chronic illnesses should have regular medical assessments with an appropriately licensed provider throughout detention. Children with chronic medical conditions that cannot be managed appropriately in the detention facility should be prioritized for release.
4. Standardized referral processes should be effectively implemented. Families should be provided with the documentation of medical care provided while in detention for chronic medical conditions and recommendations for further medical care upon release.

## General recommendations

1. The immigration detention of children, either unaccompanied or together with their families, is contrary to international law and should be prohibited in the United States;
  - a. Insofar as child migrants are detained, this deprivation of their liberty should only be deployed as a last resort and for the shortest period of time where child-friendly alternatives are not available and after a careful individual assessment of the best interests of the child, as provided by international legal norms;
  - b. Consequences for non-adherence to standards should be implemented for ICE, Geo Group and other third-party contractors, as well as for medical practitioners failing to maintain accepted medical standards.
2. Where detention is chosen as the only resort, facilities must be equipped with the proper resources and processes to provide comprehensive medical and mental health care for children. These processes and policies must be adhered to with the appropriate oversight;
  - a. Children and parents with varying levels of literacy should have access to information, communicated through their preferred method. However communicated, parents must be given opportunities to ask questions in their preferred language and to communicate their medical needs to the providers;
  - b. Comprehensive referral processes for children with any medical or mental health concerns should be developed and implemented.
3. Medical providers must have pediatric training as well as training relevant to mental health screening and management, nutrition, chronic illness and urgent care in pediatric populations specifically;
  - a. Healthcare providers are mandated reporters and any alleged inappropriate touching, sexual contact, or abuse must be reported to the relevant child services;
  - b. Informed consent for any medical care must be obtained.
  - c. Pediatric disease can present differently than in adults and providers must be aware of differences in vital sign readings and differences in symptom presentation.

4. Medical care in detention facilities should respect the child's cultural needs;
  - a. Professionally trained and certified interpreters who are child-friendly and cultural mediators should be involved at every stage of health care provision to children while in detention to ensure effective and culturally appropriate communication of medical information and services;
  - b. Given that health-care needs are context-specific and depend on factors such as country of origin and transit experience, health care providers should be appropriately trained in identifying and responding to these needs, as well as in working with a multicultural population.
5. Coordinated efforts should be made to conduct regular and systematic data collection around the health and medical needs of detained children and their families;
  - a. Further efforts should be made to ensure that there is appropriate, clear documentation in medical records of any mental health and medical screenings and care provided to the child;
  - b. Based on the documentation of care, efforts should be made to collect data on the impact of the pediatric medical care to ensure quality of services offered;
  - c. Beyond quantitative data, rich and in-depth qualitative data should also be collected to further document specific needs as well as the challenges they face in accessing care while in migrant holding facilities so that they may be addressed accordingly;
  - d. Findings should be transparent and publicly available.

## 4. REFERENCES

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1. ACLU (June 24, 2019). *Immigrant Kids Keep Dying in CBP Detention Centers, and DHS Won't Take Accountability*. Available at: <https://www.aclu.org/news/immigrants-rights/immigrant-kids-keep-dying-cbp-detention>
2. Akseer, N., Mehta, S., Wigle, J., Chera, R., Brickman, Z.J., Al-Gashm, S., Sorichetti, B., Vander Morris, A., Hipgrave, D.B., Schwalbe, N. & Bhutta, Z.A. (2020). Non-communicable diseases among adolescents: current status, determinants, interventions and policies. *BMC Public Health*, 20(1),1-20.
3. Allen, S. and McPherson, P. (2023) *By electronic mail re: Protected whistleblower disclosure experts ...* Available at: <https://whistleblower.org/wp-content/uploads/2023/03/2023.03.08-Full-Allen-McPherson-letter-to-Biden-Admin-re-Resuming-Family-Detention-with-cover.pdf> (Accessed: 05 January 2024).
4. American Academy of Child and Adolescent Psychiatry (“AACAP”) and National Association of Social Workers (“NASW”) (no date) *No. 19-56326 in the United States Court of Appeals for the ninth ...* Available at: [https://youthlaw.org/sites/default/files/2022-03/2-Flores\\_Pediatric-Child-Education-Organizations-as-Amici-Curiae.pdf](https://youthlaw.org/sites/default/files/2022-03/2-Flores_Pediatric-Child-Education-Organizations-as-Amici-Curiae.pdf) (Accessed: 10 October 2023).
5. American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Available at: <https://doi.org/10.1176/appi.books.9780890425596>
6. Andermann, A. (2016). Taking action on the social determinants of health in clinical practice: a framework for health professionals. *CMAJ: Canadian Medical Association journal*, 188(17-18), E474-E483.
7. Ataiants J, Cohen C, Riley AH, Tellez Lieberman J, Reidy MC, & Chilton M. (2018). Unaccompanied Children at the United States Border, a Human Rights Crisis that can be Addressed with Policy Change. *J Immigr Minor Health*, 20(4), 1000-1010
8. Becker, P., Carney, L. N., Corkins, M. R., Monczka, J., Smith, E., Smith, S. E., Spear, B. A., & White, J. V. (2015). Consensus statement of the Academy of Nutrition and Dietetics/ American Society for Parenteral and Enteral Nutrition: Indicators recommended for the identification and documentation of pediatric malnutrition (undernutrition). *Nutrition in Clinical Practice*, 30(1), 147-161.
9. Beer, S. S., Juarez, M. D., Vega, M. W., & Canada, N. L. (2015). Pediatric Malnutrition: Putting the New Definition and Standards Into Practice. *Nutrition in Clinical Practice: Official Publication of the American Society for Parenteral and Enteral Nutrition*, 30(5), 609-624.
10. Bennett, S. & Walkup, J. T. (2022). *Anxiety disorders in children and adolescents: Assessment and diagnosis*. Available at: [https://www.uptodate.com/contents/anxiety-disorders-in-children-and-adolescents-assessment-and-diagnosis?search=Anxiety&source=search\\_result&selectedTitle=4~150&usage\\_type=default&display\\_rank=4#H545215993](https://www.uptodate.com/contents/anxiety-disorders-in-children-and-adolescents-assessment-and-diagnosis?search=Anxiety&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4#H545215993)

11. Bergen, D. C. (2008). Effects of poverty on cognitive function: a hidden neurologic epidemic. *Neurology*, 71(6), 447–451.
12. Blackmore, R., Gray, M. G., Boyle, J.A., Fazel, M., Ranasinha, S., Fitzgerald, G., Misso, M. & Gibson-Helm, M. (2020). Systematic review and meta-analysis: the prevalence of mental illness in child and adolescent refugees and asylum seekers. *J Am Acad Child Adolesc Psychiatry*. 59(6), 705–714.
13. Blumberg, S., Lu, P., Hoover, C.M., Lloyd-Smith, J.O., Kwan, A.T., Sears, D., Bertozzi, S.M. and Worden, L. (2021). Mitigating outbreaks in congregate settings by decreasing the size of the susceptible population, *medRxiv* [Preprint]. Available at: <https://pubmed.ncbi.nlm.nih.gov/34268514/>.
14. CDC. (May 11, 2023). *Additional Information for Community Congregate Living Settings (e.g., Group Homes, Assisted Living)*. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/community/community-congregate-living-settings.html>
15. CDC. (December 15, 2022). *Clinical Growth Charts*. Available at: [https://www.cdc.gov/growthcharts/clinical\\_charts.htm](https://www.cdc.gov/growthcharts/clinical_charts.htm)
16. CDC. (February 3, 2021) *Immigrant, Refugee, and Migrant Health: Domestic Guidance*. Available at: <https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic-guidelines.html>
17. CDC. (2022) Tuberculosis (TB) | CDC. Available at: <https://www.cdc.gov/tb/>
18. Cote, S., Geltman, P., Nunn, M., Lituri, K., Henshaw, M. and Garcia, R.I. (2004) ‘Dental caries of refugee children compared with US children’, *Pediatrics*, 114(6).
19. Cowger, T.L., Wortham, J.M. & Burton, D.C. (2019). Epidemiology of tuberculosis among children and adolescents in the USA, 2007–17: an analysis of national surveillance data. *The Lancet. Public health*, 4(10), e506–e516.
20. Dawson-Hahn, E., Pak-Gorstein, S., Hoopes, A. J. & Matheson, J. (2016). *The nutritional health of young refugee children resettling in Washington State*. Washington, DC: Migration Policy Institute.
21. de Sutter, A.I., Saraswat, A. & van Driel, M.L. (2015). Antihistamines for the common cold. *The Cochrane Database of Systematic Reviews*, 11, CD009345–CD009345.
22. Douglas-Moore, J., Lewis, R. and Patrick, J. (2014). The Importance of clinical documentation. *The Bulletin of the Royal College of Surgeons of England*, 96(1), pp. 18–20.
23. Flagg, A. & Preston, J. (16 June, 2022). “No place for a child”. *The Marshall Project*. Available at : <https://www.themarshallproject.org/2022/06/16/no-place-for-a-child>.
24. Fusar-Poli, P. (2019). Integrated Mental Health Services for the Developmental Period (0 to 25 Years): A Critical Review of the Evidence. *Frontiers in Psychiatry*, 10(JUN).

25. Gartner LM, Morton J, Lawrence RA, Naylor AJ, O'Hare D, Schanler RJ, Eidelman AI; American Academy of Pediatrics Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 2005 Feb;115(2):496-506. doi: 10.1542/peds.2004-2491. PMID: 15687461.
26. Guariguata, L., Jeyaseelan, S. (2019). *Children and Non-communicable Disease Global Burden Report*. Available at: [https://www.ncdchild.org/wp-content/uploads/2021/03/ncdchild\\_global\\_burden-report-2019.pdf](https://www.ncdchild.org/wp-content/uploads/2021/03/ncdchild_global_burden-report-2019.pdf)
27. Horta, B. L., Victora, C. G., de Mola, C. L., Quevedo, L., Pinheiro, R. T., Gigante, D. P., Motta, J. V. dos S., & Barros, F. C. (2017). Associations of Linear Growth and Relative Weight Gain in Early Life with Human Capital at 30 Years of Age. *The Journal of Pediatrics*, 182, 85.
28. Joint Commission. (n/d). Joint Commission: Who we are. Available at: <https://www.jointcommission.org/who-we-are/facts-about-the-joint-commission/history-of-the-joint-commission>
29. John Hopkins Medicine. (n/d). *Screening Tests for Common Diseases*. Available at: <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/screening-tests-for-common-diseases#:~:text=A%20screening%20test%20is%20done,to%20treat%20it%20most%20effectively>
30. Jones, S.G. & Samanta, D. (2022). Macrocephaly, *Schwartz's Clinical Handbook of Pediatrics: Fifth Edition*, pp. 546-550. Available at: <https://doi.org/10.1542/aap.ppcqr.396094>.
31. Jordan M. Whistle-Blowers Say Detaining Migrant Families 'Poses High Risk of Harm.' *The New York Times*. July 18th, 2018.
32. Khan, A.N., Al-Jahdali, H.H., Allen, C.M., Irion, K.L., Al Ghanem, S., Koteyar, S.S. (2010). The calcified lung nodule: What does it mean? *Ann Thorac Med* 5(2), 67-79.
33. Kronick, R., Rousseau, C. and Cleveland, J. (2015) 'Asylum-seeking children's experiences of detention in Canada: A qualitative study.', *American Journal of Orthopsychiatry*, 85(3), pp. 287-294. doi:10.1037/ort0000061.
34. Kuhn, C., Aebi, M., Jakobsen, H., Banaschewski, T., Poustka, L., Grimmer, Y., Goodman, R., & Steinhausen, H. C. (2017). Effective Mental Health Screening in Adolescents: Should We Collect Data from Youth, Parents or Both? *Child Psychiatry and Human Development*, 48(3), 385-392.
35. Lemonjava, N. Antia, K., Lobjanidze, M. & Lobjanidze, T. (2020). *Mental health status of refugee children*. *European Journal of Public Health*, 30 (5).

36. Lenoci-Edwards, J., Allen, A.S. & Cox, D. (2016). IHI Virtual Expedition: *A Practical Approach to Ambulatory Patient Safety Session 4: Burnout, Culture, Teamwork*. Available at: [https://www.ihl.org/Engage/Memberships/Passport/Documents/Expedition\\_AmbulatorySafety\\_Session4Slides.pdf](https://www.ihl.org/Engage/Memberships/Passport/Documents/Expedition_AmbulatorySafety_Session4Slides.pdf)
37. Linton JM, Green A; COUNCIL ON COMMUNITY PEDIATRICS. Providing Care for Children in Immigrant Families. *Pediatrics*. 2019 Sep;144(3):e20192077. doi: 10.1542/peds.2019-2077. Epub 2019 Aug 19. PMID: 31427460.
38. Linton, J.M., Griffin, M. and Shapiro, A.J. (2017) 'Detention of immigrant children', *Pediatrics*, 139(5). doi:10.1542/peds.2017-0483.
39. Locking up family values, again (2023) *Women's Refugee Commission*. Available at: <https://www.womensrefugeecommission.org/research-resources/locking-up-family-values-again/> (Accessed: 05 January 2024).
40. *Long-term detention of mothers and children in Pennsylvania (no date) Human Rights First*. Available at: <https://humanrightsfirst.org/wp-content/uploads/2022/10/HRF-Long-Term-Detention-Brief.pdf> (Accessed: 10 October 2023).
41. MacLean, S.A. *et al.* (2019) 'Mental Health of Children held at a united states immigration detention center', *Social Science & Medicine*, 230, pp. 303-308. doi:10.1016/j.socscimed.2019.04.013.
42. Nicholas A, Kryszynska K, King KE. A rapid review to determine the suicide risk and risk factors of men who are survivors of sexual assault. *Psychiatry Res*. 2022 Nov;317:114847. doi: 10.1016/j.psychres.2022.114847. Epub 2022 Sep 13. PMID: 36126347.
43. Nolt, D. & Starke, J.R. (2021). Tuberculosis Infection in Children and Adolescents: Testing and Treatment. *Pediatrics*, 148(6).
44. Okunseri, C.E., Rota, K., Okunseri, E., Patel, K., Garcia, R.I., Zheng, C. & Szabo, A. (2021). Dental service utilization and immigrant family structure. *Journal of public health dentistry*, 81(3), 198-205.
45. Olusanya BO, Wright SM, Nair MKC, Boo NY, Halpern R, Kuper H, Abubakar AA, Almasri NA, Arabloo J, Arora NK, Backhaus S, Berman BD, Breinbauer C, Carr G, de Vries PJ, Del Castillo
46. Hegyi C, Eftekhari A, Gladstone MJ, Hoekstra RA, Kancherla V, Mulaudzi MC, Kakooza-Mwesige A, Ogbo FA, Olsen HE, Olusanya JO, Pandey A, Samms-Vaughan ME, Servili C, Shaheen A, Smythe T, Wertlieb D, Williams AN, Newton CRJ, Davis AC, Kassebaum NJ; Global Research on Developmental Disabilities Collaborators (GRDDC). Global Burden of Childhood Epilepsy, Intellectual Disability, and Sensory Impairments. *Pediatrics*. 2020 Jul;146(1):e20192623. doi: 10.1542/peds.2019-2623. Epub 2020 Jun 17. PMID: 32554521; PMCID: PMC7613313.

47. Pappas, D. E. (2022). *The common cold in children: Clinical features and diagnosis*. Available at: [https://www.uptodate.com/contents/the-common-cold-in-children-clinical-features-and-diagnosis?search=upper%20respiratory%20infection&source=search\\_result&selectedTitle=6~150&usage\\_type=default&display\\_rank=6](https://www.uptodate.com/contents/the-common-cold-in-children-clinical-features-and-diagnosis?search=upper%20respiratory%20infection&source=search_result&selectedTitle=6~150&usage_type=default&display_rank=6)
48. Peeler, K. Erfani, P., Lee, C. Uppal, N., Hampton, K., Mishori, R. & Raker, E. (2021). *Praying for Hand Soap and Masks: Health and Human Rights Violations in U.S. Immigration Detention During the COVID-19 Pandemic*. Physicians for Human Rights. Available at: <https://phr.org/our-work/resources/praying-for-hand-soap-and-masks/>
49. Physiopedia. (n/d). *Levels of healthcare*. Available at: [https://www.physio-pedia.com/Levels\\_of\\_Healthcare#:~:text=Secondary%20care%20simply%20means%20you,and%20care%20for%20broken%20bones](https://www.physio-pedia.com/Levels_of_Healthcare#:~:text=Secondary%20care%20simply%20means%20you,and%20care%20for%20broken%20bones)
50. Pynoos RS, Steinberg AM, Layne CM, Briggs EC, Ostrowski SA, Fairbank JA. DSM-V PTSD diagnostic criteria for children and adolescents: a developmental perspective and recommendations. *J Trauma Stress*. 2009 Oct;22(5):391-8.
51. Ramírezm, E., Ramos Salasm J. E., Barrera Bustillos, M., Gonzalez Franco, L. R., Flores Guillen, E. Perez Jacome, A., Valencia, M. E. (2017). WHO body mass index for age charts overestimate thinness and overweight compared to international and US charts applied to indigenous and non-indigenous Mexican children. *ALAN*, 67(3).
52. Rytter, M. J. H., Kolte, L., Briend, A., Friis, H., & Christensen, V. B. (2014). The immune system in children with malnutrition—a systematic review. *PloS One*, 9(8).
53. Saadi A, Tesema L. Privatisation of immigration detention facilities. *Lancet*. 2019 Jun 8;393(10188):2299. doi: 10.1016/S0140-6736(19)30351-4. Epub 2019 May 20. PMID: 31122666.
54. Schrag, P. G. (2020). *Baby jails: The fight to end the incarceration of refugee children in America*. Oakland: University of California Press.
55. Statistics Canada. (2021). *Calculating the median*. Available at: <https://www150.statcan.gc.ca/n1/edu/power-pouvoir/ch11/median-mediane/5214872-eng.htm>
56. Taylor, E.M., Painter, J., Posey, D.L., Zhou, W. & Shetty, S. (2016). Latent Tuberculosis Infection Among Immigrant and Refugee Children Arriving in the United States: 2010. *Journal of immigrant and minority health*, 18(5), 966-970.
57. ten Eick, A.P., Blumer, J.L. & Reed, M.D. (2012). Safety of Antihistamines in Children. *Drug Safety* 2001, 24(2), 119-147.
58. Texas Board of Nursing. (n/d.). *Nursing Practice FAQ*. Available at: [https://www.bon.texas.gov/faq\\_nursing\\_practice.asp.html#a22](https://www.bon.texas.gov/faq_nursing_practice.asp.html#a22)

59. The Guardian. (March 6, 2023). *Biden reportedly considers detaining migrant families in major reversal*. Available at: <https://www.theguardian.com/us-news/2023/mar/07/biden-migrant-families-detention>
60. The New York Times (May 19, 2023). *8-year-Old Migrant Died After a Week in U.S. Detention*. Available at: <https://www.nytimes.com/2023/05/19/us/politics/8-year-old-migrant-died-border.html>
61. Thurstans S, Sessions N, Dolan C, Sadler K, Cichon B, Isanaka S, Roberfroid D, Stobaugh H, Webb P, Khara T. The relationship between wasting and stunting in young children: A systematic review. *Matern Child Nutr.* 2022 Jan;18(1):e13246. doi: 10.1111/mcn.13246. Epub 2021 Sep 5. PMID: 34486229; PMCID: PMC8710094.
62. Tosif, S. *et al.* (2023) 'Health of children who experienced Australian Immigration Detention', *PLOS ONE*, 18(3). doi:10.1371/journal.pone.0282798.
63. *Tuberculosis: Domestic guidelines (2021) Centers for Disease Control and Prevention*. Available at: <https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/tuberculosis-guidelines.html> (Accessed: 10 October 2023).
64. UN General Assembly. (2005). *Convention on the Rights of the Child*. United Nations, Treaty Series, vol. 1577, 3.
65. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases. (January 11, 2017). *Central American (Guatemalan, Honduran, Salvadoran) Minors Refugee Health Profile*. Available at: <https://www.cdc.gov/immigrantrefugeehealth/pdf/central-american-health-profile.pdf>
66. U.S. Immigration and Customs Enforcement (ICE). (February 24, 2023). *ICE Detention Standards*. Available at: <https://www.ice.gov/factsheets/facilities-pbnds>
67. U.S. Immigration and Customs Enforcement (ICE). (n/d). *ICE Health Service Corps*. Available at: <https://www.ice.gov/detain/ice-health-service-corps>
68. U.S. Immigration and Customs Enforcement (ICE). (2020). *Family Residential Standards 2020*. Available at: <https://www.ice.gov/detain/detention-management/family-residential>
69. U.S. Immigration and Customs Enforcement (ICE) Advisory Committee. (2016). *Report of the ICE Advisory Committee on Family Residential Centers*. Available at: <https://www.ice.gov/sites/default/files/documents/Report/2016/acfrc-report-final-102016.pdf>
70. U.S. Immigration and Customs Enforcement. (2007). *Family Residential Standards 2007*. Available at: <https://www.ice.gov/detain/detention-management/family-residential/2007>

71. USAID. (2018). *Guatemala: Nutrition profile*. Available at: <https://2017-2020.usaid.gov/sites/default/files/documents/1864/Guatemala-Nutrition-Profile-Mar2018-508.pdf>
72. van Egmond, M., Garnefski, N., Jonker, D. & Kerkhof, A. (1993). The relationship between sexual abuse and female suicidal behavior. *American Psychological Association* [Preprint]. Available at: <https://psycnet.apa.org/record/1994-13786-001>
73. Victora, C. G., de Onis, M., Hallal, P. C., Blössner, M., & Shrimpton, R. (2010). Worldwide timing of growth faltering: revisiting implications for interventions. *Pediatrics*, 125(3).
74. Wachs TD. Relation of mild-to-moderate malnutrition to human development: correlational studies. *J Nutr.* 1995 Aug;125(8 Suppl):2245S-2254S. doi: 10.1093/jn/125.suppl\_8.2245S. PMID: 7623164.
75. Wagle, K. (2017). Z-score and its Classification. *Public Health Notes*. Available at: <https://www.publichealthnotes.com/z-score-nutritional-indication/>
76. WHITLEY, R.J. *et al.* (2001) 'Oral Oseltamivir treatment of influenza in children', *The Pediatric Infectious Disease Journal*, 20(2), pp. 127-133. doi:10.1097/00006454-200102000-00002.
77. WHO (n/d). *Child growth standards and the identification of severe acute malnutrition in infants and children*. Available at: [www.who.int/childgrowth/standards](http://www.who.int/childgrowth/standards)
78. WHO (n/d). Child growth standards : growth velocity based on weight, length and head circumference : methods and development. Available at: <https://apps.who.int/iris/handle/10665/44026>
79. WHO (2021). *Malnutrition: Key facts*. Available at: <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
80. WHO (2022). *Mental Disorders*. Available at: <https://www.who.int/news-room/fact-sheets/detail/mental-disorders#:~:text=A%20mental%20disorder%20is%20characterized,in%20important%20areas%20of%20functioning.>
81. Zwi, K. *et al.* (2017) 'The impact of detention on the social-emotional wellbeing of children seeking asylum: A comparison with community-based children', *European Child & Adolescent Psychiatry*, 27(4), pp. 411-422. doi:10.1007/s00787-017-1082-z.