

# BMJ Open Evaluation of the US detention standards to protect the health and dignity of migrants: a systematic review of national health standards

Lauren Tejkl,<sup>1,2</sup> David Tellez,<sup>1,2</sup> Dana McLaughlin,<sup>1,2</sup> Jordan Savold,<sup>1,2</sup>  
Cyndy Vasquez,<sup>1,2</sup> Orit Abraham,<sup>1,2</sup> Paul Spiegel <sup>1,2</sup>

**To cite:** Tejkl L, Tellez D, McLaughlin D, *et al.* Evaluation of the US detention standards to protect the health and dignity of migrants: a systematic review of national health standards. *BMJ Open* 2023;**13**:e069949. doi:10.1136/bmjopen-2022-069949

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2022-069949>).

Received 13 November 2022  
Accepted 05 April 2023



© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

<sup>1</sup>Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

<sup>2</sup>Johns Hopkins Center for Humanitarian Health, Baltimore, Maryland, USA

**Correspondence to**  
Dr Paul Spiegel;  
[pbspiegel@jh.edu](mailto:pbspiegel@jh.edu)

## ABSTRACT

**Objective** The US government detains hundreds of thousands of migrants across a network of facilities each year. This research aims to evaluate the completeness of standards across US detention agencies to protect the health and dignity of migrants.

**Design** Five documents from three US agencies were examined in a systematic review: Immigration and Customs Enforcement (ICE; 3), Customs and Border Protection (CBP; 1) and Office of Refugee Resettlement (ORR; 1). Standards within five public health categories (health, hygiene, shelter, food and nutrition, protection) were extracted from each document and coded by subcategory and area. Areas were classified as critical, essential or supportive. Standards were measured for specificity, measurability, attainability, relevancy and timeliness (SMART), resulting in a sufficiency score (0%–100%). Average sufficiency scores were calculated for areas and agencies.

**Results** 711 standards were extracted within 5 categories, 12 subcategories and 56 areas. 284 standards of the 711 standards were included in multiple (2–7) areas, resulting in 1173 standards counted as many times as each was included. On average, 85.4% of standards were specific, 87.1% measurable, 96.6% attainable and 74.9% time-bound. All standards were considered relevant. CBP standards were the least sufficient across all other SMART components, when compared with ICE and ORR.

**Conclusions** There are disparate detention standards based on agencies' mandates and type of facility contracts. Migrants should be ensured of their public health rights and services in all spaces they occupy, and for any length of time regardless of who manages the facility. As long as detention remains a policy, the US should develop comprehensive, consistent and complementary standards for all detention facilities or pursue alternatives to detention.

## BACKGROUND

Increasing restrictive measures are being implemented to reduce migration in many countries.<sup>1 2</sup> These have accelerated due to the COVID-19 pandemic.<sup>3</sup> The utilisation of administrative detention for migrants and asylum seekers, henceforth called migrants,

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The five most recent versions of National Detention Standards were evaluated, excluding state, local and facility guidelines.
- ⇒ Multiple reviewers extracted and coded standards using a prespecified coding framework based on Sphere guidelines.
- ⇒ Only standards that fit in at least one of five categories (health, hygiene, food and nutrition, shelter, or protection) were analysed.
- ⇒ Analysed standards were reviewed by two reviewers for specificity, measurability, attainability, relevancy and timeliness.
- ⇒ While replicable, this methodology is unverified, as there are no internationally accepted guidelines for the detention of migrants that could be used to broadly write or evaluate standards.

is one major illustration of such restrictions.<sup>4</sup> We, like many other public health and human rights professionals, consider detaining migrants awaiting adjudication of their cases unnecessary and harmful.<sup>5</sup> The detention of migrants is not US-specific, and many countries continue to detain these persons.<sup>6</sup> As of 2022, there are 85 countries which have detention centres, and more than 1 in 5 detention centres globally are in the USA. This study aims to examine the comprehensiveness and quality of existing detention standards to protect the health and dignity of migrants in custody of the US government.

The importance of ensuring that detention facilities preserve the dignity, rights and health of migrants in detention through compliance with basic standards is highlighted by the humanitarian crisis at the US southern border. There are over 200 detention facilities in the USA overseen by three main government agencies: Immigration and Customs Enforcement (ICE), Customs and Border Protection (CBP) and the Office of

Refugee Resettlement (ORR). CBP and ICE fall under the jurisdiction of the Department of Homeland (DHS) Security and ORR under the Department of Health and Human Services (HHS). CBP, which detains all ‘non-citizens’ who enter the country without inspection by an immigration officer, is required to release or transfer migrants to ORR or ICE within 72 hours.<sup>7</sup> However, in the US government’s fiscal year (FY) 2022, the average length of stay in CBP custody was 23.3 days.<sup>8</sup> In FY2021, CBP encountered 1.6million migrants along the US Southwest Border, a 314% increase from FY2020 when 400 000 migrants were encountered.<sup>9</sup> As of July 2022, the FY21 figure has already been surpassed at 1.8million encounters. This includes nearly 130 000 unaccompanied migrant children who entered ORR custody in 2022, the most ever recorded in 1 year.<sup>10</sup>

Children under 18 years who arrive in the USA alone or who are separated from the adults with whom they were travelling (unaccompanied alien children (UAC)) are experiencing increased lengths of stay in detention.<sup>11 12</sup> They are held in custody by ORR which organises their placement in shelters, group homes, foster care and other facilities. ORR contracts non-profit organisations and for-profit companies across 22 states, funding roughly 200 programmes and facilities that provide care and services to UAC.<sup>13</sup>

For this research, US health standards for detention facilities were analysed and compared among facilities managed by CBP, ICE and ORR, and evaluated for the sufficiency of such standards to protect migrants.

## METHODS

### Document selection

A landscape analysis was conducted to illustrate the detention architecture within the USA. This analysis included the administrative bodies that operate and oversee facilities, detention facility types, populations detained, existing detention standards, and monitoring and evaluation frameworks. Primary detention standard documents were identified through review of government web pages and web search engines. Only detention standards at the national-level were examined, excluding prison/jail-level standards, corporate standards and other contracted agency standards.

### Standard extraction

From these primary documents, specific standards pertaining to five public health categories were extracted. Categories were adapted from the Sphere association: (1) health, (2) hygiene, (3) shelter, (4) food and nutrition and (5) protection.<sup>14</sup> The first four of these areas are technical areas covered by Sphere, while the latter (protection) is derived from the organisation’s underlying principles. Standards were extracted in their entirety and were further coded using an inductive framework by category (5), subcategory (12) and then area (56) (online supplemental appendix 1). For example, the ‘food and

nutrition’ category contained two subcategories, among those the ‘nutrition’ subcategory which was further divided into two areas (nutrition plans/analysis and Infant/child nutrition). Standards were only extracted if they related to migrants; standards focusing on administrators and staff (eg, general staff, migrant workers) were not included. Standards that were assigned to multiple areas were considered to be relevant to more than one distinct area.

Reviewers extracted, analysed and coded the standards in two independent extraction processes. Hence, each guidance document was reviewed twice for relevant standards. All standards were coded using the same coding framework. The researchers then reviewed the extractions to reach a consensus on which standards were included and how they were coded. If there was concordance between the reviewers, the standard was included and coded according to the agreed on area(s). If there was discordance between the reviewers, the standard was further reviewed until the reviewers reached consensus regarding the relevance of the standard and the area for coding.

Each area was ranked by criticality based on its capacity to protect a migrant’s health and well-being (online supplemental appendix 2). Three criticality levels were defined to classify the areas: critical, essential and supportive. Critical areas were defined as those that could affect the survival of migrants (eg, medical evaluation, emergency services). Essential areas were those considered to be necessary to maintain the health and well-being of migrants (eg, facility cleanliness, access to toilets/showers). Supportive areas were those considered supplementary to the health of migrants but were not considered to be life-sustaining (eg, religious diets, privacy/chaperones).

### Analysis

Extracted standards were analysed through sufficiency scores (0%–100%), with 0% representing insufficiency and 100% complete sufficiency. Each standard was independently reviewed by two researchers for specificity, measurability, attainability, relevancy and timeliness (SMART). Sufficiency was measured using the SMART framework.<sup>15</sup> While the SMART framework is intended for objectives, it was considered the most practical existing framework for this analysis. Detention standards represent the minimum requirements for agencies, equating them to benchmarks or objectives to be met by facilities. Each standard was given a value (0, not present or 1, present) for each SMART measure. The sum of these values indicated the percentage of SMART components that were fulfilled, providing the overall sufficiency score for that standard. A consensus was reached if researchers did not initially agree on any SMART component. The sufficiency of standards was analysed across categories, subcategories, areas, criticality, agency and SMART component. Descriptive statistics were used to detail findings.

**Table 1** US detention standards documents used for extraction

Organisation	Document title	Year published	Included revisions up to year*	No of standards extracted†
ICE	Performance-Based National Detention Standards	2011	2016	166
	National Detention Standards	2019	–	182
	Family Residential Standards	2007	2020	197
CBP	National Standards on Transport, Escort, Detention and Search	2015	–	92
ORR	Children Entering the United States Unaccompanied: sections 3 and 4	2015	2018	74

\*Revisions do not imply full document revisions and may reflect section-specific updates.

†Standards counted only once, but may have been included in multiple areas.

ICE, Immigration and Customs Enforcement; CBP, Customs and Border Protections; ORR, Office of Refugee Resettlement.

### Patient and public involvement

Patients and the public were not involved in this research as it was based on reviewing grey and peer-reviewed literature.

## RESULTS

### Detention standard documents

Eight US detention standard documents were collected from primary sources. The most recent version of each respective document was selected, resulting in five main documents that were used for extraction: three ICE documents, one CBP document and one ORR document (table 1). These included the Performance-Based National Detention Standards 2011 (PBNDS), National Detention Standards 2019, Family Residential Standards 2020 (FRS), National Standards on Transport, Escort, Detention and Search (TEDS) and Children Entering the United States Unaccompanied: sections 3 and 4 (CEUSA).

### Standard extraction

In total, 711 standards were extracted from all documents within the 5 public health categories and organised into subcategories and areas. A total of 284 standards fell into 2 or more areas, resulting in 1173 coded standards that were analysed. The maximum number of areas a standard was coded was 7.

Health was the most frequently coded category (50.2%; 589 of 1173), followed by protection (27.9%; 327 of 1173), and food and nutrition (10.1%; 118 of 1173). The most common subcategory coded was medical care (35.6%; 418 of 1173), followed by protections for vulnerable populations (14.8%; 174 of 1173) and protections against sexual violence and exploitation (13.0%; 153 of 1173). Protections for sexual abuse and violence (12.4%; 146 of 1173) was the most commonly extracted area, followed by protections for differently abled migrants (5.5%; 65 of 1173) and protections for unaccompanied children (5.3%; 62 of 1173).

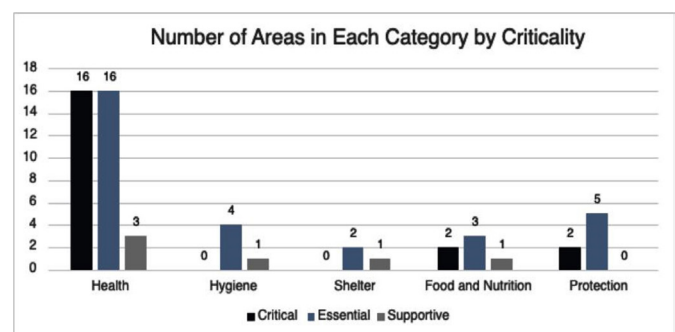
### Criticality

There were three categories with areas considered to be critical: health, food and nutrition, and protection. Of the 57 areas that were examined, 21 (36.8%) were classified as critical, 30 (52.6%) as essential and 6 (10.5%) as supportive. Health was the most common category with critical areas, followed by food and nutrition and protection. Similarly, health was the category with the most essential areas, followed by protection (figure 1). Most standards were coded as critical and essential health areas (figure 2).

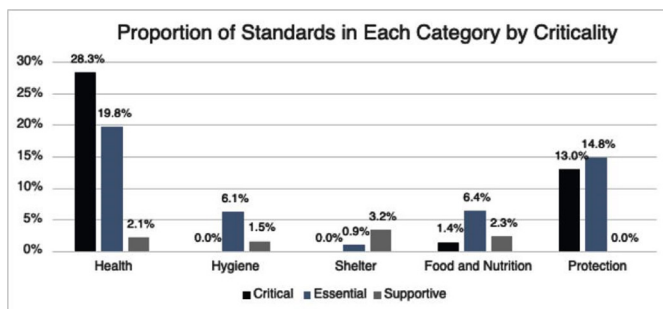
### SMART criteria

All standards (100%) were considered relevant; however, not all standards were considered specific, measurable, attainable and time-bound. On average, 85.4% of standards were specific, 87.1% measurable, 96.6% attainable and 74.9% time-bound.

There were differences between average SMART findings across agencies. ORR had the most specific, attainable and time-bound standards. Whereas CBP standards were specific, measurable, attainable and time-bound the least often. Ninety-two per cent of ORR standards were specific, followed by 88% ICE standards and 61% CBP standards. 90.8% of ICE standards were measurable, followed by 87.9% ORR standards and 60.2% CBP standards. All (100%) ORR standards were attainable, followed by



**Figure 1** Number of areas in each public health category by criticality.



**Figure 2** Proportion of extracted standards in each category by criticality.

96.8% ICE standards and 81.4% CBP standards. Lastly, 77.2% of ORR standards were time-bound, followed by 76.7% ICE standards and 59.3% CBP standards.

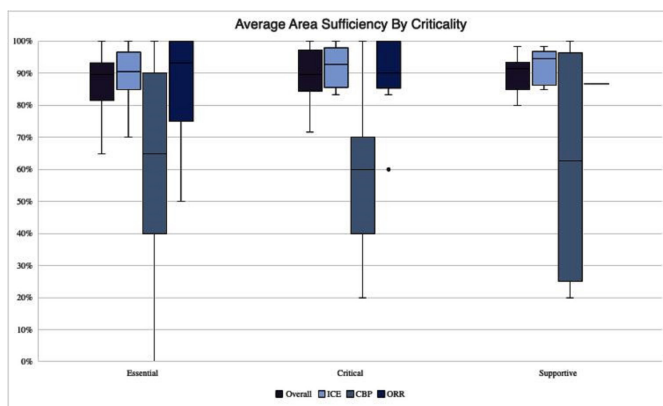
### Sufficiency

The sufficiency scores for public health categories and criticality rankings varied across detention agencies. All five categories maintained minimum average area sufficiency scores of at least 65% (figure 3). The median sufficiency rating was lowest for critical areas (88.4%), compared with essential (89.8%) and supportive (91.3%) areas, respectively (figure 4).

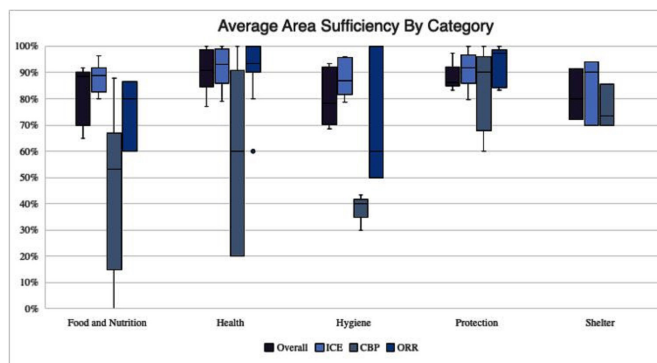
Three areas considered critical received average sufficiency scores of 100%: access to abortion (n=3), involuntary administration of psychotropic medications (n=3) and medical housing (n=2). Infant/child nutrition, another critical area, accounted for 0.3% of all extracted standards and received the lowest average sufficiency score for all areas, 65.0%. The most commonly coded area, protections for sexual abuse and violence (n=146), was deemed critical. This area had a lower sufficiency score (84.8%) compared with the average of all critical areas (88.9%) and standards for protection (94.2%).

### DISCUSSION

This research documents, categorises and analyses standards established by three US agencies for completeness and quality to protect the health of migrants in US



**Figure 3** Area sufficiency box and whiskers plot of area by criticality, overall and for each agency.



**Figure 4** Area sufficiency box and whiskers plot of area by category, overall and for each agency.

detention wherever they may be detained. These standards are the foundation of the US detention system for migrants. This research does not reflect how the standards are implemented or the reality of life in detention for migrants; however, it does evaluate its foundation from a public health lens and provides a necessary expertise for future research.

Successful implementation, monitoring and evaluation are reliant on quality and measurable standards. There is limited, independent research that explores the implementation and compliance of national standards at the facility level. Peer-reviewed literature often focuses on violations of human rights in detention facilities, opposed to evaluating the national standards in place. In addition, official evaluations of standards are completed by the DHS' own Office of Inspector General.<sup>16</sup> There is a need for additional research to validate the completeness of standards, as well as more independent monitoring and evaluating mechanisms.

Our analysis of the sufficiency of standards varied across agencies, with CBP's standards being the least consistent. Gaps in CBP's standards may be attributed to its mandate to transfer migrants as soon as possible, and no later than 72 hours. The system is designed with the assumption that ICE or ORR facilities, where migrants may be transferred, will provide more comprehensive services. However, in practice, migrants have been held in CBP facilities for up to 2 months, demonstrating the necessity of CBP standards to be more responsive to longer-term needs. Similarly, given its mandate to protect the health and dignity of UAC, a vulnerable population, ORR should have in place population-specific standards, such as age-appropriate nutrition requirements and sexual health assessments, particularly for adolescents. Several important protections were found to be absent from ORR standards. Specifically, the agency fails to provide standards specific to adolescent health such as monitoring and care of detainees at risk of self-harm, pregnancy care and access to abortion. These areas are of particular concern as UAC require comprehensive health services that are age appropriate, address reproductive and mental health, and mitigate the consequences of adverse childhood experiences. In contrast, ICE's standards were

found to be the most sufficient, suggesting that ICE could be used as a reference point for future CBP and ORR investigations and revisions, while considering the specific context and mandates of these agencies. Overall, the inconsistency and gaps among standards of the three agencies calls into question the cohesion, complementarity and continuity of care for migrants moving among facilities and agencies.

The use of the SMART criteria to identify the sufficiency of each standard revealed that one of the most absent components of US standards for detention in all three agencies was the element of time. When standards lack clear parameters for time, it makes the delivery of services difficult to monitor and measure. This is particularly alarming for the standards that address critical areas like protections for sexual abuse and violence, medical evaluation, communicable disease and infection control, and mental health screening. For example, the ORR standard from CEUSA section 4 states: 'Care providers must ensure that UAC who are victims of sexual abuse that occurred while in ORR care and custody are offered tests for sexually transmitted infections (STIs) when the allegation involves oral, genital, or anal contact by or to another person.' The standard does not specify how long migrants must wait before they are provided with STI tests after a sexual abuse or assault, which is necessary to hold ORR accountable for providing this essential medical service. When a standard lacks the time-bound element, detention staff and detention facilities may interpret it differently and there can be no accountability.

Detention facilities often have existing barriers to hiring staff with technical expertise or formal medical training to make these potentially life-threatening decisions.<sup>17</sup> The latter is particularly concerning when non-medical staff are expected to conduct medical and mental health screenings for new arrivals, which is the case for some facilities. Health screenings are considered an important aspect of public health programming in migration as they identify people in need of care. All three agencies have standards for health screenings. Yet, the designation of whom must conduct the medical screenings vary considerably by agency, raising concerns over the consistency and quality of these screenings. For example, the standards specified the need for 'officers/agents' (CBP), a 'trained staff member' (ORR), a 'care provider' (ICE), 'medical staff' (ICE), a 'specially trained detention officer' (ICE) or a 'healthcare provider' (ICE) to conduct health or mental health screenings. The impact of health screenings is not found directly in the occurrence of such an examination, but rather the follow-through to connect people of concern to the appropriate, timely and quality care that they need. Organisations such as the Southern Poverty Law Center and National Immigrant Justice Center have reported gaps in health screenings and follow-up medical care in detention centres in the USA, including extended delays of proper medications and treatment and repeatedly ignored sick calls.<sup>18 19</sup> Gaps in healthcare also extend to dental and mental health

issues, with migrants reporting higher mental health issues following detention and reports of ibuprofen being used as emergency dental treatment. These and similar reports have sounded the alarm on the insufficiency of health screening standards and called for greater attention on the process for conducting health screenings across all three agencies.<sup>20 21</sup>

In addition to the element of time, the ambiguity of standards was another concern highlighted by the analysis. For example, TEDS relies on the broad standard for age-appropriate foods: 'food must be appropriate for at-risk detainees' age and capabilities (such as formula and baby food). This can be contrasted by the specificity of a similar standard from FRS that ICE facilities 'will ensure the food service programme provides for the minimum nutritional needs of toddlers and infants, ranging in age from newborn to 4years of age. The menus will reflect recommended governmental guidelines for Well-Baby and Well-Child growth and development. Staff will be responsible for ensuring that infant and toddler bottles and utensils are sterilised properly, to include providing parents the necessary supplies as appropriate.' The standard in FRS includes specific information required to meet the age-appropriate nutritional needs of children, which is similarly needed for CBP to ensure the nutrition and health of migrants in its custody. Overall, specific resources and measures that reference other standards like the guidelines for Well-Baby and Well-Child enable facility staff to meet minimal nutritional requirements. Standards, particularly those critical to the underlying health of people like nutrition, should be comprehensive and specific to encourage compliance.

Beyond the standards, there are systemic issues inherent to the US detention system that add to the challenge in providing adequate care to migrants, as evidenced by existing literature. US detention agencies are often fragmented, both by population type (adults managed by DHS, children by HHS) and by health services (eg, for-profit vendors, ICE Health Service Corps).<sup>22</sup> Even in instances where healthcare is provided, the focus is often on addressing acute care needs rather than on prevention, which is exceptionally concerning for migrants with chronic medical issues.<sup>23</sup> Finally, conditions of confinement have been associated with an increased likelihood of negative health outcomes, with each additional confinement condition presenting a cumulative effect on health.<sup>24</sup> Though the evidence presented in this paper assess the quality of the standards, it is equally imperative to recognise these additional systemic limitations and contextualise the detention system to understand the full impact of detention on migrant's health.

There are a number of limitations to this research. First, there are many more standards in each document examined that were deliberately not categorised or analysed because those standards were not created to explicitly protect the health of migrants according to the five public health categories used in our coding framework. For example, there are standards that exist that are more

focused on the dignity of migrants (eg, related to telephone access). To the greatest extent possible, documents were reviewed in their entirety for standards that might be applicable to this research. Only standards that existed in the most recent national-level documents were examined. There could be areas of evaluation that were not evaluated because they do not exist in the reviewed documents. In addition, there are state-level, local-level and facility-level standards for detention centres. These non-national standards may be based on older standards and may not yet be revised per the newest national standards. These gaps may further separate the written national standards from the reality of their implementation. While the Sphere guidelines were used to create the coding framework, there are no broader international guidelines for detaining migrants in this capacity. Second, the sufficiency score methodology using SMART criteria has been otherwise untested. As such, sufficiency scores for each standard likely possess a margin of error. Numerical ratings should be used as relative measures for the purposes of comparison rather than absolute scores. Lastly, there was an inherent level of subjectivity in the extraction and rating of standards. This was minimised by having more than one reviewer at each stage, and a process in place to meet a consensus.

## CONCLUSION

Migrants of all backgrounds and nationalities must be ensured of their health and dignity, particularly in settings where they are detained and deprived of their fundamental liberties. This is particularly important in the context of the USA, which detains the highest number of migrants globally. This analysis of the ICE, CBP and ORR standards that focus on health reveals that the sufficiency of the standards rests on the ability of each detention facility to implement and comply with the existing standards. The adverse effects of detention could be avoided if alternatives to detention were implemented, such as community-based supervised release, release with or without conditions, or other less restrictive and detrimental measures. Until this possibility is achieved, we recommend that a comprehensive and complementary set of public health detention standards be developed that apply to all US agencies and privately contracted organisations that detain different types of populations.

**Twitter** Paul Spiegel @pbspiegel

**Contributors** PS, OA, LT, DT and DM contributed to the conception and design of the study. PS, OA, LT, DT, DM, JS and CV contributed to data analysis and interpretation. PS, LT, DT and DM drafted the manuscript. All authors critically reviewed the manuscript. All authors had final responsibility for the decision to submit for publication. PS is the guarantor for the study.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** Data are available on reasonable request.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

## ORCID iD

Paul Spiegel <http://orcid.org/0000-0002-6158-6661>

## REFERENCES

- Gammeltoft-Hansen T, Tan NF. The end of the deterrence paradigm? future directions for global refugee policy. *Journal on Migration and Human Security* 2017;5:28–56.
- Kent J, Norman KP, Tennis KH. Changing motivations or capabilities? migration deterrence in the global context. *International Studies Review* 2020;22:853–78.
- Pew Research Center. More than nine-in-ten people worldwide live in countries with travel restrictions amid COVID-19. 2020.
- Flynn M. There and back again: on the diffusion of immigration detention. *Journal on Migration and Human Security* 2014;2:165–97.
- von Werthern M, Robjant K, Chui Z, *et al*. The impact of immigration detention on mental health: a systematic review. *BMC Psychiatry* 2018;18:1–19.
- Immigration detention centres [website]. Geneva: Global Detention Project; 2022. Available: <https://www.globaldetentionproject.org/detention-centres/list-view> [Accessed 6 Apr 2022].
- American Immigration Council. Immigration detention in the united states by agency. 2020. Available: <https://www.americanimmigrationcouncil.org/research/immigration-detention-united-states-agency> [Accessed 18 Jan 2021].
- Department of homeland security. ICE fiscal year 22 detention statistics website fy22\_detentionstats09292022.xlsx (live.com). n.d.
- Department of Homeland Security, Office of the Inspector General. U.S. border patrol screened migrants at the southwest border but could strengthen processes. 2022. Available: <https://www.oig.dhs.gov/sites/default/files/assets/2022-09/OIG-22-71-Sep22.pdf>
- Montoya-Galvez C. CBS news. U.S. shelters received a record 122,000 unaccompanied migrant children in 2021. 2021.
- American Immigration. Immigration detention in the united states by agency. 2020. Available: <https://www.americanimmigrationcouncil.org/research/immigration-detention-united-states-agency> [Accessed 18 Jan 2021].
- Ordonez F. National public radio. hundreds of migrant children held in border detention for more than 10 days. March 18, 2021.
- U.S. Department of Health and Administration for children and families. FACT SHEET: unaccompanied alien children (UAC) program. 2022. Available: <https://www.hhs.gov/sites/default/files/uac-program-fact-sheet.pdf>
- Sphere. Sphere handbook: humanitarian charter and minimum standards in humanitarian response. 2018.
- Minnesota. Objectives and goals: writing meaningful goals and SMART objectives [website]. n.d.
- Tellez D, Tejkl L, McLaughlin D, *et al*. The United States detention system for migrants: patterns of negligence and inconsistency. *J Migr Health* 2022;6:100141.
- Department of Homeland Security, Office of the Inspector General. Many factors hinder ICE's ability to maintain adequate medical staffing at detention facilities. 2021;29. Available: <https://www.oig.dhs.gov/sites/default/files/assets/2021-11/OIG-22-03-Oct21.pdf>
- Southern Poverty Law. Prison by any other name: A report on south florida detention facilities. 2019. Available: <https://www.splcenter.org/>

- 20191209/prison-any-other-name-report-south-florida-detention-facilities [Accessed 20 Feb 2022].
- 19 National Immigrant JusticeLives in peril: how ineffective inspections make ICE complicit in detention center abuse. 2015.
  - 20 Department of Health and Human Services Office of the Inspector General. Southwest key programs did not always comply with health and safety requirements for the unaccompanied alien children program. 2019. Available: <https://oig.hhs.gov/oas/reports/region6/61707005.pdf>
  - 21 Department of Homeland Security, Office of the Inspector General. CBP needs to strengthen its oversight and policy to better care for migrants needing medical attention. 2021. Available: <https://www.oig.dhs.gov/sites/default/files/assets/2021-07/OIG-21-48-Jul21.pdf>
  - 22 Saadi A, De Trinidad Young M-E, Patler C, *et al.* Understanding US immigration detention: reaffirming rights and addressing social-structural determinants of health. *Health Hum Rights* 2020;22:187–97.
  - 23 Venters HD, Keller AS. The immigration detention health plan: an acute care model for a chronic care population. *J Health Care Poor Underserved* 2009;20:951–7.
  - 24 Saadi A, Patler C, De Trinidad Young ME. Cumulative risk of immigration prison conditions on health outcomes among detained immigrants in california. *J Racial Ethn Health Disparities* 2022;9:2518–32.

## **Supplementary Information**

**Appendix 1.** Complete coding framework for detention standards

**Appendix 2.** Areas by criticality



**Appendix 1. Complete Coding Framework for Detention Standards**

<b>Category (n=5)</b>	<b>Subcategory (n=12)</b>	<b>Area (n=56)</b>
Health	Medical care	Medical evaluation
Health	Medical care	Mental health screening
Health	Medical care	Access to health services within facility
Health	Medical care	Referral and transfers
Health	Medical care	Access to mental healthcare and psychosocial support
Health	Medical care	Care for migrants with chronic/serious illnesses
Health	Medical care	Care for migrants with pre-existing mental illness
Health	Medical care	Communicable disease and infection control
Health	Medical care	Access to health information
Health	Medical care	Translation/interpretation services
Health	Medical care	Examination area guidelines
Health	Medical care	Medical housing
Health	Medical care	Pharmaceutical management
Health	Medical care	Medical personnel
Health	Medical care	Substance use
Health	Medical care	Dental screening
Health	Medical care	Monitoring and evaluation
Health	Medical care	Emergency services

Health	Medical care	Privacy/chaperones
Health	Medical care	Continuity of care
Health	Medical care	Informed consent and confidentiality
Health	Medical care	Tele-health
Health	Medical care	Guidelines for terminal illness, death, advance directives
Health	Self-harm and suicide protection	Monitoring and care of migrants at risk of self-harm
Health	Self-harm and suicide protection	Regulations on solitary confinement
Health	Self-harm and suicide protection	Involuntary administration of psychotropic medications
Health	Self-harm and suicide protection	Use of restraints (SHSP)
Health	Self-harm and suicide protection	Post-discharge suicide watch guidelines
Health	Self-harm and suicide protection	Guidelines following suicide attempt
Health	Sexual and reproductive health	Gender-sensitive services
Health	Sexual and reproductive health	Family planning counseling and contraception
Health	Sexual and reproductive health	Pregnancy care
Health	Sexual and reproductive health	Use of restraints (SRH)
Health	Sexual and reproductive health	Access to abortion
Health	Sexual and reproductive health	Mental health care for post-partum, miscarriage, or termination of pregnancy
Hygiene	Environmental health and safety	Facility cleanliness
Hygiene	Environmental health and safety	Safety guidelines
Hygiene	Personal hygiene items	Access to clean clothing and/or linens
Hygiene	Personal hygiene items	Access to personal grooming

Hygiene	Bathing and toilet facilities	Access to toilets and/or showers
Shelter	Accommodations	Space allotted per migrant in living quarters
Shelter	Accommodations	Hold room guidelines
Shelter	Detention limitations	Maximum length of detention
Food and nutrition	Food service	Number and type of meals
Food and nutrition	Food service	Medical diets and snacks
Food and nutrition	Food service	Religious diets
Food and nutrition	Food service	Food safety
Food and nutrition	Nutrition	Nutrition plans/analysis
Food and nutrition	Nutrition	Infant/child nutrition
Protection	Protections for vulnerable populations	Protections for unaccompanied children
Protection	Protections for vulnerable populations	Protections for family units
Protection	Protections for vulnerable populations	Protections for LGBTQI migrants
Protection	Protections for vulnerable populations	Protections for the elderly
Protection	Protections for vulnerable populations	Protections for differently abled migrants
Protection	Protections against sexual violence and exploitation	Protections for sexual abuse and violence
Protection	Protections against sexual violence and exploitation	Protections for trafficking and torture

**Appendix 2. Areas by Criticality**

<b>Critical (n=20)</b>	<b>Essential (n=30)</b>	<b>Supportive (n=6)</b>
Access to abortion	Access to clean clothing and/or linens	Examination area guidelines
Access to health services within facility	Access to health information	Gender-sensitive services
Access to mental healthcare and psychosocial support	Access to personal grooming	Hold room guidelines
Care for migrants with chronic/serious illnesses	Access to toilets and/or showers	Privacy/chaperones
Care for migrants with pre-existing mental illness	Continuity of care	Religious diets
Communicable disease and infection control	Dental screening	Safety guidelines
Emergency services	Facility cleanliness	
Guidelines following suicide attempt	Family planning counseling and contraception	
Infant/child nutrition	Food safety	
Informed consent and confidentiality	Guidelines for terminal illness, death, advance directives	
Involuntary administration of psychotropic medications	Maximum length of detention	
Medical diets and snacks	Mental health care for post-partum, miscarriage, or termination of pregnancy	
Medical evaluation	Monitoring and evaluation	
Medical housing	Number and type of meals	
Medical personnel	Nutrition plans/analysis	
Mental health screening	Pharmaceutical management	
Monitoring and care of migrants at risk of self-harm	Post-discharge suicide watch guidelines	
Pregnancy care	Protections for differently abled migrants	
Protections for sexual abuse and	Protections for family units	

violence		
Protections for trafficking and torture	Protections for LGBTQI migrants	
	Protections for the elderly	
	Protections for unaccompanied children	
	Referral and transfers	
	Regulations on solitary confinement	
	Space allotted per migrant in living quarters	
	Substance use	
	Tele-health	
	Translation/interpretation services	
	Use of restraints (SHSP)	
	Use of restraints (SRH)	