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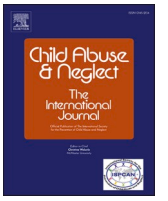

Children's out-of-home care in Finland, 1993–2020: lifetime risks, expectancies, exit routes, and number of placements for synthetic cohorts

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A B S T R A C T

Background: Population level studies rarely include multiple dimensions of the out-of-home care (OHC) experience, which are important for understanding the nuanced experiences of children and families. Multiple dimensions of OHC journeys can be measured without birth cohort data using the synthetic cohort approach, which summarizes contemporary risks of OHC for a synthetic cohort.
Methods: We use register data on all children born in Finland in 1980–2020 ($n = 2{,}747{,}803$) and link them with the Register of Child Welfare (OHC episodes $n = 305{,}045$). We fit discrete-time multistate models to estimate the lifetime risks, expected duration, exit routes, and number of home-to-OHC transitions for synthetic cohorts, that is, cohorts experiencing risks observed in a given calendar year across their childhood. We use these metrics to describe OHC development in Finland from 1993 to 2020.
Results: The lifetime risk from birth to age 18 of any OHC entry increased from 2.6 % in 1993 to 5.7 % in 2020, with the largest increases occurring in residential care (from 1.7 % in 1993 to 4.8 % in 2020). Among children who entered care, the expected duration decreased from 4.2 to 3.5 years and the chances of returning from OHC to home by age 18 increased from 32 % to 44 % over this period. In 2020, there were 1.8 home-to-OHC transitions per person ever in OHC.
Conclusion: For the synthetic cohorts of 1993–2020, the lifetime risk of entry into OHC increased two-fold and the lifetime risk of entry into residential care three-fold. Despite international declarations of intent to prioritise family-based care, increasing numbers of children are being placed in residential care in Finland.

1. Introduction

The placement of children in out-of-home care (OHC) is the state intervention of last resort for safeguarding a child's healthy development. It has been estimated that in the European Union, around 750,000 children are in OHC at any given point in time (Herczog et al., 2021). A child is placed outside their home in exceptional circumstances which endanger the healthy development of the child. These circumstances are complex and always unique but may arise either directly or indirectly from caregiving environments, in the form of direct parental abuse, or alternatively or additionally in the form of child's mental health or behavioural problems, which potentially reflect issues in the caregiving environment (Herczog et al., 2021). Children placed in OHC are at higher likelihood of having adverse health and social outcomes later in life, such as early mortality, school dropout, and mental health issues

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(Almquist et al., 2020; Brännström, Forsman, et al., 2020; Brännström, Vinnerljung, & Hjern, 2020; Jackisch et al., 2019; Seker et al., 2022) but it is unclear to what extent these outcomes reflect the underlying reasons for placements. The effects of OHC intervention on adult outcomes is an active area of research but difficult to estimate due to strong selection to placements and potentially heterogenous effects of the intervention on different outcomes (Bald et al., 2022; Helénsdotter, 2025; Doyle, 2007).

An OHC episode implies that child protection services have assessed that the children are endangered by their living environment. In the context of this study, the Finnish child welfare act (417/2007) states that a child can be placed outside their home when all other child protection measures have been exhausted, and the child's health and development continue to be deemed endangered due to either their caregiving environment or their own behaviour. At the population level, the levels OHC may thus signal serious dysfunction of families with children. At the same time, however, OHC trends at the aggregate level are influenced by the extent to which child welfare issues are identified, by thresholds for interventions, and by larger child welfare policies.

Monitoring OHC at the population level is important yet challenging task because it is not straightforward how OHC should be measured. OHC journeys are dynamic in nature; care episodes differ by length, legal basis and type of care, and children may experience multiple episodes and thereby more than one transition from home-to-OHC and back to home. The official statistical agencies often report the number of episodes per year or the proportion of children in care at a given point in time (Herczog et al., 2021). But such measures cannot be used to assess the length, exit routes, or stability of the care the children experience, all of which are relevant aspects of the OHC system. Actual birth cohort-based measures, which follow the complete life course of the people born in the same year, such as the number of days placed or the cumulative incidence of placements for actual birth cohorts, may be used for these purposes (Jay et al., 2022; O'Donnell et al., 2016; Rouland & Vaithianathan, 2018, pp. 1998–2015; Ubbesen et al., 2015). But these measures require that the complete childhood of the children are already observed and therefore do not necessarily reflect the current state of family wellbeing and the child welfare system.

To overcome these methodological issues, a synthetic cohort is a useful tool for monitoring OHC at the population level. Synthetic cohorts, which are, for example, used to calculate period life expectancies, are imaginary cohorts who live through their lives with the age-specific risks of events observed in a given period (Esposito et al., 2024; Sabol et al., 2004; Wildeman & Emanuel, 2014, pp. 2000–2011; Yi et al., 2023, pp. 2015–2019). In contrast to a birth cohort analysis, which requires the observation of complete life courses, a synthetic cohort analysis only requires data on the probabilities of transitioning into and out OHC by age at one time point, in this case calendar year. The childhood of synthetic cohorts is simulated as if their entire childhood were lived under the conditions of a single calendar year. This is done by calculating the OHC transition probabilities observed at each age group in that year and subsequently applying these probabilities to the childhood of the synthetic cohort. For example, the synthetic cohort of 2020 will experience at each age of their childhood the transition probabilities observed among those aged 0, 1, 2, 3, and so on, in 2020. The synthetic cohort approach provides a useful snapshot of the OHC system because it summarizes the conditions at a given time point, net of age compositions, and allows for the standardised comparison of changes over time and across populations, even with changing age structures.

Previous studies have calculated the lifetime risk of OHC entry for synthetic cohorts using one-dimensional period life tables (Sabol et al., 2004; Wildeman & Emanuel, 2014, pp. 2000–2011; Yi et al., 2023, pp. 2015–2019), but no other metrics.[1] Other metrics can be calculated using a multistate approach, which considers important, yet often neglected, dimensions of OHC at the population level, such as the average time spent in care. However, to the best of our knowledge, no previous studies have assessed OHC within the individual-level multistate framework.

In this study, we use multistate modelling to derive metrics that describe the OHC journey at the population level: lifetime risks of entry, expected duration, exit routes, and number of home-to-OHC transitions. We use these metrics to describe the evolution of OHC in Finland for the synthetic cohorts of 1993–2020. While the country has been applauded for its child and family-friendly social policies, the annual number of children who spent at least one day in OHC increased from some 6000 to 17,000 over the 1990–2020 period (Forsell et al., 2024), and the rate of entry into OHC is currently higher than it is in peer countries, such as Norway (Nordic Health and Welfare Statistics, 2025; Timonen-Kallio, 2023). In 2023, of children in OHC, some 48 % were in foster families, which includes kinship care, other foster parents and professional foster homes (a form of foster care where the foster parents have professional expertise), 49 % in residential care and the rest in other care forms, which do not fall under foster or residential care (Forsell et al., 2024). It is important to acknowledge that these types of care differ in their living environments. Foster family care is the preferred care type for being the most home-like environment whereas in residential care, up to 24 children can live simultaneously in the same unit. The details of the system are provided in the open access documentations in English provided by the Central Union for Child Welfare (lastensuojelu.info, 2025).

2. Data and methods

We combine individual-level data on OHC using Finnish registers. We link socio-demographic data obtained from Statistics Finland with the Register of Child Welfare (Child welfare—THL, 2023), maintained by the Finnish Institute for Health and Welfare, using unique personal identification numbers that are pseudonymised for the analysis. For data protection reasons, we only have information on month and year of birth; therefore, we assume that the first day of the birth month is the date of birth. The use of the data for research purposes has been approved by the Ethics Committee of Statistics Finland (TK/3343/07.03.00/2023) and Findata (THL/

[1] In this paper we use the term "risk" purely in statistical context, not equating it to a risk of "harm".

5674/14.06.00/2023).

We limit our analysis to Finnish-born individuals under 18 years old who were residing in the country at any point in time between 1993 and 2020 ($N = 2{,}747{,}803$). We do not include people born abroad because the exact time when such individuals were at risk of OHC episode is unknown to us.

The information on OHC is obtained from the Register of Child Welfare, and consists of the start and end dates of the care episodes, the types of care provided, and the legal basis for the placement. In Finland, children can be placed in a foster family, residential care, or another care facility as an emergency, voluntary, or involuntary placement (Child welfare services, n.d.; Pösö & Huhtanen, 2016). We provide our key results by both care type and the legal basis for the placement. We only consider episodes in which the person placed in care was under 18 years of age. An episode with the same start and end date is considered a one-day episode, an episode ending the next day is considered a two-day episode, and so on. We censor individuals at age 18, death, emigration, or the end of 2020, whichever came first. After excluding overlapping days (6832 days, with priority given to the episode with a later starting date, assuming that this is the up-to-date record), these data consist of a total of 129,613,238 out-of-home care days.

Then, we classify each individual as being in home care or OHC on each day from their birth date to their 18th birthday, date of emigration, end of the study period, or date of death. The OHC state is further divided into the type of care and, in a separate analysis, the legal basis for the placement. To follow internationally comparable classifications (Herczog et al., 2021), the care type is divided into foster family care, residential care, and other. The legal basis is divided into emergency, voluntary (which also includes placement as a support measure for open care), and involuntary placements (Child welfare services, n.d.; Pösö & Huhtanen, 2016). We note here that in some cases, the family may not agree with an emergency placement. In our analysis, except for the number of episode calculations, we reduce the size of these data by taking the state of each person on every 10th day of the observation period. This is done to keep our analysis computationally feasible.

3. Methods

We use discrete-time multistate modelling (Dudel, 2021) to calculate the lifetime risks of OHC entry, expectancies in and out of OHC, exit routes, and number of episodes for the synthetic cohorts of 1993–2020. Multistate models are extensions of survival analyses in which individuals can move over time across multiple states. In OHC research, such states may include home, OHC, and death. The added value of using multistate modelling with synthetic cohorts is that this approach can provide period-based summary measures relating to multiple states, without observing the complete life course of the actual birth cohorts. In multistate modelling, children have a certain probability of moving from home-to-OHC, and from OHC to home. These probabilities are then summarised into meaningful metrics using Markov chain models.

The first step of the modelling is to estimate the probabilities. We start by fitting multinomial logistic regression models in which we predict the transition probabilities of moving in and out of the OHC states, defined by the used state spaces, and of mortality by age. Inspecting empirical probabilities showed complex relationship between the OHC transition probabilities and age. For this reason, we decided to use linear age splines in the models, which allowed flexible relationships between the predicted probabilities and age. We place the spline knots at ages 3, 6, 14, and 17. These knots are chosen based on the empirical probabilities, previous findings of the risk of OHC (Ristikari et al., 2018) and the fact that they showing significance in most of the models. We fit separate models for moving in and moving out of OHC to allow for varying age-specific transitions probabilities. We then use these age- and year-specific transition probabilities in Markov chain multistate models to calculate the metrics described below. These metrics are calculated under the Markov assumption, i.e., the likelihood of transitioning to a specific state depends on the present state only. We discuss the plausibility of this assumption in the limitations section of the paper.

We calculate four metrics that describe different aspects of the OHC journey. All these metrics can be interpreted as corresponding to the average life course of the synthetic cohorts. First, the lifetime risk of OHC episode is measured by the share of individuals in the synthetic cohort who experience a placement at least once during their childhood. The state space for this estimation, which is shown in Supplementary Fig. 1, included additional absorbing post-OHC home state, which ensured that the first entry probabilities were not inflated by the re-entry probabilities, which are substantially higher (as shown in Table 1). Ignoring this would have led to overestimation of the lifetime risks (discussed e.g. in (Esposito et al., 2023)). The second set of metrics reflect state expectancies, that is, the average time individuals in the synthetic cohort spend in a given state during their childhood. These metrics, which we call expected duration of care, are calculated by the care type and by the legal basis for the placement. We calculate the expected duration for children ever experiencing an OHC episode, and average them for the total population (State space in Supplementary Fig. 2). The expected duration among children experiencing at least one episode is calculated by dividing the population average expected duration by their lifetime risks. For the lifetime risks and expected duration metrics we fit separate models for the type and the legal basis by including the types of placements as separate spaces across which individuals can move. This is to say that the modelling

Table 1
The number of transitions and crude transition probabilities to out-of-home care (OHC) observed in 1993–2020. Time unit is 10 days.

Transitions	Number of transitions	Transition probability per 10 days
Home-First OHC	78,248	0.000073
OHC-Home	98,834	0.011
Home-OHC (Re-entry).	50,130	0.0046

considers placement changes within the OHC system, for example from foster family to residential care or from emergency to voluntary episode. In these latter models, we use simpler age functions due to data scarcity.

Third, we calculate the distribution of the OHC exit routes, that is, the risks of experiencing different states following the first episode. We divide the exit routes into: (1) aging out of the system (no states other than the OHC after the first entry; this group also includes the negligible share of individuals who die in OHC); (2) home return without re-entry (at least one home state after the first entry); and (3) home return with later re-entry (at least one home state followed by a new OHC state after the first entry). The state space for calculating these metrics, shown in supplementary fig. 1, included separate spaces for home after first and second OHC episode and separate spaces for second OHC episode. These additional absorbing state spaces were needed to make sure that the current state is the most predictive of the subsequent state.

Finally, we calculate the number of home-to-OHC transitions that the synthetic cohorts on average experience. We calculate these numbers conditionally on having at least one episode by dividing the total population average by the lifetime risk. In this analysis, an episode on the day of exit of a previous episode, or on the next day, is not a new episode, but is a transition within OHC, and is therefore not taken into consideration. For these analyses, we extend the state space by including as a new state the first OHC day after home and use the average expectancy of this state as a measure of the number of home-to-OHC transitions (Supplementary Fig. 3). Unlike the first two metrics, this metrics do not consider new placements within the OHC system, such as transitions from a foster family to a residential care facility. For multistate modelling we use dtms r package (Dudel 2025).

In an additional analysis of the drivers of changes in the expected duration in terms of changes over time in transition probabilities, we conduct a demographic decomposition of these expectancies at each age. We decompose the difference in the home expectancy, as the negative of expected OHC duration, between 1993 and 2020 using the Horiuchi decomposition (Horiuchi et al., 2008; Moretti et al., 2025) (for details, see the supplementary materials).

4. Results

The data consisted of around one billion person-time unit transitions from home to home and 74,248 transitions from home to the first OHC episode over the 1993–2020 period with the crude transition probability of 0.000073 per time unit of 10 days. The transition probabilities were substantially higher for those with a previous OHC episode.

These transition probabilities to the first OHC placement varied by year, age, and the nature of the placement (Fig. 1). In 2020, the risk of transitioning to any OHC was lowest at age six and was highest in the teenage years, when the probability of experiencing this type of transition was more than three times higher than it was at age six. The probabilities of transitioning from home to residential care and due to an emergency were substantially higher in 2020 than in 1993 and later years, particularly for individuals in their teenage years.

These age-specific first entry transition probabilities translated to an increase in the lifetime risk of entering OHC from 2.6 % to 5.7 % in the study period (Fig. 2). Broken down by care type, there was a two-fold increase in the lifetime risk of entering foster family care, a three-fold increase in the lifetime risk of entering residential care, and a three-fold increase in the lifetime risk of entering other care types. In terms of the legal basis for entry into care, the lifetime risk of being in an emergency placement increased 6-fold and the lifetime risk of being in a voluntary or an involuntary placement increased two-fold. Despite long term increases in the lifetime risk of entering OHC from 1993 to 2020, the synthetic cohort for 2020 shows a temporary decline in lifetime risk compared to the previous year, likely due to child protection system and social disruptions seen at the start of the pandemic.

Among those individuals who were ever placed in care, the expected total time spent in OHC over all placements decreased in the 1990s, then fluctuated and remained stable at 3–3.5 years in 2020 (Fig. 3). This conditional expected duration was highest in foster care (4.4 years in 2020) and was lower in residential care (1.5 years) and in other care types (0.8 years). By legal basis, the expected duration of those in care was highest in involuntary placements (4.6 years) and was lowest in emergency placements (0.3 years).

The expected duration for the total population (including for those never placed) increased from 0.11 years (39 days between ages zero and seventeen) in 1993 to 0.2 years (74 days) in 2020 (Supplementary Fig. 4). An increase was observed in both residential care (from 10 to 27 days) and foster family care (from 28 to 44 days). The expected duration due to emergency placement increased ten-fold (from 0.4 to five days). The decomposition analysis indicated that the increase in the overall expected duration was largely attributable to a higher probability of experiencing an emergency placement at all ages and of being placed in residential care in the teenage years (Supplementary Fig. 5). In terms of the contributions at different ages, a third of the increase can be attributed to more transitions to

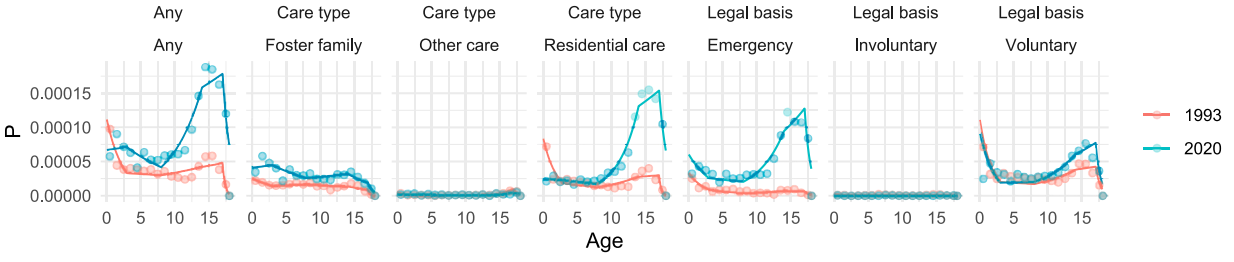

Fig. 1. Transition probabilities for first entry into out-of-home care. Observed probabilities, averaged over ages, and fitted lines from multistate models. Any form and by care type and legal basis for placement. Time interval is 10 days.

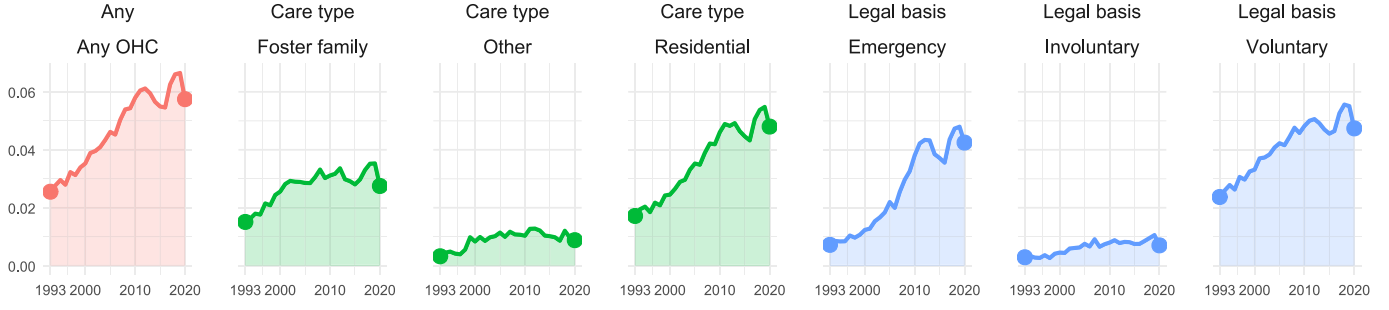

Fig. 2. Lifetime risks of entry into out-of-home care (OHC) by type of care and placement type for the synthetic cohorts of 1993–2020. Discrete multistate modelling. The Register of Child Welfare.

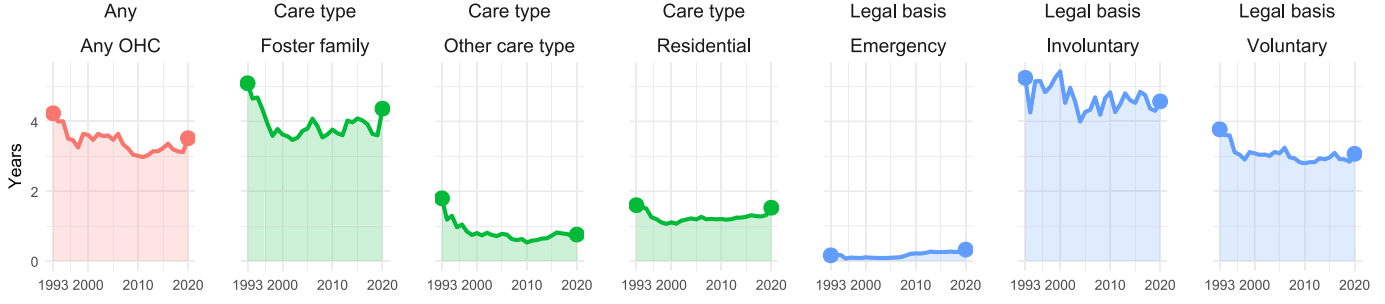

Fig. 3. Average expectancy in out-of-home care (OHC) among individuals entering care by type of care and placement type for the synthetic cohorts of 1993–2020. Discrete multistate modelling. The Register of Child Welfare.

OHC among children less than age of seven.

The most common exit route from the first OHC placement was a sustained home return, with the share of this exit route increasing from 32 % in 1993 to 44 % in 2020 (Fig. 4). In 2020, some 17 % of the synthetic cohort did not leave OHC before turning 18 or dying, down from 29 % in 1993. A home return with later re-entry accounted for 39 % of all exits. The conditional number of home-to-OHC transitions, a measure of stability, increased from 1.3 in 1993 to 3.2 in 2002, then decreased to 1.8 in 2020 (Supplementary Fig. 6).

5. Discussion

We described the evolution of OHC in Finland in 1993–2020 in terms of the lifetime risks of placement, expected duration, exit routes, and the stability of care. OHC is a key measure of child wellbeing but monitoring it is complicated, as children have different probabilities of entering, exiting, and re-entering the system at every age. These probabilities also differ by the nature of the care placement, the year of the placement, and their interactions. The multistate modelling we used provided a unified framework that summarised these numerous probabilities into meaningful metrics that described the average life course of a synthetic cohort, that is, a fictional cohort who lived their childhood under the current conditions. Using these metrics, we showed that over the past 30 years in Finland, the number of children who were placed in OHC in general and in residential care in particular increased, but the expected duration these children spent in care decreased. In addition, we found that over the study period, children became more likely to reunify with their families after their first care placement.

The experience of being placed in care, whether voluntarily or involuntarily, indicates trauma, poor child health, or behaviour problems. It is important to quantify the share of children likely to experience such an event. We estimated that the lifetime risk of being placed in OHC was 6 % in 2020, a two-fold increase from the early 1990s, which corresponds to previous birth cohort-based estimates for the 1997 birth cohort (Ristikari et al., 2018). Our estimate is also in the ballpark of a US study, which estimated a lifetime risk of 5 % in a synthetic cohort of 2016 (Yi et al., 2020) and UK and Canadian actual birth cohort studies reporting similar numbers (Esposito et al., 2023; Jay et al., 2022). A more recent study with similar methodology indicated that the lifetime risk varied across the US states from 2 % to 18 % (Yi et al., 2023, p. 18). However, our lifetime risk estimate was higher than that of a Danish study, which reported a lifetime risk of 3 % in 2010 (Fallesen et al., 2014). We suspect that this difference reflects the distinct nature of the Finnish system in which increasing numbers of teenagers are being placed in residential care.

However, focusing on the lifetime risk metric alone paints an incomplete picture because it does not consider the length of the episodes. We therefore calculated the expected duration of care for synthetic cohorts. In this study during the 30-year period, the expected duration declined among the children who ever entered care. This is not surprising given that the increase in the lifetime risk of entering care came to a large extent from an increased risk of entering residential care, which is intended for shorter periods and mostly concerns teenagers.

The expected duration averaged over the total population is a global measure of OHC, which can be decomposed into its components. We conducted a decomposition of this expectancy change between 1993 and 2020 to see which transitions (by care type and legal basis) at which ages explained the increase. The factors contributing to the decrease in the time children spent at home, and thus the increasing expected duration, were the increasing probability of transitioning to foster family care at all ages and the increasing probability of transitioning to residential care, particularly in the teenage years. While emergency placements constituted a marginal

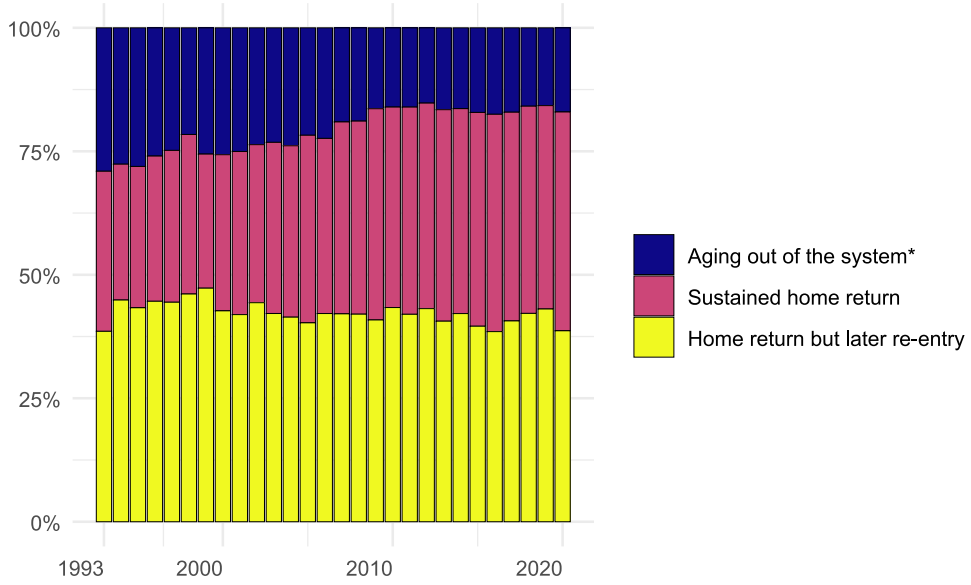

Fig. 4. Out-of-home care (OHC) exit routes among those entering OHC for the synthetic cohorts of 1993–2020. *Also includes individuals who left the system through death, but this proportion is negligible.

portion of the total expected duration, the expected duration due to emergency placements increased 10-fold during the period and contributed to the increasing expectancy, because children often entered the OHC system via this route, as shown in our decomposition analysis.

The child welfare law in Finland and international declarations view OHC as a temporary measure, and the care system aims to reunify families (UN. General Assembly, S, 2009). Indeed, our results suggest that the majority of children ever placed in OHC are likely to exit it before turning 18 years old (or dying). This share has been increasing. However, half of children who ever exit OHC will re-enter it. This raises questions about the efficacy of policies and interventions aimed at achieving long-term stability and wellbeing for these children.

Previous longitudinal studies have focused on exits and re-entries, but used sequence analysis (Mc Grath-Lone et al., 2020), trajectory modelling (Brännström et al., 2024), and hazard models to model family reunifications (Mc Grath-Lone et al., 2017). A longitudinal study found that one-third of English children exiting OHC re-entered within five years (Mc Grath-Lone et al., 2017). A Canadian study found that returns were less likely among those placed initially at younger ages (Esposito et al., 2014). A US study focused on placement changes using survival analysis and found that the likelihood of a placement change was linked to placement type (Jedwab et al., 2019). However, these studies relied on longitudinal or birth cohort data, which are often not available, or, when they are available, reflect the past rather than the current state of affairs. The added value of the synthetic cohort approach is in its use of period data to produce tangible metrics that can be used, for example, to illustrate the life course implications of sudden macro-environmental changes, similarly as life expectancy is used to monitor changes in mortality. This study demonstrated how the OHC system changed in the wake of the onset of the COVID-19 pandemic in 2020: the lifetime risk of entering OHC decreased, while the conditional expected duration increased. These insights could not have been obtained using previously employed longitudinal methods, which require long follow-up periods. As a method of summarizing age-specific OHC transition probabilities into a meaningful summary metrics, we suggest multistate modelling as additional method in future quantitative child welfare research.

The observed increase in the risks of entry into OHC are not just concerning, but are puzzling. While OHC should reflect child and family wellbeing, well-established risk factors of OHC, such as youth crime and alcohol consumption, have not changed dramatically (Näsi et al., 2024; Raitasalo et al., 2024). Moreover, no consistent trend is observed in Nordic countries despite the similarities in their welfare systems. In Denmark and Norway, OHC placements have remained stable or declined since 2012, the first year of comparable data available (Nordic Health and Welfare Statistics, 2025). Future research, both qualitative and quantitative and potentially also participatory research that engage experts from different fields as well as children and adolescents with an OHC experience and their families are needed to understand this increase.

There are several limitations. Our time-trend comparison is limited by the fact that previous placements cannot be observed prior to 1991. However, as some 95 % of two consecutive OHC episodes were within two years of each other, we are confident that the risks observed in 1993 are not affected by unobserved re-entries. These findings are limited by the fact that we did not have data whether a child moved from one foster family to another. There are no currently care provider register, which is to say we are unable to identify and separate different care facilities.

Our expected duration metrics rely on the Markov assumption, which implies that the transition probabilities across states are assumed to depend only on the current states, and not on the previous states. Previous research shows that OHC trajectories are influenced not only by their past placements but also by the length of care e.g. (Mc Grath-Lone et al., 2020). Similarly, our additional analysis showed that the likelihood of re-entry or return to home depends on whether the children have previous OHC episodes. When we calculated the lifetime risks and exit routes, we added additional absorbing state (post-OHC home). This implies that the clock starts at birth and the cumulated risk of ever experiencing an episode is computed so, by design, there is no history and therefore the Markov Assumption is not relevant for the lifetime risk measures. Moreover, while the Markov assumption is violated to some extent in our calculation of the expected durations, it has been shown that the bias arising from such violations is often small in practical applications, because the bias is averaged out in the calculation of average state expectancies (Shen & O'Donnell, 2024). It is important also to highlight here that our analysis assumes that the underlying child welfare register data is accurate. It is possible that some of the previous trends, such as increase in the home-to-OHC transitions in the early 2000 may be explained by the register data quality issues. Moreover, our findings are limited by the fact that we did not include the population born abroad. Finally, we were unable to calculate metrics that describe the number of transitions within the OHC system, for example from a foster family to another, as the available data lacked information on care provider identification numbers. Subsequent studies are needed to focus in detail on the placement stability using synthetic cohort methodologies.

6. Conclusion

The lifetime risk of OHC increased more than two-fold in Finland for the synthetic cohorts of 1993–2020. Among the children who entered OHC, the expected duration of care decreased and the exit routes to home increased. The increase in the expected duration of care, averaged over total population, increased due to placements of teenagers in residential care and emergency placements. Our headline finding is then that despite the international efforts and declarations of intent to prioritise family-based care, increased numbers of children are being placed in residential care in Finland.

CRediT authorship contribution statement

Aapo Hiilamo: Writing – review & editing, Writing – original draft, Software, Formal analysis, Data curation, Conceptualization. **Joonas Pitkänen:** Writing – review & editing, Resources, Methodology, Investigation. **Margherita Moretti:** Writing – review &

editing, Methodology, Formal analysis, Conceptualization. **Pekka Martikainen:** Writing – review & editing, Supervision, Resources, Investigation, Funding acquisition, Conceptualization. **Mikko Myrskylä:** Writing – review & editing, Supervision, Software, Resources, Project administration, Investigation, Conceptualization.

Ethics

The use of these data was approved by the ethical committee of Statistics Finland (TK/3343/07.03.00/2023) and Findata (THL/5674/14.06.00/2023). Researchers can access only pseudonymised data.

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Declaration of competing interest

The authors declare no conflict of interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.chiabu.2025.107626.

Data availability

The data that has been used is confidential.

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