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Mortality outcomes of children and young people in care in Scotland

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Background

- Currently around 12,500 children and young people in care in Scotland
- Reasons for entering care are varied
 - Many will have faced considerable trauma, adversity and stress
- For some, being in care is a positive experience leading to improved outcomes
 - Others will experience poorer outcomes affecting relationships, education, employment and physical and mental health outcomes
- Increased risk of early mortality. Recent review found
 - 2.5 times risk for all-cause mortality
 - Study specific estimates of 1.04 to 5.8 times
 - For suicide, the risk was more than 3 times

Aim

To examine mortality outcomes of a cohort of care experienced children and young people across Scotland

- Direct comparison to children and young people without experience of care
 - Look at all-cause mortality and mortality from internal and external causes
 - Effect of cohort characteristics on the relationship between care and mortality
 - Consider the type of care experienced
-
- Children's Health in Care in Scotland (CHiCS), a population-wide administrative cohort study

Children's Health in Care in Scotland (CHiCS)

Pupil Census 2009

Statistics on school pupil characteristics collected annually in state funded schools

663,601 pupils

Childrens Looked After Statistics 2009/10

Information about looked after children and the type of care

- Looked after at home
- In kinship care
- In foster care
- In residential care

13,830 in care

649,771 never in care

Birth Registrations

Vital Events

born 1990-2004

4-19 years in 2009

Death Registrations

Vital Events

deaths 2009-2016

11-26 years in 2016

Children's Health in Care in Scotland (CHiCS)

Pupil Census 2009

- Area of residence (SIMD 2009)
- Assessed disability (Yes/No)

Childrens Looked After Statistics 2009/10

- Episode
- Type of placement
- Length of placement
- Main disability

Birth Registrations

- Area of residence at birth (SIMD 2004)
- Maternal age
- Employment status at birth

Death Registrations

- Age at death
- Area of residence
- Underlying cause

663,601 pupils

13,830 in care

649,771 never in care

born 1990-2004

4-19 years in 2009

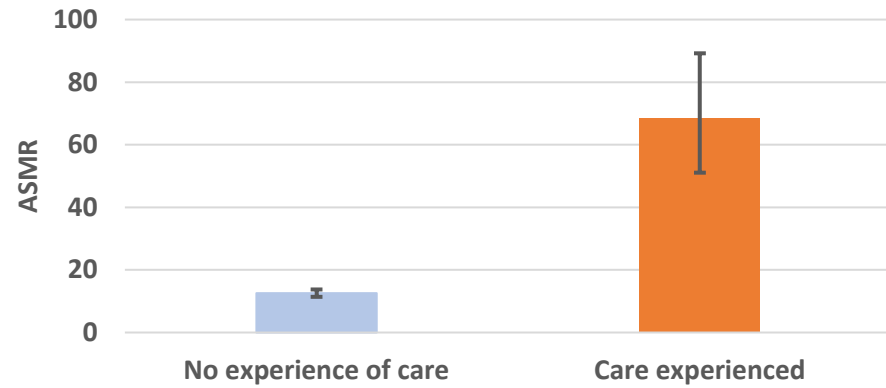
deaths 2009-2016

11-26 years in 2016

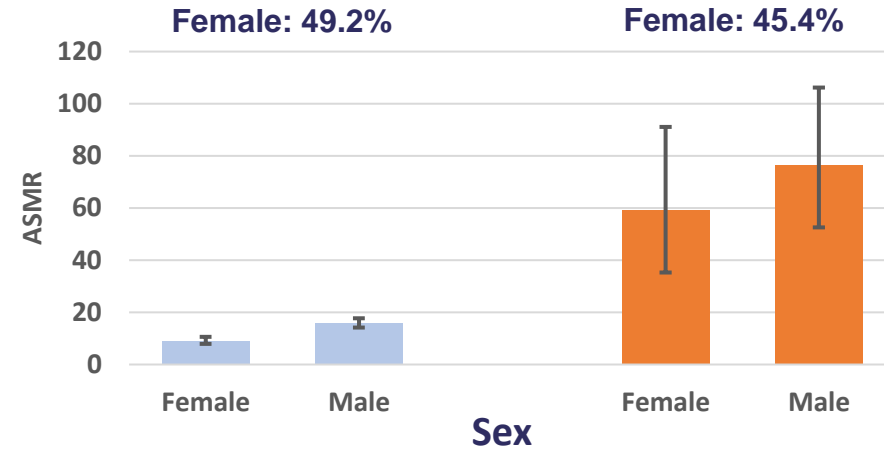
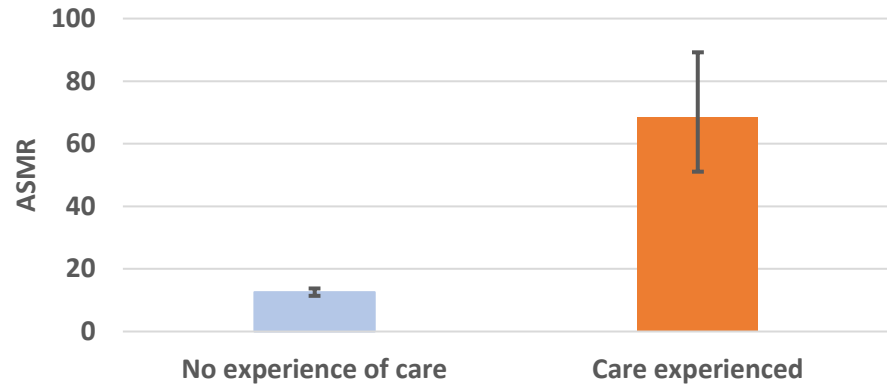
Mortality in children and young people

	No experience of care	Care experienced
N	649,771	13,830
Deaths	746	78
% (of N)	0.11	0.56
Leading causes	Accidents (24%)	Suicide (29%)
	Cancer (16%)	Accidents (27%)
	Suicide (16%)	Nervous system (10%)
External causes	41%	68%

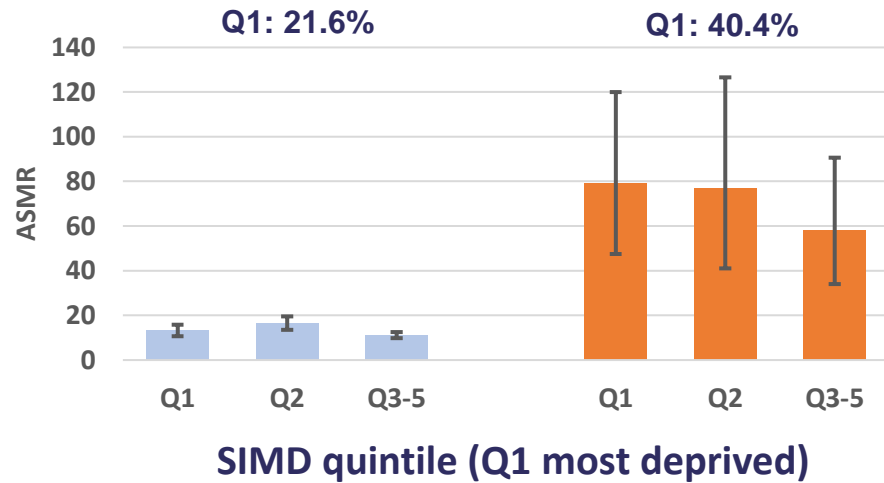
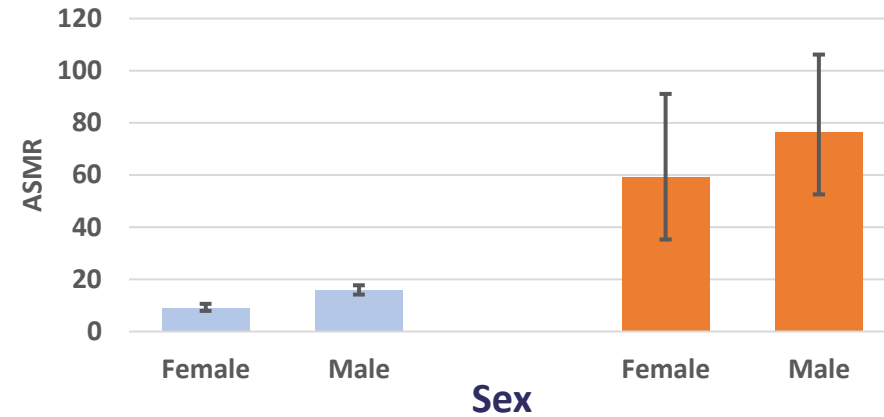
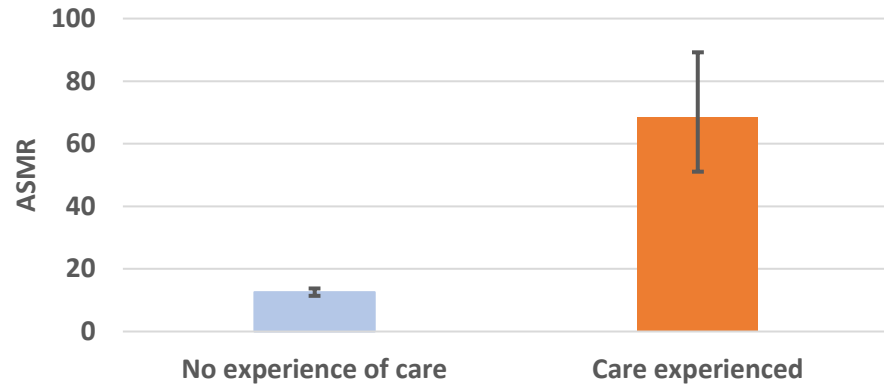
Age-standardised mortality rates (ASMR per 100,000 person-years)



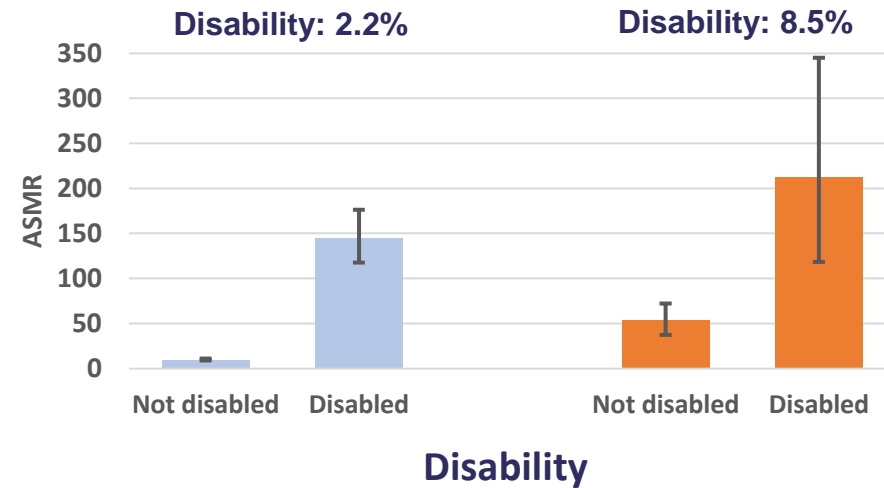
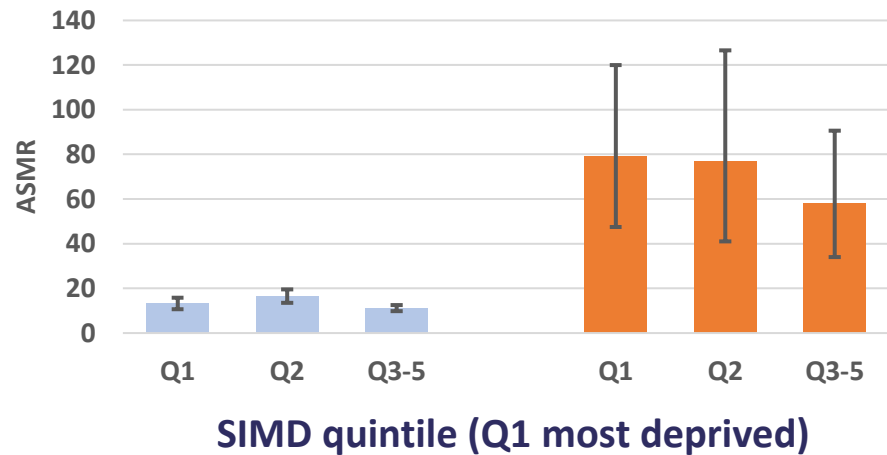
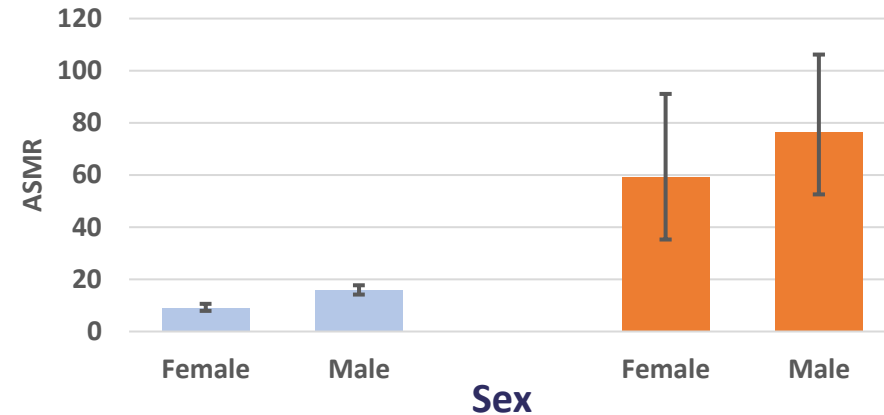
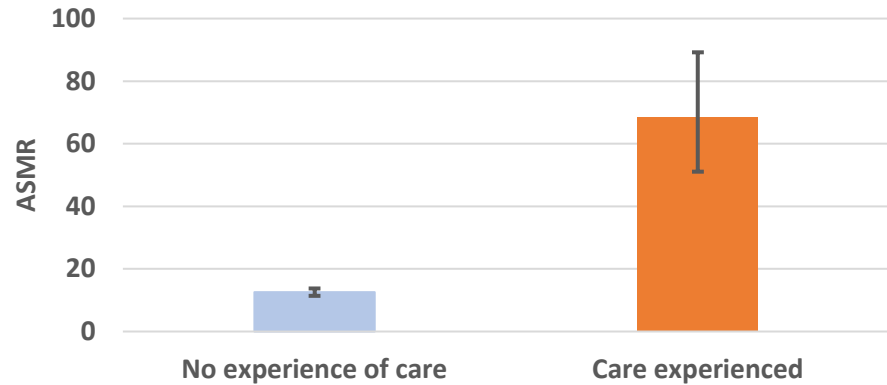
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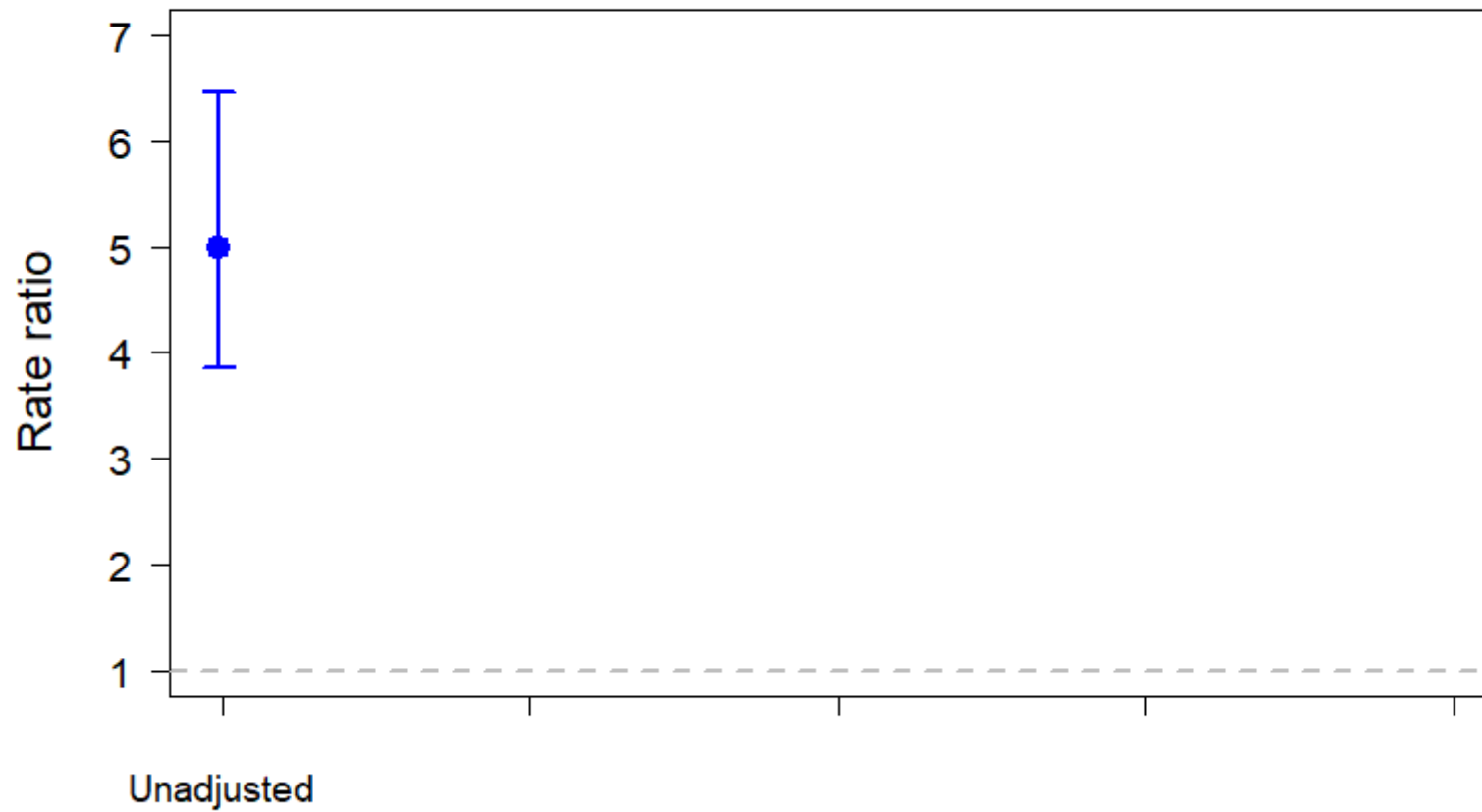
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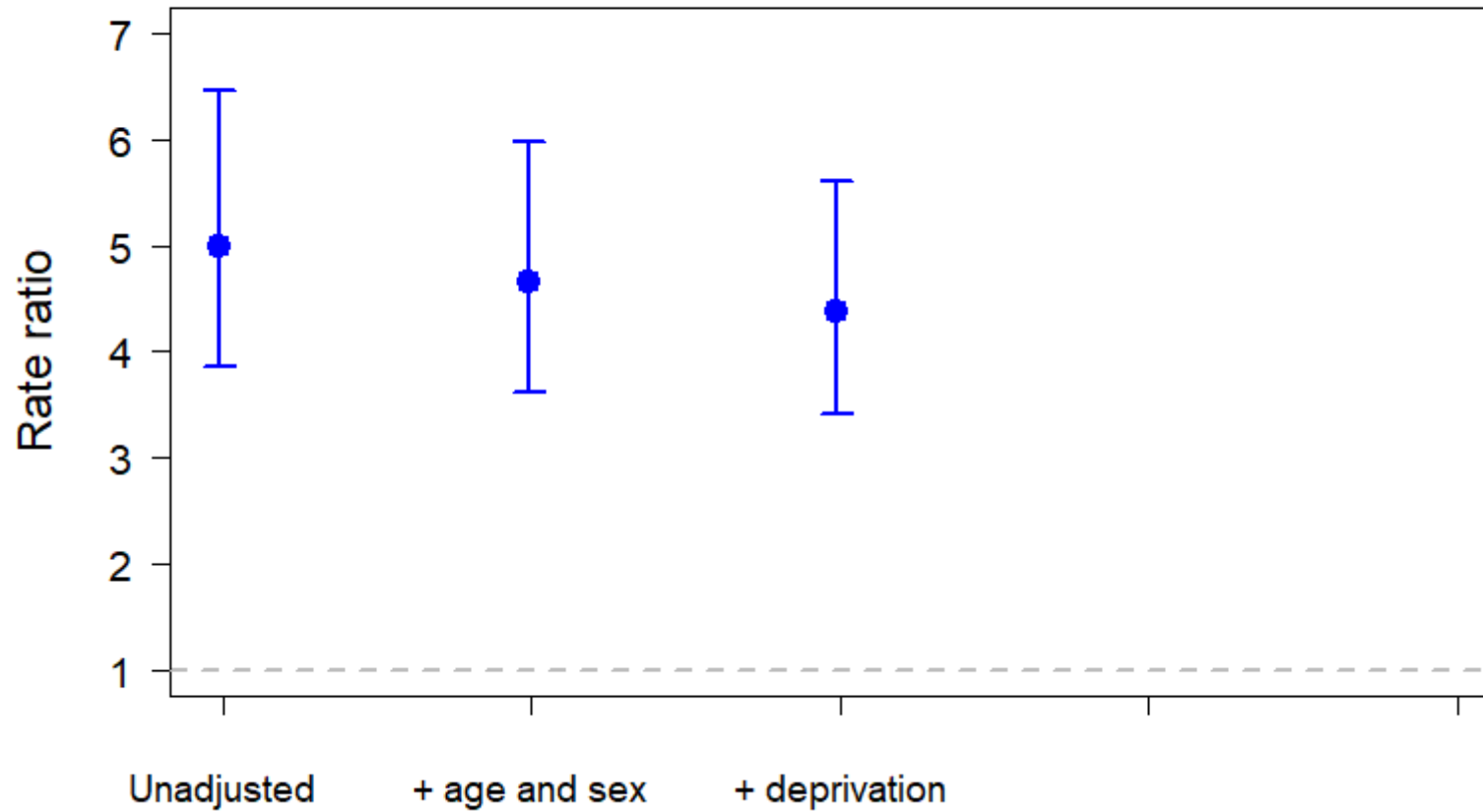
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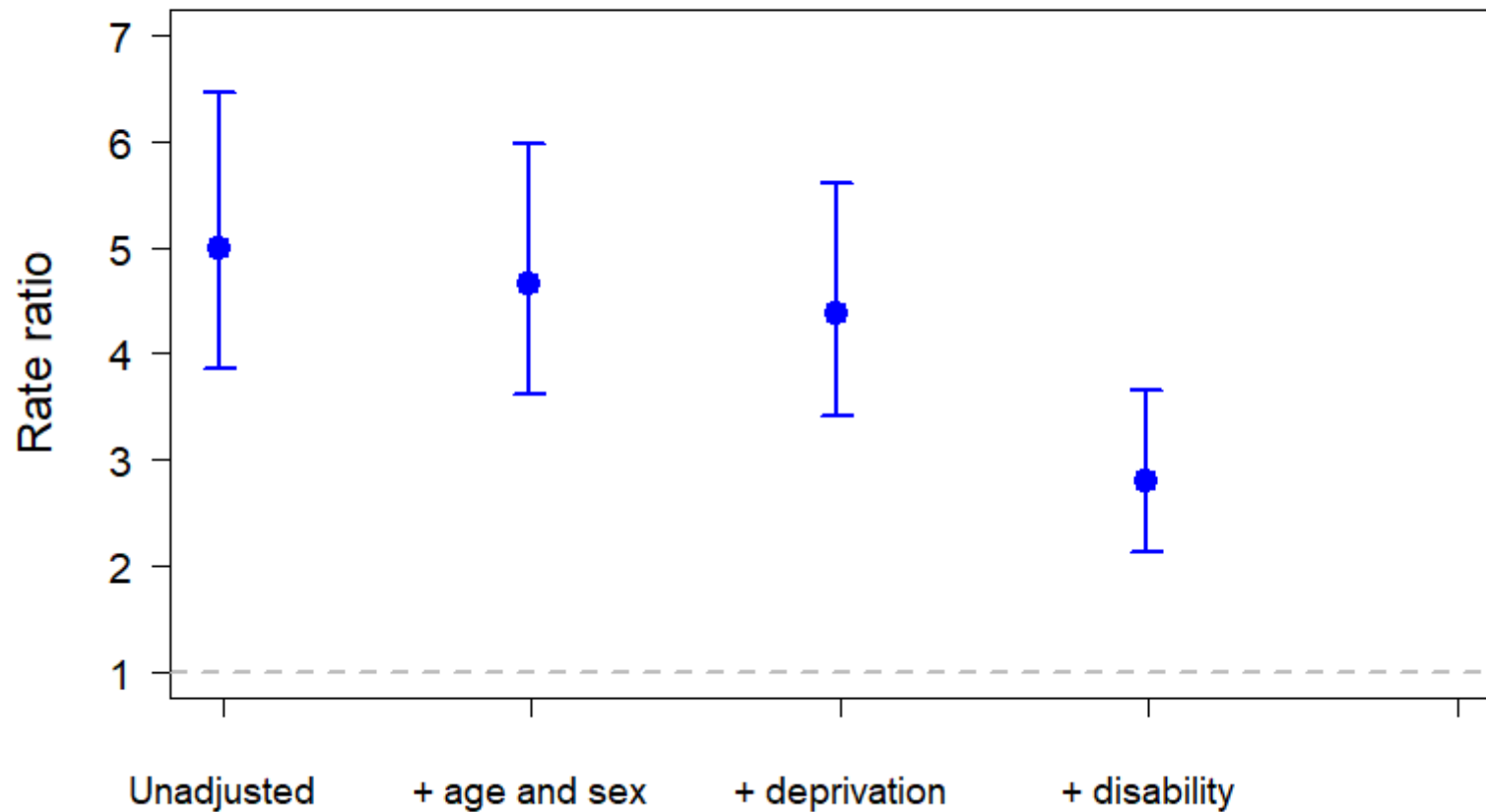
Rate ratio for all-cause mortality



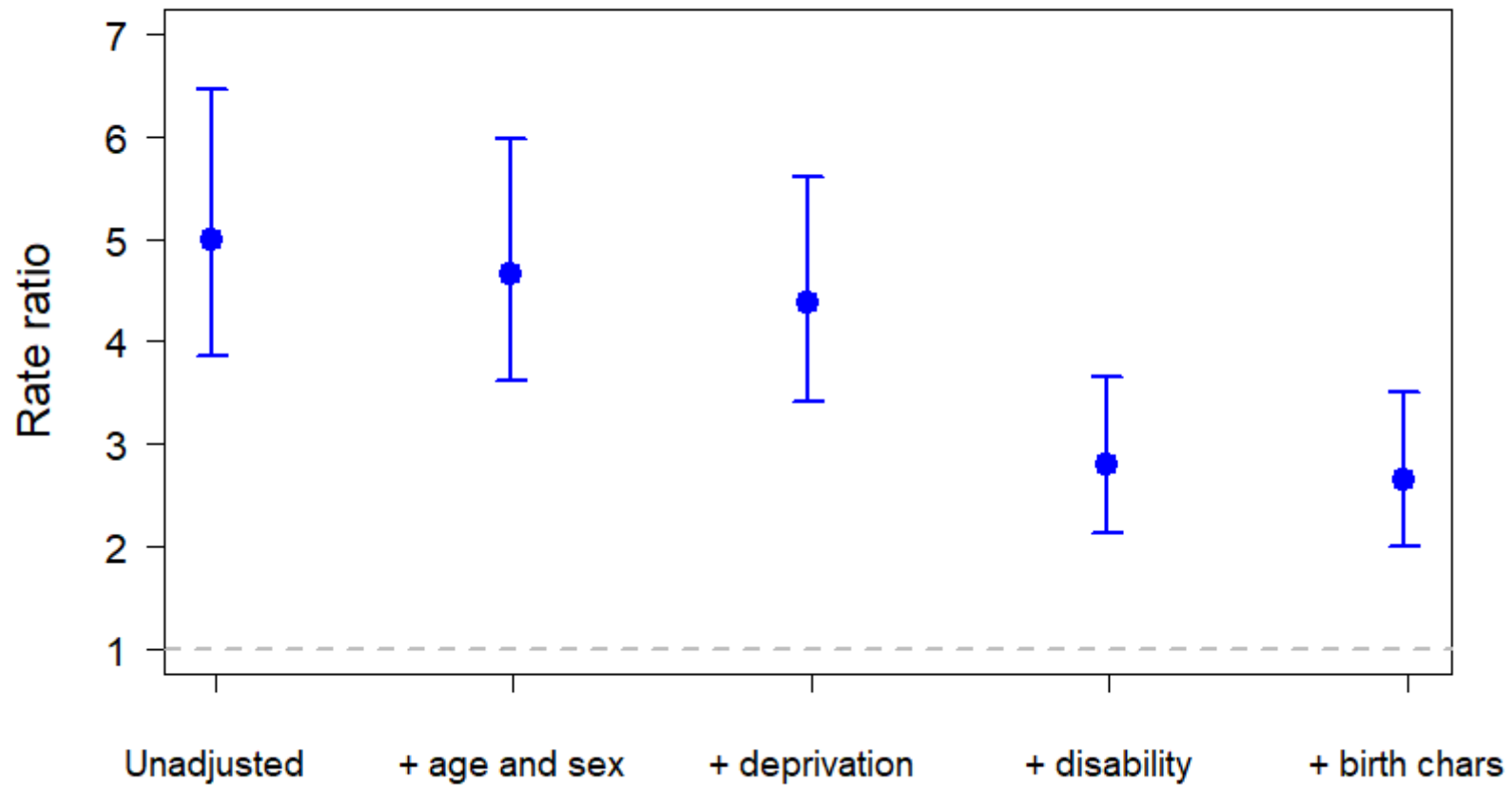
Rate ratio for all-cause mortality



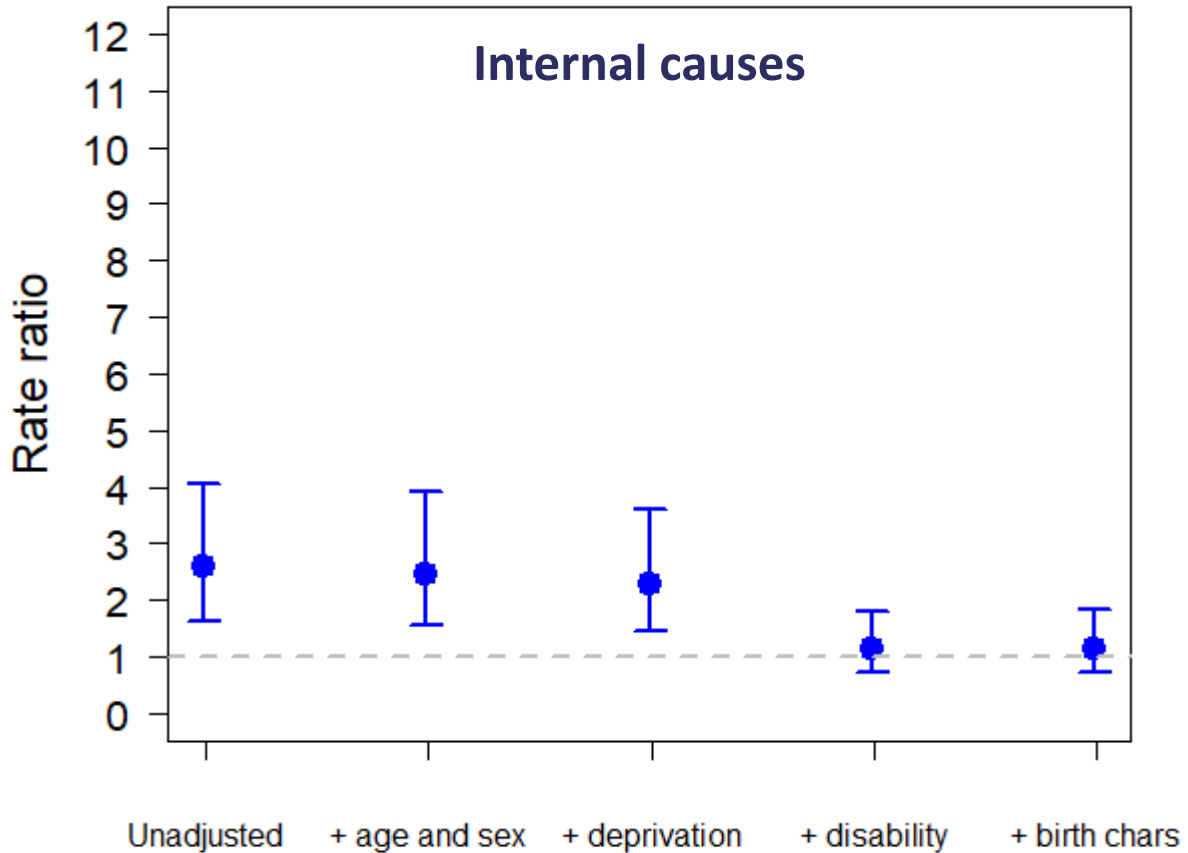
Rate ratio for all-cause mortality



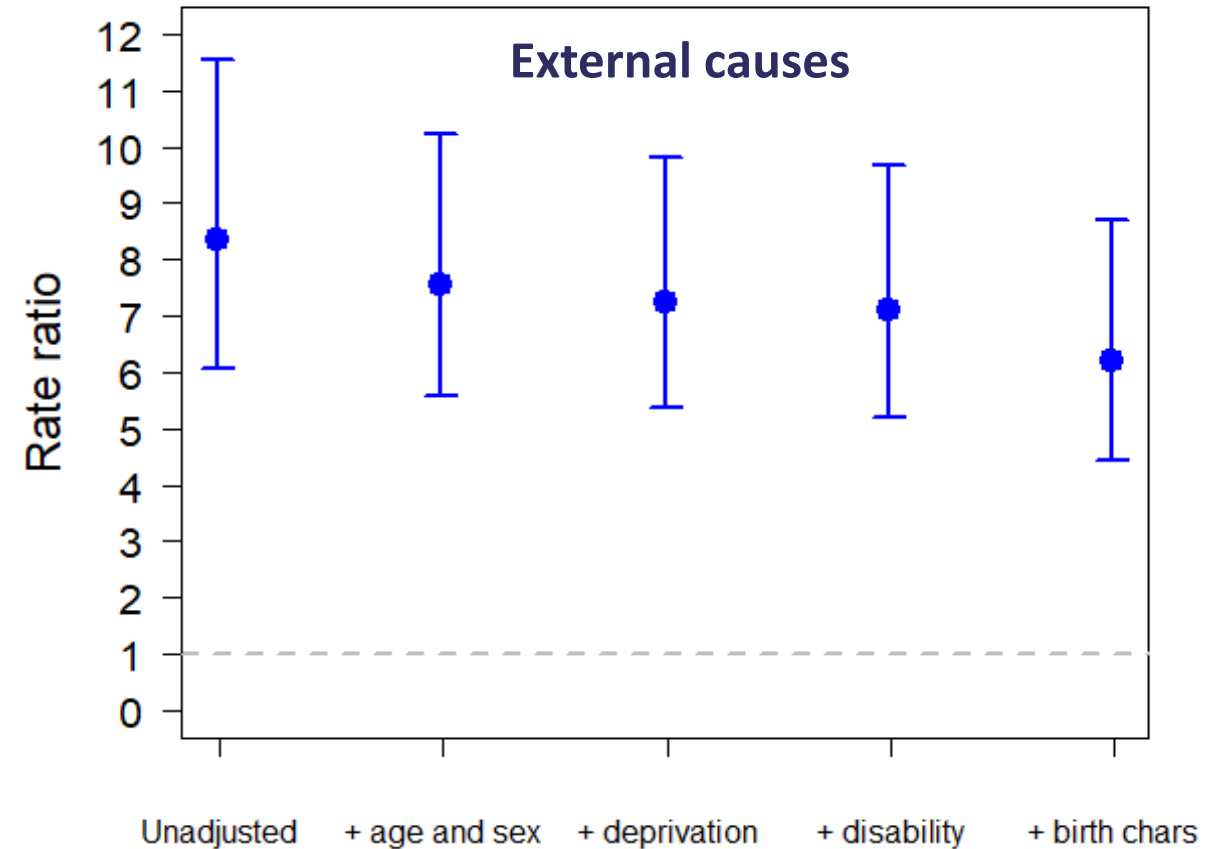
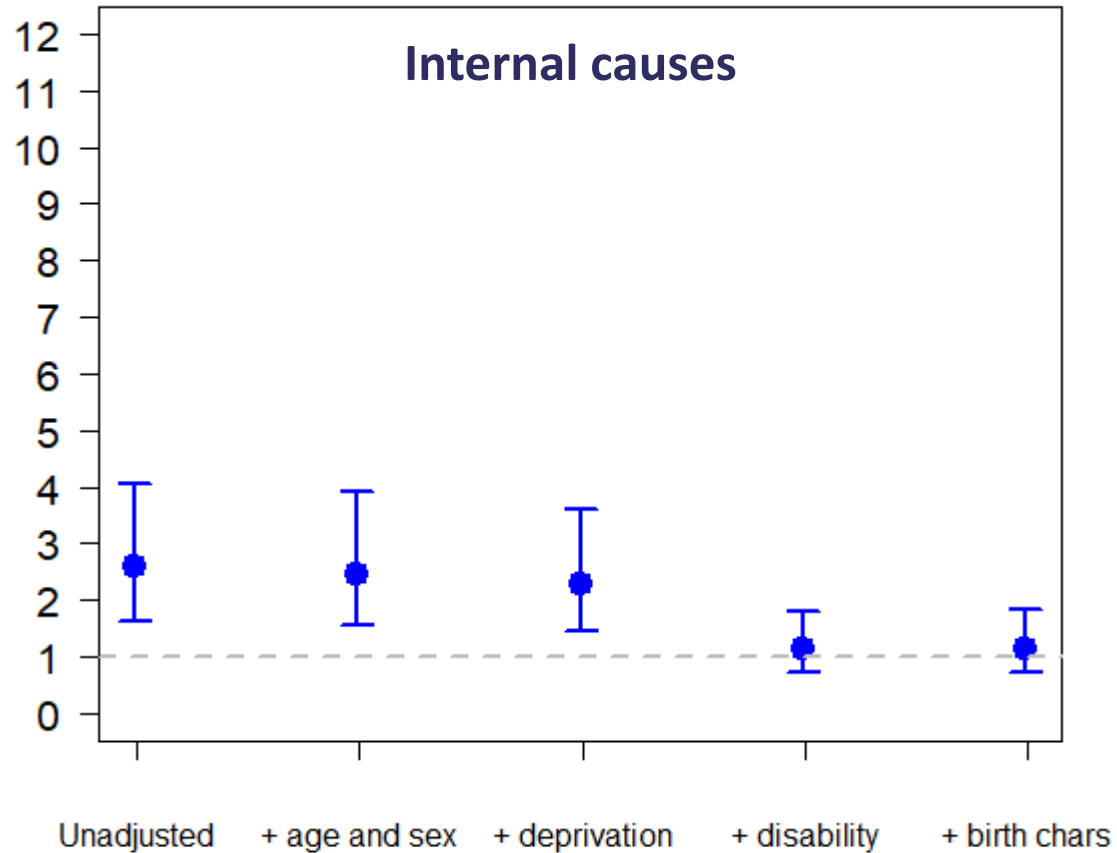
Rate ratio for all-cause mortality



Rate ratio for internal causes of mortality



Rate ratio for internal and external causes of mortality



Main disability (Children Looked After Statistics)

Care experienced (N = 13,830)		
	N	%
Not disabled	12,029	87.0
Disabled	1,801	13.0
Main disability (where known)	1,200	100.0

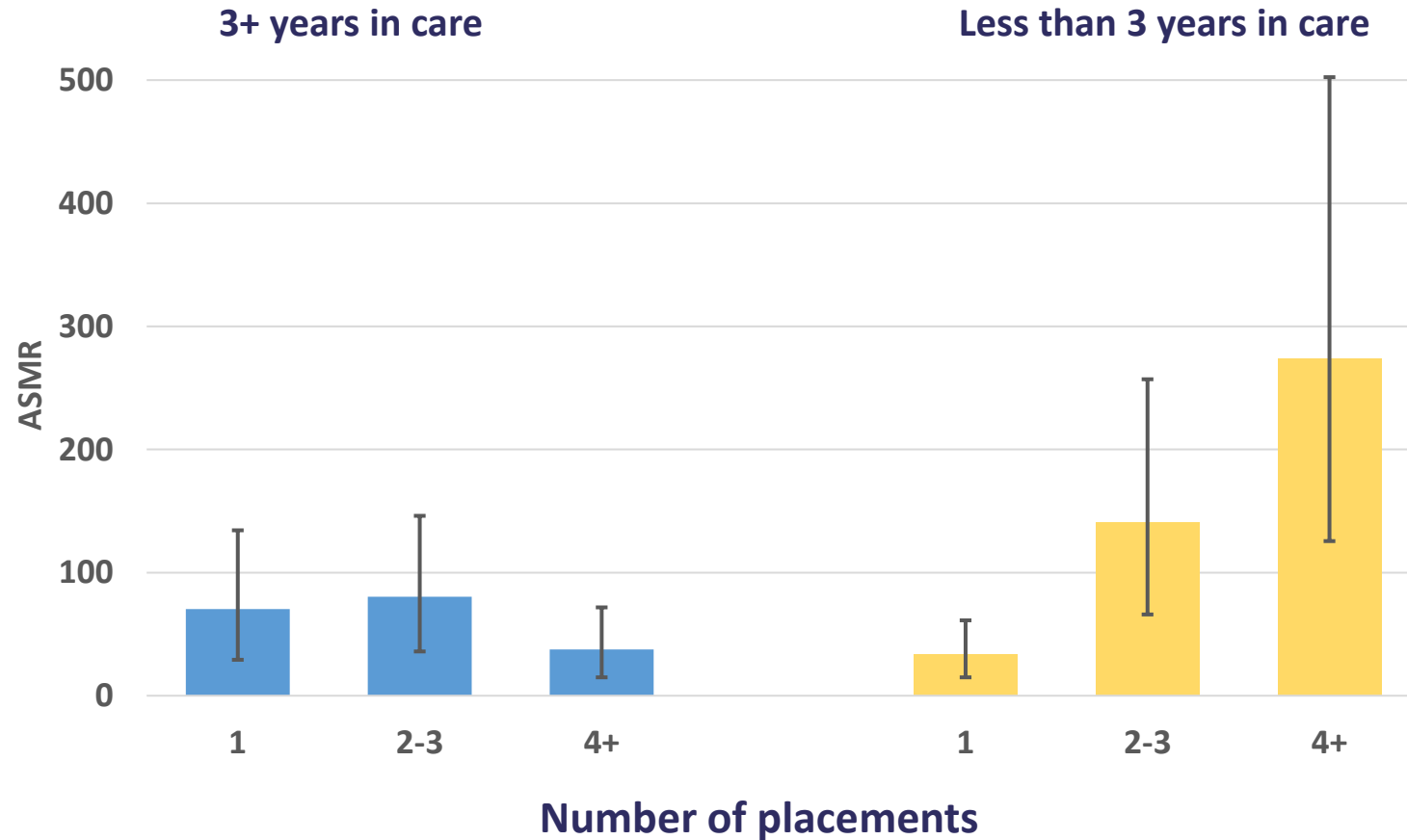
Main disability (Children Looked After Statistics)

Care experienced (N = 13,830)		
	N	%
Not disabled	12,029	87.0
Disabled	1,801	13.0
Main disability (where known)	1,200	100.0
Social, emotional and behavioural difficulty	470	39.2
Learning disability	204	17.0
Multiple disabilities	199	16.6
Other chronic illness/disability	84	7.0
Autistic spectrum disorder	74	6.2
Physical or motor impairment	47	3.9
Specific learning disability	38	3.2
Mental health problem	32	2.7
Visual impairment	20	1.7

Characteristics of care leavers

- Focus on care leavers, as they have completed their journey through care
 - Age 18+ and no longer in a care placement
- Higher proportion of deaths in care leavers who
 - First entered care at age 12+
 - Spent a shorter time in care
 - Had multiple placements
 - Had a disability
- Less evidence to suggest differences by
 - Sex
 - Placement type

Length of time in care and number of placements



Conclusions

- All-cause mortality rates higher for care experienced cohort
 - Crude rate 4.9 times as high
 - Remains around 2.7 times as high after controlling for cohort characteristics
- No sex differences in all-cause mortality in care experienced cohort
- All-cause mortality higher for all children and young people living with a disability
 - Children and young people in care have a higher burden of disability
 - But no differences in all-cause mortality rates between cohorts
 - Difference between cohorts seen in those *without* a disability
- Explained excess mortality from internal causes
 - Not from external causes which remained over 6 times as high

Conclusions

- Further work needed to understand factors related to increased risk of external causes in populations with experience of care
 - Reasons for entry to care, placement instability
- Young children in families driven into poverty are more likely to end up involved in the care system
 - Affecting those from more disadvantaged backgrounds
- Care system can provide scaffolding to help support young people and create more positive outcomes
- Care experienced young people are not a homogenous group
 - Some will need more support than others to achieve their potential

Acknowledgements

@CHiCS_project

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Open access Cohort profile

BMJ Open Cohort profile: The ‘Children’s Health in Care in Scotland’ (CHiCS) study—a longitudinal dataset to compare health outcomes for care experienced children and general population children

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ABSTRACT
Purpose The Children’s Health in Care in Scotland Cohorts were set up to provide first population-wide evidence on the health outcomes of care experienced children (CEC) compared with children in the general population (CGP). To date, there are no data on how objective health outcomes, mortality and pregnancies for CEC are different from CGP in Scotland.
Participants The CEC cohort includes school-aged children who were on the 2009/2010 Scottish Government’s Children’s Register.

Strengths and limitations of this study

- ▶ The CHiCS (Children’s Health in Care in Scotland) project is the first population-wide longitudinal data collection in the UK that links administrative data on social care, births, deaths, hospitalisations and prescriptions to compare the health of care experienced children (CEC) with children in the general population (CGP).
- ▶ The study looks at a wide range of health outcomes.

To cite: Allik M, Brown D, Taylor Browne Luka C, et al. Cohort profile: The ‘Children’s Health in Care in Scotland’ (CHiCS) study—a longitudinal dataset to compare health outcomes for care experienced children and general population children. *BMJ Open* 2021;11:e004664. doi:10.1136/bmjopen-2021-004664



Children’s Health in Care in Scotland (CHiCS)

Main findings from population-wide research