National Institute for Health and Care Excellence

Final

Looked-After Children and Young People

[J] Interventions to support entry into further or higher education or training in looked-after children and young people

NICE guideline NG205

Evidence reviews underpinning recommendations 1.6.23 and 1.6.26

October 2021

Final

These evidence reviews were developed by NICE Guideline Updates Team



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Review question

- a) What is the effectiveness of interventions to support entry into further or higher education or training?
- b) are interventions to support entry into further or higher education or training acceptable and accessible to looked-after children and young people and their care providers? What are the barriers to, and facilitators for the effectiveness of these interventions?

Introduction

Looked-after children are at a greater risk of poor educational outcomes. In 2017, 56.3% of looked-after children had a special educational need, compared with 45.9% of children in need and 14.4% of all children. At key stage 2, 32% of looked-after children and young people reached the expected standard in reading, writing and maths (compared with 61% of those who were not looked after). In 2018, for 19 to 21 year old care leavers in the UK, 6% were known to be in higher education, 20% were in other education, 25% were in training or employment and 39% were known to be not in education, employment or training (compared to around 12% of all young people aged 19 to 21 years). Interventions that support entry into further or higher education or training could help to improve the long-term employment, independence and education prospects for looked-after children.

Looked after children and young people are currently entitled to a pupil premium to support their education, however there is uncertainty about which specific educational interventions work. The (2010) NICE guideline for looked-after children and young people did not include recommendations on specific educational interventions to promote entry into further or higher education or training. A NICE surveillance review found new evidence that indicated recommendations on interventions to entry into further or higher education or training in looked-after children might be needed.

Summary of protocol

PICO table

Table 1: PICO for review on interventions to support entry into further or higher education or training in looked-after children and young people

Population

Looked after children and young people (wherever they are looked after) from the beginning of secondary school education until age 18.

Including:

Children and young people who are looked after on a planned, temporary basis for short breaks or respite care purposes, only if

Intervention	the Children Act 1989 (section 20) applies and the child or young person is temporarily classed as looked after. Children and young people living at home with birth parents but under a full or interim local authority care order and are subject to looked-after children and young people processes and statutory duties. Children and young people in a prospective adoptive placement. Children and young people preparing to leave care. Looked-after children and young people on remand, detained in secure youth custody and those serving community orders. Interventions and approaches to support entry into further or higher education or training for looked-after children and young people. Example interventions and approaches of interest include: Interventions to promote positive relationships (as relates to their impact on educational outcomes) Coaching and mentoring (including peer mentoring) Transition and outreach programmes (LACYP-specific programmes to encourage entry into further education)
	 Interventions targeted at colleges and universities (where outcomes for LACYP are reported) Vocational courses Teacher-delivered and carer-delivered interventions School-based and home-based interventions Tutoring programmes Other pedagogical interventions
Comparator	Comparator could include standard care, waiting list, or another approach to support entry into further or higher education or training for looked-after children and young people.
Outcomes	 Intention to enter, or successful entry, into further or higher education or training Maintenance of, and graduation from, further or higher education or training place Adverse outcomes i.e. non-continuation of, or into, further or higher education or training Knowledge and beliefs about further education and training (including confidence and interest)

SPIDER table

Table 2: SPIDER table for review on interventions to support entry into further or higher education or training in looked-after children and young people

Sample	 Looked after children and young people (wherever they are looked after) from the beginning of secondary school education until age 18. Including: Children and young people who are looked after on a planned, temporary basis for short breaks or respite care purposes, only if the Children Act 1989 (section 20) applies and the child or young person is temporarily classed as looked after. Children and young people living at home with birth parents but under a full or interim local authority care order and are subject to looked-after children and young people processes and statutory duties. Children and young people in a prospective adoptive placement. Children and young people preparing to leave care. Looked-after children and young people on remand, detained in secure youth custody and those serving community orders. 					
Phenomenon of Interest	Interventions and approaches to support entry into further or higher education or training for looked-after children and young people.					
Design	Including focus groups and interview-based studies (mixed-methods studies will also be included provided they contain relevant qualitative data).					
Evaluation	 Qualitative evidence related to interventions to support entry into higher or further education will be examined. Evidence should relate to the views of looked after children, their carers, and providers, who would deliver eligible interventions, on: The accessibility and acceptability of the intervention, including information about the source and type of intervention used. Barriers to and facilitators for intervention effectiveness in supporting entry into further or higher education. 					
Research type	Qualitative and mixed methods					
Search date	1990					
Exclusion criteria	 Mixed-methods studies reporting qualitative data that cannot be distinguished from quantitative data. Countries outside of the UK (unless evidence concerns an intervention which has been shown to be effective in reviewed quantitative evidence) Studies older than the year 2010 (unless not enough evidence, then progress to include studies between 1990 to current) 					

Methods and process

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual. For further details of the methods used see Appendix N. Methods specific to this review question are described in this section and in the review protocol in Appendix A.

The search strategies for this review (and across the entire guideline) are detailed in Appendix B.

Declarations of interest were recorded according to NICE's 2018 conflicts of interest policy.

Effectiveness evidence

Included studies

The search for this review was part of a broader search for the whole guideline. After removing duplicates, a total of 36,866 studies were identified from the search. After screening these references based on their titles and abstracts, 32 studies were obtained and reviewed against the inclusion criteria as described in the review protocol for interventions to support leaning in school (Appendix A). Overall, 7 studies were included reporting on 7 original studies.

The evidence consisted of four randomised controlled trials, one prospective cohort study, and one qualitative study. See the table below for a summary of included studies. For the full evidence tables please see Appendix D. The full references of included studies are given in the reference section of this chapter. These articles considered 13 interventions to support entry into further or higher education or training in school-aged looked-after children.

Excluded studies

In total, 25 references were excluded because they did not meet the eligibility criteria. See Appendix J for a list of references for excluded studies, with reasons for exclusion.

Summary of included studies

Table 3: Summary of included studies

Study (country)	LACYP population	Intervention	Comparator	Number of patients who completed study	Outcomes reported (follow up f/u)
Quantitative	evidence				
Barnow 2015 (USA – prospective cohort study)	In out-of- home care currently or formerly (aged 16-21 years)	College preparation (CP) Job preparation (JP) Life skills courses (LS) GED/remedial education support Parenting support (PS) classes Health/medical support (HS)	Not receiving one of these services	Total: 1058 CP: 331 JP: 807 LS: 435 GED/remedial education: 585 PS: 72 HS: 640 ISS: 349 SAC: 43	Completion of GED or diploma (2-years) Employment in a paid job including apprenticeship and the military (2-years) Post-secondary enrolment full-time (2-years) Any positive outcome (one of the three above) (2-years)

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				Number of patients who	Outcomes
Study (country)	LACYP population	Intervention	Comparator	completed study	reported (follow up f/u)
		Income support services (ISS) Substance abuse counselling (SAC)			
Blakeslee 2020 (USA - RCT)	Looked after children in care (aged 16.5 to 18.5 years)	My Life Model	CAU	My Life Model = 108 CAU = 123	Self-determination score at 12 months Career Decision- Making Self- Efficacy at 12 months My Life Self- Efficacy Scale at 12 months Self-attribution of accomplishments at 12 months
Courtney 2008 (USA - RCT)	In out of home care (aged 17)	Life Skills Training Programme (LSTP)	Usual Care (UC)	LSTP: 196 UC: 215	Completion of high school diploma or general equivalency diploma (2 years) Attended college (2 years)
Geenen 2013 (USA - RCT)	In foster care and receiving special education services (aged 14-17)	Take charge (TC): individual coaching and group mentoring	Usual Care	TC: 60 UC: 60	Postsecondary preparation score (postintervention/9-month) Career development score (postintervention /9-month) AIR self-determination score (post-intervention/9-month) Student identification of education goals score (postintervention /9-month)
Geenen 2015 (USA - RCT)	In foster care with significant mental health or	Better futures (BF): summer institute, individual coaching, and	Usual Care (UC)	BF: 36 UC: 31	AIR self- determination scale (post-intervention/6- months)

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				Number of patients who	Outcomes
Study (country)	LACYP population	Intervention	Comparator	completed study	reported (follow up f/u)
	emotional difficulty (1 or 2 years away from completion of secondary education)	group mentoring			Assessing barriers to education (post-intervention/6-months) Career decision self-efficacy scale (post-intervention/6-months) Arc self-determination scale (post-intervention/6-months) Post-secondary preparation scale, (post-intervention/6-months) High school completion (6-months) Participating in post-secondary education (6-months) Taking part in paid employment (6-months)
Powers 2012 (USA - RCT)	In foster care and receiving special education services (aged 16.5- 17.5)	Take charge (TC): individual coaching and group mentoring	Foster-care independent living programme (ILP)	TC: 29 ILP: 32	Arc self- determination (post- intervention/1-year) High school completion (post- intervention/1-year) Employment (post- intervention/1-year) Post-secondary education (post- intervention/1-year)
Qualitative 6	evidence				
Gazeley 2018 (UK – mixed methods)	Looked after young people and their near peer coaches taking part in a coaching intervention to support	Near peer coaching	NA	Looked after young people (6) Coaches (12) Key adults (8) Trainers and other adults involved in programme delivery (5)	Perspectives focused on the needs addressed by the programme, qualities most valued by a coach, and the need for the coach to be care experienced.

Study (country)	LACYP population	Intervention	Comparator	Number of patients who completed study	Outcomes reported (follow up f/u)
	higher education				

See Appendix D for full evidence tables

Summary of the effectiveness evidence

Quantitative evidence

Table 4: Summary GRADE table (My Life Model vs usual care)

ore 4. Summary GRADE table (My Life	Sample	Effect size		Interpretation of
Outcome	size	(95% CI)	Quality	effect ^a
Young person-reported self- determination score at postintervention defined by the ARC Self-Determination Scale	288	Standardised MD 0.24, p=0.03	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID
Young person-reported self- determination score at 12 months follow up defined by the ARC Self- Determination Scale	288	Standardised MD 0.27, p=0.025	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID
Observer rated steps to reach goals score at 12 months assessed using self-determination skills assessment	288	Standardised MD 0.20, p=0.017	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID
Observer rated range of stress management strategies score at 12 months assessed using self- determination skills assessment	288	Standardised MD 0.37, p=0.012	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID
Young person-reported career decision making score at 12 months defined by the Career Decision-Making Self-Efficacy	288	Standardised MD 0.27, p=0.031	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID
Young-person reported self-attribution of accomplishments score at postintervention	288	Standardised MD 0.27, p=0.006	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Young-person reported self-attribution of accomplishments score at 12 months	288	Standardised MD 0.16, p=0.033	Very Low	Intervention was associated with an improvement, however it was unclear if this was more than the MID

Table 5: Summary GRADE table (Life Skills Training Programme vs usual care)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Completion of high school diploma or general equivalency diploma (GED) at 2 years follow up	482	RR 1.02 (0.87 to 1.20)	Very Low	No meaningful difference
Attended college at 2 year follow up	482	RR 0.85 (0.66 to 1.09)	Very Low	Could not differentiate

Table 6: Summary GRADE table (Take charge vs usual care)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Post-secondary preparation score postintervention (a checklist indicating activities performed in planning for college)	120	MD 1.01 (0.76 to 1.26)	Very Low	Effect favours intervention group
Post-secondary preparation score at 9- months follow up (a checklist indicating activities performed in planning for college)	120	MD 0.02 (-0.31 to 0.35)	Very Low	Could not differentiate
Career development score postintervention (information regarding key activities youth had engaged in around career exploration and preparation for employment. Item sums were calculated.)	120	MD 0.60 (0.30 to 0.90)	Very Low	Effect favours intervention group but may be less than the MID
Career development score following at 9-months follow up (information regarding key activities youth had engaged in around career exploration and preparation for employment. Item sums were calculated.)	120	MD 0.17 (-0.09 to 0.43)	Very Low	Could not differentiate
Self-determination score postintervention (parent, student, and teacher versions of the AIR Self-Determination Scale as well as by asking youth to describe their goals and accomplishments)	120	MD 2.91 (-0.28 to 6.10)	Very Low	Could not differentiate
Self-determination score following at 9- months follow up (parent, student, and teacher versions of the AIR Self- Determination Scale as well as by	120	MD 2.80 (-0.31 to 5.91)	Very Low	Could not differentiate

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
asking youth to describe their goals and accomplishments)				
Student identification of educational goals postintervention (youth were asked to list all of their educational goals for the upcoming year and a total count was taken)	120	MD 0.25 (-0.17 to 0.67)	Very Low	Could not differentiate
Student identification of educational goals at 9-months follow up (youth were asked to list all of their educational goals for the upcoming year and a total count was taken)	120	MD -0.02 (-0.39 to 0.35)	Very Low	Could not differentiate

Table 7: Summary GRADE table (Take charge vs Independent Living Programme)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Self-determination post intervention (Arc Self-determination Scale)	69	MD 14.22 (4.06 to 24.38)	Very Low	Effect favours intervention group but may be less than the MID
Self-determination at 1-year follow up (Arc Self-determination Scale)	69	MD 14.20 (4.00 to 24.40)	Very Low	Effect favours intervention group but may be less than the MID
High school completion postintervention (either through graduation or obtaining GED - school data was collected from school records)	69	OR 1.83 (0.61 to 5.49)	Very Low	Could not differentiate
High school completion at 1-year follow up (either through graduation or obtaining GED - school data was collected from school records)	69	OR 2.63 (0.90 to 7.65)	Very Low	Could not differentiate
Employment post-intervention (self-report: "the outcome survey")	69	OR 2.84 (0.84 to 9.66)	Very Low	Could not differentiate
Employment at 1-year follow up (self-report: "the outcome survey")	69	OR 2.08 (0.72 to 6.01)	Very Low	Could not differentiate
Post-secondary education post- intervention: defined as attending either a 2 or 4-year college programme.	69	OR 2.30 (0.20 to 26.75)	Very Low	Could not differentiate
Post-secondary education at 1-year follow up: defined as attending either a 2 or 4-year college programme.	69	OR 2.28 (0.71 to 7.37)	Very Low	Could not differentiate

Table 8: Summary GRADE table (Better futures vs usual care)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Self-determination score following intervention (assessed using the parent, student, and teacher versions of the AIR Self-Determination Scale as well as by	67	MD 11.55 (3.72 to 19.38)	Very Low	Effect favours intervention group but may be less than the MID

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
asking youth to describe their goals and accomplishments)				
Self-determination score following at 6-months follow up (the parent, student, and teacher versions of the AIR Self-Determination Scale as well as by asking youth to describe their goals and accomplishments)	67	MD 13.98 (6.71 to 21.25)	Very Low	Effect favours intervention group but may be less than the MID
Assessing barriers to education score post-intervention (Assessing Barriers to Education scale)	67	MD -10.10 (- 19.94 to -0.26)	Very Low	Effect favours intervention group but may be less than the MID
Assessing barriers to education score at 6-months follow up (Assessing Barriers to Education scale)	67	MD -28.57 (- 37.57 to -19.57)	Very Low	Effect favours intervention group
Career decision self-efficacy scale post- intervention (Career Decision Self- Efficacy Scale)	67	MD 0.70 (0.34 to 1.06)	Very Low	Effect favours intervention group but may be less than the MID
Career decision self-efficacy scale at 6 months follow up (Career Decision Self-Efficacy Scale)	67	MD 0.96 (0.64 to 1.28)	Very Low	Effect favours intervention group
Self-determination post intervention (Arc self-determination scale)	67	MD 14.34 (4.50 to 24.18)	Very Low	Effect favours intervention group but may be less than the MID
Self-determination at 6 months follow up (Arc self-determination scale)	67	MD 21.83 (13.69 to 29.97)	Very Low	Effect favours intervention group
Post-secondary preparation post- intervention (post-secondary preparation scale)	67	MD 6.76 (3.96 to 9.56)	Very Low	Effect favours intervention group
Post-secondary preparation scale at 6- months follow up (post-secondary preparation scale)	67	MD 8.35 (5.74 to 10.96)	Very Low	Effect favours intervention group
High school completion at 6-months follow up	67	OR 1.66 (0.62 to 4.42)	Very Low	Could not differentiate
Participating in post-secondary education at 6-months follow up	67	OR 6.07 (2.06 to 17.90)	Very Low	Effect favours intervention group
Taking part in paid employment at 6- months follow up	67	OR 0.91 (0.33 to 2.50)	Very Low	Could not differentiate

Table 9: Summary GRADE table (life skills training programme vs usual care)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Completion of high school diploma or general equivalency diploma (GED) at 2 year f/u	482	RR 1.02 (0.87 to 1.20)	Very Low	No meaningful difference

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Attended college at 2-year f/u	482	RR 0.85 (0.66 to 1.09)	Very Low	Could not differentiate

Table 10: Summary GRADE table (College preparation services vs no college preparation services)

sei vices _j				
Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient -0.317 (-1.00 to 0.37)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.561 (0.08 to 1.04)	Very Low	Intervention was associated with a more favourable outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.49 (-0.16 to 1.14)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.42 (-0.04 to 0.89)	Very Low	No statistically significant association was observed between intervention and outcome

Table 11: Summary GRADE table (Job preparation services vs no job preparation services)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient 0.546 (-0.23 to 1.32)	Very Low	No association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.99 (0.41 to 1.58)	Very Low	Intervention was associated with a more favourable outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 1.25 (0.11 to 2.39)	Very Low	Intervention was associated with a more favourable outcome
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2	1058	Beta coefficient 1.03 (0.53 to 1.53)	Very Low	Intervention was associated with a more favourable outcome

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
years (assessed by composite of self-				
report outcomes)				

Table 12: Summary GRADE table (Life skills courses vs no life skills courses)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient 0.34 (-0.31 to 0.99)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.26 (-0.21 to 0.73)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.45 (-0.23 to 1.12)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.33 (-0.10 to 0.78)	Very Low	No statistically significant association was observed between intervention and outcome

Table 13: Summary GRADE table (Substance abuse counselling vs no substance abuse counselling)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient -0.66 (-1.57 to 0.25)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient - 0.86 (-1.66 to - 0.06)	Very Low	Intervention was associated with a less favourable outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.02 (-0.83 to 0.86)	Very Low	No statistically significant association was observed between intervention and outcome

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient -1.02 (-1.84 to 0.89)	Very Low	No statistically significant association was observed between intervention and outcome

Table 14: Summary GRADE table (income support services vs no income support services)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient 1.37 (0.82 to 1.91)	Very Low	Intervention was associated with a more favourable outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.42 (-0.01 to 0.85)	Very Low	No statistically significant association was observed between intervention and outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.92 (0.40 to 1.43)	Very Low	Intervention was associated with a more favourable outcome
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.71 (0.28 to 1.15)	Very Low	Intervention was associated with a more favourable outcome

Table 15: Summary GRADE table (parenting support services vs no parenting support services)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a	
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient 0.82 (0.06 to 1.58)	Very Low	Intervention was associated with a more favourable outcome	
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.23 (-0.43 to 0.90)	Very Low	No association was observed between intervention and outcome	
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.01 (-0.71 to 0.74)	Very Low	No association was observed between intervention and outcome	

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.40 (-0.28 to 1.09)	Very Low	No association was observed between intervention and outcome

Table 16: Summary GRADE table (GED preparation/remedial education support vs no GED preparation/remedial education support)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient 0.18 (-0.37 to 0.72)	Very Low	No association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient 0.35 (-0.11 to 0.81)	Very Low	No association was observed between intervention and outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient 0.05 (-0.53 to 0.62)	Very Low	No association was observed between intervention and outcome
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.30 (-0.15 to 0.75)	Very Low	No association was observed between intervention and outcome

Table 17: Summary GRADE table (Health support services vs no health support services)

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with completion of GED or diploma over 2-year follow up (assessed by self-report)	1058	Beta coefficient -0.49 (-1.11 to 0.14)	Very Low	No association was observed between intervention and outcome
Association of intervention with employment in a paid job including apprenticeship and military over 2 years (assessed by self-report)	1058	Beta coefficient -0.17 (-0.31 to 0.65)	Very Low	No association was observed between intervention and outcome
Association of intervention with post- secondary education enrolment full-time or part-time if also employed part-time (assessed by self-report)	1058	Beta coefficient - 0.59 (-1.17 to - 0.01)	Very Low	Intervention was associated with a less favourable outcome

Outcome	Sample size	Effect size (95% CI)	Quality	Interpretation of effect ^a
Association of intervention with any positive outcome (employment or education) defined as having one or more of the other three outcomes over 2 years (assessed by composite of self-report outcomes)	1058	Beta coefficient 0.17 (-0.65 to 0.32)	Very Low	No association was observed between intervention and outcome

⁽a) No meaningful difference: crosses line of no effect but not line of MID; Could not differentiate: crosses line of no effect and line of MID; May favour: confidence intervals do not cross line of no effect but cross MID; Favours: confidence intervals do not cross line of no effect or MID

Qualitative evidence

Table 18: Summary CERQual table (Experience of young people, coaches, key adults, trainers and other adults involved in programme delivery regarding Higher Education Champions Coaching Programme)

Themes	illustrative quotes	Studies*	CERQual concerns	CERQual explanation
Gaps in support at the pre-entry phase Key Adults emphasised the importance of this issue to many of those involved: The programme was primarily built around the idea that there were gaps in support and knowledge at the pre-entry phase and that these had consequences later on.	'Anyone in my field is going to see HE support as a priority and there's a limited range of programmes supporting that' Key Adult "What we've found with the young people in care is they're making quite ill informed decisions about universities and courses. They're accepting offers without even going to unis. One accepted a place because it looked nice in photos." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Need for practical, knowledgeable advice, particularly for asylum seekers Despite the additional practical support that is now often available to LAC, finance and accommodation emerged as particular concerns, with vacation periods identified as difficult and requiring careful planning. One Key Adult also highlighted the changing profile of LAC in the LA and the additional demands on young people from asylum seeking backgrounds.	"Growing up in another country you may not have this knowledge of uni and how to get the most from a university experience and confidence to do so. It's all very aspirational but it takes a lot of guts to get there. It's a big step in terms of independence." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

lack of family network leads to lack of preparedness Research into student preparedness for HE suggests that those leaving a family environment and expected to take responsibility for their own lives experience an 'abrupt shift'the absence of a family network might intensify this.	"Many of ours have to repeat the first year or change courses. They are vulnerable because they don't have a safe place, a family to go back to. The other issue is accommodation. There's a whole load of things we need to sort out." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Simply gaining access is not enough Overall, there was a strong sense that simply gaining access to HE was not enough as many went on to experience stressors in the first year that increased the risk of drop out. Normative assumptions around the forms of involvement provided by 'good' parents have implications for how disadvantage is recognised and worked with in practice yet it could not be assumed that even those LAC still in touch with family had access to networks with knowledge of HE.	"Even family members they stay in contact with tend not to have had university pathway, so there's not that understanding or knowledge." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Additional challenges for those in the role of corporate parent One Key Adult emphasised the value of making joint visits once a university had been identified and the importance of establishing a connection with the designated university lead for LAC, especially where later difficulties arose. However, another discussed the difficulty of establishing and utilising these lines of communication in order to ensure continuing care. The programme was therefore proactive and future	'I try and visit them. I try to keep involvedbut it is hard' Key Adult	1 Gazeley 2018	ML: Very Serious C: Minor A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear. Some lack of clarity regarding what role key adults played.

orientated in aiming to deliver: "Survival skills forcare leaverswithout any local support systems. Soft care skills re mental and physical health." (KA,S1Q). Key Adults conceptualised their responsibilities holistically, reflecting a life-cycle approach: "Supporting care leavers in having a full uni life. Helping care leavers think about work in the future. Help care leavers think ahead about accommodation." (KA,S1Q)				Some lack of clarity regarding what role key adults played.
University admission processes were insufficiently adapted to consider differences in level of support	"Our children don't have parents and teachers preparing them for [courses where the entry criteria are difficult and an interview required] like some others. Knowing how to jump through the hoops." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Key adults insufficient to fill in the knowledge gaps	"Social workers in our set up didn't feel equipped to help out much with uni applications or have time to devote to it. The initial idea was for me to fill that gap. But with my new job role now I don't have time to either." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Not knowing where to find the information Although there are resources available to inform stakeholders working with LAC, there is no guarantee	"The young people always ask a lot about finance for uni and I don't know the right answers. I read a newspaper article about all the bursaries young	1 Gazeley 2018	ML: Very Serious C: No concerns	Only one study contributed to this theme. Study was high

that they will reach them, leaving some dependent on informal sources.	people can apply for. I wish I kept it so I could advise the young people I work with." Key Adult		A: Serious R: No concerns Overall: Very Low	risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Coaches could fill in the knowledge gaps Key Adults felt strongly that the undergraduate students recruited to work as coaches could supply something that would better fill these gaps. There was a strong sense that some questions would be more comfortably addressed by a near peer and that not all relate to formal areas of knowledge.	'For children in care what's missing is not teachers but that friend outside the system' Key Adult "It's often indiscernible stuff that I can't answer or kids won't ask meIt might be a question they feel silly about, or just a general chat about their work. Myself, foster carer – it's lots of middle aged women around a teenage lad." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Qualities desirable in a coach - Asked to comment on the qualities desirable in a coach the young people confirmed the importance of more personal relationships built on shared understandings	"You have to be comfortable with each other to come up with more questions." Young Person "They've just come out of university or they've just gone to university, so they kind of understand what we're going to go through." Young Person	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Sense of powerlessness from Key Adults Some of the concerns raised by Key Adults were considered to lie outside their control, highlighting a sense of powerlessness.	"For LACs, particularly asylum seekersSuccesses can be little and far between but you have to hold on to them. It can be soul destroying – how it feels for young people who	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious	Only one study contributed to this theme. Study was high risk of bias. Unclear how

	have worked so hard against obstacles." Key Adult		R: No concerns Overall: Very Low	researchers were selected. Interview methods and method of thematic analysis was unclear.
Young people identify their own coaching goals Although much of this aligned closely with the concerns that Key Adults suggested jeopardised future 'success', a key tenet of the programme was that 'the learners lead' (T2). The young people therefore identified their own coaching goals and this appeared essential as they were at different stages in their HE journeys. The coaches' questioning of the young people's self- identified goals was seen to be a way of bridging the 'disconnect between aspiration and reality: trying to connect these two' (C,S2WN). It was described by one coach as being 'like onion peeling' and another as 'allowing room to share without being judged' (C,S2WN). One young person explained how the process had opened up lines of communication.	at uni andtalking about what I study and how I can improve on it and get the grades I want. " Young Person "It was quite natural which kind of helps to get the problems out in the open quicker and deal with them in a more realistic way." Young Person	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Tailoring to individual strengths and barriers The young people expressed different motivations for joining the programme including 'experience and knowledge of what uni has in store for us' (YP,S1Q) and 'to feel more comfortable in the suitability of higher education' (YP,S1Q). The coaches needed to become attuned to each young person as an individual with different strengths and facing different barriers.	"Didn't really know at beginning how can help herAlready got place at university. Faced a lot of setbacks, people telling her she can't do the things she wants to do." Coach	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

Gaining knowledge through coaching Some indicated having gained knowledge and understanding in areas that aligned closely with the concerns motivating the programme's development. Coaches also highlighted the acquisition of new knowledge in key areas, including how to identify the point of contact for LAC at a university and the kinds of financial support available. Other areas of learning encompassed the social aspects of HE such as the nightlife and music scene. These more contextualised insights are important given the increased risk of social isolation amongst LAC and they have a part to play in building an understanding of how new networks can be built.	"My goal was really to see what I really wanted to do at uniI was like 'I want to do this, this and this' and then at the end of it, I kind of know what I want to do now and what unis I want to go to." Young Person "If I didn't go for this I wouldn't have read through all the modules, I would have said, 'Yeah I want to go here and do [subject name]so it actually made us more knowledgeable in the sense of what we need to do to know what we're doing." Young Person "But societies, I had no idea, like societies had loads of stuffI've spoken to a lot of people about the union and [they have] never come across that." Young Person	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear. The kinds of knowledge sought by looked after young people was varied.
Encouragement to keep going The mixed feelings that the young people might experience during the first week at the university were explored during the final celebration event. One trainer explained that all students feel alien at first and need to keep going, encouraging the coaches to share their own experiences of feeling this way and surviving. This mixture of open engagement with real-life concerns alongside positive insights into lived 'success' appeared to provide an experience of mutuality as a protective resource for the future.		1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

Connecting pasts with futures, seeing the past as a "In care or not it is such a good way strength -

A life-cycle approach to 'success' in HE does not automatically entail an understanding of challenging life experiences in the way that these understandings were embedded in the programme. This appeared to be structured as a reflexive space in which to make sense people we work with don't know of the past in preparation for the future. One Key Adult | about...People need to know not just had a sense of how the personal statement, written as part of the university admissions process, might unfairly work against such a forward-looking focus. The uncomfortable feelings that might be engendered around the need to 'sell themselves' in the personal statement were addressed by one trainer at the final celebration event who asked the young people to reflect on the question: 'What does your history - that you got to this point – what does your willingness say to the university?' The personal statement was then represented as a way of connecting 'all your life experiences'. The coaches suggested that this repositioning of the past was about the empowerment of the young person and a rejection of anything deterministic: 'Your social workers do not define your life you define it!' (C,S2WN). Consequently, there was a strong emphasis on utilising the experience to foster independence and deliver sustainable benefits: One young person described the process as starting with being challenged but ending with challenging himself. Another described having become more optimistic based on the realisation 'that if I'm really positive I can

of reflecting on where a person stands in their life and in relation to themselves and others." Coach

"My own daughter was able to take up opportunities that the young about the young person's history in care, but about where they can go in life." Key Adult

"[I am] a care leaver who believes that all care [leavers] should be supported to reach their full potential. To do this I believe that we need people who care for care leavers, who care about them and who enable them to care for themselves → this programme does enable them to care for themselves that is why I did this programme." Coach

"I have been in care myself and know how hard it can be. (C.S1Q) On paper I come from a disadvantaged background, young carer, teenage pregnancy, low income...so I want to give back to other disadvantaged groups. (C1,S1Q)" Coach

Gazeley 2018

ML: Very Serious

C: No concerns

A: Serious

R: No concerns

Overall:

Very Low

Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

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do way more than I thought I could'. The coaches identified their similar life experiences as a motivating factor when it came to applying for the role. Participation in the programme was described by one trainer as involving a reconfiguring and sharing of narratives around their own pasts.				
been important in securing her involvement in the programme. Coaches highlighted the positives arising from their involvement, important given that some were care-experienced themselves: 'The benefits to both coaches and learners are equal' (C,S2WN). In addition to developing a range of inter-personal skills relevant to	"They were talking about personal things that they had to go through and! was really inspired, cos! just felt really uplifted and! felt like! wanted to participate in this!" Young People "Not only will you enrich the life of another, you will also learn a tremendous amount about yourself. Whatever career path you choose, having a high level of emotional intelligence will help you in your path to success." Coach	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
Problems with recruitment into the programme (too many people) There was an overarching concern that more LAC could have benefited from the intervention than the 16 who ultimately took part. Those who did also experienced varying levels of involvement. Some explanations of the problems around recruitment reflected wider challenges in their lives. Reflecting on the difficulties with recruitment one trainer questioned	"When you are a LAC you have a lot of adults in your life and you don't necessarily want to add more." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall:	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

the initial reliance on unfamiliar people in unfamiliar settings, an approach that was subsequently changed.			Very Low	
Geographical access problems The most common explanation for difficulty involving young people related to the decision to bring them together for whole group events at the start as this posed a geographical challenge given that 'children in care are so scattered' (KA10,S2Q).	No supporting quote was reported for this theme	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.
The need for more information	"I wasn't sure of what was going to happen, what it was about, but I thought I would take a risk and see what it is, especially since people telling me 'You should do this, do that' so I thought I would just give it a try." Young Person	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear. Substance of the theme was vague
Tailored appoaches needed These difficulties reinforced the perception that more reflexive, personalised approaches were needed. Key Adults asked to reflect on the 'success' of the programme made judgements on a similar case by case basis, highlighting a wide range of internal and external factors as potentially relevant.	"The quality of the relationships was strong. They had shared interests in common[there was] a stronger network of support at home. The [other YP is] in a foster relationship. It's very different." Key Adult "It's trying to be flexible, meeting each person's needs. Humans are	1 Gazeley 2018	ML: Very Serious C: Minor A: Serious R: No concerns Overall:	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was

	individuals. That's the challenge." Key Adult		Very Low	unclear. Substance of the theme was vague
Successes not readily quantified There was some sense of ripples out from the programme into other aspects of the young people's lives, including their immediate educational experiences, although these influences were neither straightforward nor readily quantified.	"Although we weren't really sure if he was engaging fully, he did really well in his AS grades. Prior to that there had been a dipWe felt that involvement in the programme had really helped his motivation". Key Adult "The young person was going through a period of significant changeUnsurprisingly A levels didn't go that wellThey've got supportive housing and are getting up and going to college. They're on a path, that's the important thing." Key Adult	1 Gazeley 2018	ML: Very Serious C: No concerns A: Serious R: No concerns Overall: Very Low	Only one study contributed to this theme. Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.

See appendix F for full GRADE tables.

Economic evidence

Included studies

A systematic review was conducted to cover all questions within this guideline update. The search returned 3,197 publications since 2000. Additionally, 29 publications were identified through reference tracking. All records were excluded on basis of title and abstract for this review question. An updated search was conducted in November 2020 to identify any newly published papers. The search returned 584 publications. After screening titles and abstracts five publications were considered for full text inspection but did not meet the inclusion criteria and were excluded from the evidence report.

Economic model

No economic modelling was undertaken for this review question.

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

The committee considered outcomes for the nine interventions that were considered for this review question: Life skills training; Take Charge (individualised coaching and group mentoring); Better Futures (summer institute, individualised coaching, and group mentoring); college preparation services; job preparation services; substance abuse counselling; income support services; parenting support services; remedial education support; and health support services. Certain outcomes were considered more helpful in guiding recommendations than others. Of the outcomes reported, enrolment in post-secondary education was felt to be most important, since this meant that the participant achieved progression into higher/further education. This outcome was reported for all interventions.

The committee considered other outcomes reported in the literature, such as a post-secondary preparation score, a career development score, and a score denoting a participant's perceived barriers to education. Some outcomes were considered less useful for decision making: for example, "student identification of educational goals" in which youth were asked to list all of their educational goals for the upcoming year and a total count was taken. It was noted that this outcome does not necessarily correspond with a person's confidence/interest in progressing to higher/further education since a person may have only a few very well thought out educational goals. Finally, some outcomes were considered only surrogate: e.g. several studies reported "self-determination". This outcome is not specific to determination in reaching higher/further education or training, although the outcome was reported in response to an intervention aimed at helping looked after youth achieve better post-secondary education.

The committee noted that no outcomes were reported that considered whether LACYP who enrolled in college or higher education were actually thriving, nor indeed whether they completed their respective courses.

The quality of the evidence

Only five intervention studies considered support for entry into further or higher education or training in looked after children and young people. These comprised four RCTs and one prospective cohort study. All the intervention studies were carried out in the USA with no evidence identified from the UK, therefore the committee were careful to take into account the indirectness of these studies to current UK practice.

The overall quality of all the presented evidence was noted to be very low by the criteria outlined in GRADE. The committee considered the common reasons why evidence was marked down for quality. Studies frequently failed to report how randomisation was performed or if allocation of participants was concealed; it was often unclear how many were lost to follow up or if there was missing data (and for what reason, and whether this varied between comparison groups); studies commonly failed to adequately adjust for differences between comparison groups at baseline for important variables such as behavioural problems, number of placement changes, and special educational needs; studies were frequently unblinded and did not outline a detailed protocol or analysis plan. In addition, for certain studies, outcomes may have been selectively reported (either through selective use of subscales or follow up times).

The committee discussed and discounted the findings from the Barnow 2015 prospective cohort study. This study considered outcomes reported in LACYP who had undertaken various services over a 2-year follow up, including: life skills training; college preparation services; job preparation services; substance abuse counselling; income support services; parenting support services; remedial education support; and health support services. This study was likely to have inherent selection bias (e.g. persons using substance abuse counselling are likely to be very different to those who did not undertake such interventions). This study also had inadequate adjustment for substance use, mental health problems, behavioural or emotional disorders; Finally, interventions were not clearly defined and could have differed significantly between sites and participants.

Small sample size was also a problem for many outcomes with included studies frequently unable to differentiate between an observed effect that was non-significant and one which was greater than the pre-defined minimum important difference. Sample size for the remaining included studies ranged from n=67 to 482.

Though evidence was generally scarce for this review question. The committee noted a clear gap in the evidence for the effectiveness of interventions to support entry into career training or apprenticeship leading to a long-term career (including careers support and advice).

Benefits and harms

The committee considered evidence from the four RCTs which considered Life skills training; Take Charge (individualised coaching and group mentoring); and Better Futures (summer institute, individualised coaching, and group mentoring). The committee acknowledged that entry into further or higher education is very different for LACYP compared to the wider population. For example, LACYP have broadly lower expectations of ever attending higher education and may consider this to be something that they are not able to achieve. Interventions need to be tailored for LACYP accordingly.

First the committee considered evidence looking at the benefits of the individualised coaching and group mentoring interventions. Compared to usual care, the Take Charge intervention was found to be associated with a significantly greater post-secondary preparation score, and career development score at postintervention. Additionally,

participants in the intervention group scored higher for self-determination. However, the studies were not able to differentiate between an effect greater than the MID and no effect at all for achieving post-secondary education or number of educational goals identified. It was noted that this study included only participants with special educational needs. While 56.3% of LACYP have some form of special educational need, the impediments to entering post-secondary education are higher for this sub-population.

The committee then considered evidence from a randomised controlled trial among LACYP with mental health problems. This study considered the Better Futures programme which, as well as individualised coaching and group mentoring, offered an experiential summer visit and stay over at a university campus. In the intervention group, improvements were observed for perceived barriers to education (both post intervention and at 6 months follow up), career decision self-efficacy (both post intervention and at 6 months follow up), post-secondary preparation (both postintervention and at 6 months follow up), and two measures of self-determination (both postintervention and at 6 months follow up) compared to care as usual. Most importantly to the committee, the study found a considerable improvement in post-secondary participation at 6-month follow up in the intervention group (OR 6.07 95%CI 2.06 to 17.90). The committee discussed their experience of the benefits of first hand university campus visits (including staying overnight) for inspiring LACYP, especially those combined with group mentoring by near peers (recent care leavers in college or university) who would be instructive about the various opportunities open to LACYP seeking entry to higher/further education.

Finally, the committee considered evidence from one randomised controlled trial which considered the use of a five-week classroom-based programme of classes held at a local community college for 17-year-old LACYP. The classes covered areas of education, employment, daily living skills, survival skills, choices and consequences, interpersonal/social skills, and computer/Internet skills. This study was not able to differentiate between an effect size greater than the MID and no effect for the number who attended college at 2-years follow up. Since this study considered an intervention aimed at improving life skills and independence among LACYP on the verge of leaving care the committee decided to revisit this evidence/intervention in review question 6.1 which looks at the effectiveness of interventions and approaches (including entry into employment, training, life skills and higher education) to support looked-after young people transitioning out of care into independent living.

In terms of the potential harms caused by these interventions. The committee discussed the potential harm caused by pushing a LACYP into higher education when this might not be the best option for them. As noted, no outcomes were reported that considered whether LACYP enrolled in college/higher education thrived or completed their courses. This is a concern that applies to all young people not just those who are looked after and a problem that could be ameliorated by individualised coaching. The committee noted that several colleges offer 'Swap, don't drop' schemes where young people are offered the opportunity to change course and direction and get back on track, rather than dropping out of college altogether.

Based on the evidence, the committee considered that residential experiences, university campus visits, coaching, and mentoring by near peers in higher education could have profoundly beneficial effects on LACYP considering higher education. In addition, by consensus, the committee found that university access schemes (offered by several UK universities) can give important support for LACYP in navigating the application process and receiving assisted entry into the course to which they have applied. However, given the overall scarcity and poor quality of the evidence, and also the need to individualise and tailor the use of interventions to encourage entry into higher education (which may not be the best

path for everyone) the committee made this a weak strength recommendation, which was as follows: "Virtual schools should collaborate with universities and colleges to encourage young people to aspire to higher or further education. Ways to do this could include providing: residential experiences and visits to university or college campuses, mentoring by near peers in higher or further education, and coaching; current local opportunities such as university access schemes and college support programmes." Where offered, the committee noted residential experiences are usually facilitated by the virtual school and delivered by universities and colleges.

Based on the consensus, the committee considered that support was also important for LACYP considering alternative routes into further education and training (other than higher education which is accessed by only around 6% of LACYP). The committee considered careers support and advice, work experience placements, and internships to be useful and available routes into good careers for LACYP and care leavers. These interventions should be targeted at looked-after children and care leavers in recognition of the extra level of support and sign posting required for this population. Since this recommendation was based on expert consensus a "consider"-strength recommendation was made, as follows: "Consider ways to support a young person's entry into careers and training. These could include: careers support and advice; current local opportunities such as work experience placements, apprenticeships, and internships (particularly those targeted at looked-after young people and care leavers).

Cost effectiveness and resource use

There were no published cost-effectiveness analyses identified and original economic modelling was not prioritised due to the anticipated lack of effectiveness evidence to address this review question. When drafting recommendations, the committee considered the nature of the interventions and type of resource use that would be required as described in the effectiveness studies.

The recommendations drafted by the committee were aimed at ensuring that local authorities, virtual schools and designated teachers were making use of currently available opportunities to support entry into further or higher education or training for LACYP in their area. This may include signposting to local programmes and schemes, many of which are delivered by universities or third sector parties. This type of intervention was perceived as being low cost from the public sector perspective. For interventions that are funded by local authorities to assist LACYP to enter higher or further education or training, the committee recognised that interventions that have an apparently low cost such as volunteer coaching programmes, are likely to still be associated with expenses associated to travel, management and administration. Overall, the committee considered that the resource impact was small compared to the potential benefits (improved education, employability, and independence).

This evidence review supports recommendations 1.6.22 and 1.6.23.

References - included studies

Effectiveness

Barnow, Burt S; Buck, Amy; O'Brien, Kirk; Pecora, Peter; Ellis, Mei Ling; Steiner, Eric; Effective services for improving education and employment outcomes for children and alumni of foster care service: Correlates and educational and employment outcomes.; Child & Family Social Work; 2015; vol. 20 (no. 2); 159-170

Blakeslee, Jennifer E; Powers, Laurie E; Geenen, Sarah; Schmidt, Jessica; Nelson, May; Fullerton, Ann; George, Kevin; McHugh, Elizabeth; Bryant, Mary; Research Consortium to Increase the Success of Youth in Foster, Care; Evaluating the My Life self-determination model for older youth in foster care: Establishing efficacy and exploring moderation of response to intervention.; Children and youth services review; 2020; vol. 119

Courtney ME, Zinn A, Zielewski EH, Bess RJ, Malm KE, Stagner M, Pergamit M. Evaluation of the Life Skills Training Program, Los Angeles County, California. Administration for children & families. 2008 Jul.

Geenen, Sarah; Powers, Laurie E; Powers, Jennifer; Cunningham, Miranda; McMahon, Lisa; Nelson, May; Dalton, Lawrence D; Swank, Paul; Fullerton, Ann; Experimental study of a self-determination intervention for youth in foster care.; Career Development and Transition for Exceptional Individuals; 2013; vol. 36 (no. 2); 84-95

Geenen, Sarah; Powers, Laurie E; Phillips, Lee Ann; Nelson, May; McKenna, Jessica; Winges-Yanez, Nichole; Blanchette, Linda; Croskey, Adrienne; Dalton, Lawrence D; Salazar, Amy; Swank, Paul; Better futures: a randomized field test of a model for supporting young people in foster care with mental health challenges to participate in higher education.; The journal of behavioral health services & research; 2015; vol. 42 (no. 2); 150-71

Powers, Laurie E; Geenen, Sarah; Powers, Jennifer; Pommier-Satya, Summer; Turner, Alison; Dalton, Lawrence D; Drummond, Diann; Swank, Paul; My life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition outcomes of youth in foster care and special education.; Children and Youth Services Review; 2012; vol. 34 (no. 11); 2179-2187

Gazeley, Louise; Hinton-Smith, Tamsin; The 'Success' of Looked after Children in Higher Education in England: Near Peer Coaching, 'Small Steps' and Future Thinking; Higher Education Research and Development; 2018; vol. 37 (no. 5); 952-965

Cost effectiveness

No cost-effectiveness studies were included.

Appendices

Appendix A – Review protocols

Review protocol for interventions to support entry into further or higher education or training

ID	Field	Content
0.	PROSPERO registration number	
1.	Review title	Interventions to support entry into further or higher education or training for looked-after children and young people
2.	Review question	4.3a: What is the effectiveness of interventions to support entry into further or higher education or training?
		4.3b: are interventions to support entry into further or higher education or training acceptable and accessible to looked-after children and young people and their care providers? What are the barriers to, and facilitators for the effectiveness of these interventions?
3.	Objective	Quantitative To determine the effectiveness and harms of interventions and approaches to support entry into further or higher education or training for looked-after children and young people.
		Qualitative To determine if interventions to support entry into further or higher education or training are acceptable and accessible to looked after children, their

		carers, and providers who would deliver them. To determine other barriers		
		and facilitators to the effectiveness of these interventions.		
4. Searches		Sources to be searched		
		PsycINFO (Ovid)		
		Embase (Ovid)		
		MEDLINE (Ovid)		
		MEDLINE In-Process (Ovid)		
		MEDLINE Epubs Ahead of Print		
		PsycINFO (Ovid)		
		Social policy and practice (Ovid)		
		Cochrane Central Register of Controlled Trials (CENTRAL)		
		 Cochrane Database of Systematic Reviews (CDSR) 		
		 Database of Abstracts of Reviews of Effect (DARE) 		
		 EconLit (Ovid) – economic searches only 		
		NHSEED (CRD) - economic searches only		
		Supplementary search techniques		
		 Studies published from 1st January 1990 to present day. 		
		 A supplementary search of ERIC database was performed using terms relating to looked after children and education. 		
		Limits		
		Studies reported in English		
		No study design filters will be applied		
		Animal studies will be excluded		
		 Conference abstracts/proceedings will be excluded. 		

		For economic searches, the Cost Utility, Economic Evaluations and Quality of Life filters will be applied.			
		The full search strategies for MEDLINE database will be published in the final review. For each search the Information Services team at NICE will quality assure the principal database search strategy and peer review the strategies for the other databases using an adaptation of the PRESS 2015 Guideline Evidence-Based Checklist			
5.	Condition or domain being studied	This review is for part of an updated NICE guideline for looked-after children and young people and concerns supporting looked after children to entry into further or higher education.			
6.	Population	 Looked after children and young people (wherever they are looked after) from the beginning of secondary school education until age 18. Including: Children and young people who are looked after on a planned, temporary basis for short breaks or respite care purposes, only if the Children Act 1989 (section 20) applies and the child or young person is temporarily classed as looked after. Children and young people living at home with birth parents but under a full or interim local authority care order and are subject to looked-after children and young people processes and statutory duties. Children and young people in a prospective adoptive placement. Children and young people preparing to leave care. Looked-after children and young people on remand, detained in secure youth custody and those serving community orders. 			

7.	Intervention	Interventions and approaches to support entry into further or higher education or training for looked-after children and young people.			
		 Example interventions and approaches of interest include: Interventions to promote positive relationships (as relates to their impact on educational outcomes) Coaching and mentoring (including peer mentoring) Transition and outreach programmes (LACYP-specific programmes to encourage entry into further education) Interventions targeted at colleges and universities (where outcomes for LACYP are reported) Vocational courses Teacher-delivered and carer-delivered interventions School-based and home-based interventions Tutoring programmes 			
8.	Comparator	Other pedagogical interventions Quantitative evidence Comparator could include standard care, waiting list, or another approach to support entry into further or higher education or training for looked-after children and young people. Qualitative evidence Not applicable			
9.	Types of study to be included	Quantitative evidence Systematic reviews of included study designs Randomised controlled trials			

		If insufficient evidence, progress to non-randomised prospective controlled study designs If insufficient evidence, progress to non-randomised, non-prospective, controlled study designs (for example, retrospective cohort studies, case control studies, uncontrolled before and after studies, and interrupted time series)
		Qualitative evidence Including focus groups and interview-based studies (mixed-methods studies will also be included provided they contain relevant qualitative data). Evidence must be related to acceptability, accessibility of interventions or other barriers to and facilitators for their effectiveness to support entry into further or higher education or training.
10.	Other exclusion criteria	Studies including mixed populations (i.e. looked after and non-looked after children) without reporting results separately for LACYP Strategies, policies, system structure and the delivery of care that is covered in statutory guidance about looked after children and young people
		 Quantitative evidence exclusions Countries outside of the UK (unless not enough evidence, then progress to OECD countries) Studies older than the year 2000 (unless not enough evidence, then progress to include studies between 1990 to current)
		Qualitative evidence exclusions

		 Mixed-methods studies reporting qualitative data that cannot be distinguished from quantitative data. Countries outside of the UK (unless evidence concerns an intervention which has been shown to be effective in reviewed quantitative evidence) Studies older than the year 2010 (unless not enough evidence, then progress to include studies between 1990 to current)
11.	Context	In 2017, 56.3% of looked-after children had a special educational need, compared with 45.9% of children in need and 14.4% of all children. At key stage 2, 32% of looked-after children and young people reached the expected standard in reading, writing and maths (compared with 61% of those who were not looked after). In 2016, 0.10% of looked-after children were permanently excluded from school, compared to 0.08% of all children. Currently just 6 per cent of care leavers aged 19-21 go into higher education, and those that do are nearly twice as likely to drop out than their peers. Local authorities have a duty to support looked-after children and young people. This includes providing individual care plans covering for educational needs such as support for higher and further education aspirations.
12.	Primary outcomes (critical outcomes)	 Quantitative outcomes Intention to enter, or successful entry, into further or higher education or training Maintenance of, and graduation from, further or higher education or training place Adverse outcomes i.e. non-continuation of, or into, further or higher education or training Knowledge and beliefs about further education and training (including confidence and interest)

		 Qualitative outcomes Qualitative evidence related to interventions to support entry into higher or further education will be examined. Evidence should relate to the views of looked after children, their carers, and providers, who would deliver eligible interventions, on: The accessibility and acceptability of the intervention, including information about the source and type of intervention used. Barriers to and facilitators for intervention effectiveness in supporting entry into further or higher education.
13.	Secondary outcomes (important outcomes)	None
14.	Data extraction (selection and coding)	All references identified by the searches and from other sources will be uploaded into EPPI reviewer and de-duplicated. 10% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be
		assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4).
		Study investigators may be contacted for missing data where time and resources allow.

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15.	Risk of bias (quality) assessment	Risk of bias and/or methodological quality will be assessed using the preferred checklist for each study type as described in Developing NICE guidelines: the manual . The risk of bias across all available evidence will be evaluated for each
		outcome using an adaptation of the 'Grading of Recommendations
		Assessment, Development and Evaluation (GRADE) toolbox' developed by
		the international GRADE working group http://www.gradeworkinggroup.org/
		GRADE and GRADE CERQual will be used to assess confidence in the
		findings from quantitative and qualitative evidence synthesis respectively.
16.	Strategy for data synthesis	Quantitative data
		Meta-analyses of interventional data will be conducted with reference
		to the Cochrane Handbook for Systematic Reviews of Interventions
		(Higgins et al. 2011).
		Fixed- and random-effects models (der Simonian and Laird) will be
		fitted for all syntheses, with the presented analysis dependent on the
		degree of heterogeneity in the assembled evidence. Fixed-effects
		models will be the preferred choice to report, but in situations where
		the assumption of a shared mean for fixed-effects model is clearly not
		met, even after appropriate pre-specified subgroup analyses is
		conducted, random-effects results are presented. Fixed-effects
		models are deemed to be inappropriate if one or both of the following
		conditions was met:

- Significant between study heterogeneity in methodology, population, intervention or comparator was identified by the reviewer in advance of data analysis.
- The presence of significant statistical heterogeneity in the metaanalysis, defined as I²≥50%.
- Meta-analyses will be performed in Cochrane Review Manager V5.3

If the studies are found to be too heterogeneous to be pooled statistically, a simple recounting and description of findings (a narrative synthesis) will be conducted.

Qualitative data

Information from qualitative studies will be combined using a thematic synthesis. By examining the findings of each included study, descriptive themes will be independently identified and coded in NVivo v.11. The qualitative synthesis will interrogate these 'descriptive themes' to develop 'analytical themes', using the theoretical framework derived from overarching qualitative review questions. Themes will also be organised at the level of recipients of care and providers of care.

Evidence integration

A segregated and contingent approach will be undertaken, with sequential synthesis. Quantitative and qualitative data will be analysed and presented separately. For non-UK evidence, the data collection and analysis of qualitative data will occur after and be informed by the

		collection and analysis of quantitative effectiveness data. Following this, all qualitative and quantitative data will be integrated using tables and matrices. By intervention, qualitative analytical themes will be presented next to quantitative effectiveness data. Data will be compared for similarities and incongruence with supporting explanatory quotes where possible.		
17.	Analysis of sub-groups	Results will be stratified by the following subgroups where possible. In addition, for quantitative synthesis where there is heterogeneity, subgroup analysis will be undertaken using the following subgroups. • Looked-after children on remand • Looked-after children in secure settings • LACYP who are outside of mainstream education (e.g. off-roll or in pupil referral units) • Looked-after children and young people with mental health and emotional wellbeing needs • Looked-after children and young people who are unaccompanied children seeking asylum, or refugees • Looked-after children and young people who are teenage and young parents in care • Looked-after children and young people with disabilities; speech, language and communication needs; special education needs or behaviour that challenges. • Looked-after children and young people who are placed out of area • Looked-after children and young people who are LGBTQ		

18.	Type and method of review				
		□ Diagnostic			
		□ Prognostic			
		□ Qualitative			
		□ Epidemiologic			
		□ Service Deliver	У		
		☐ Other (please s	pecify)		
		·			
19.	Language	English			
20.	Country	England			
21.	Anticipated or actual start date	June 2019			
22.	Anticipated completion date	September 2021			
23.	Stage of review at time of this submission	Review stage	Started	Completed	
		Preliminary searches			
		Piloting of the study selection			
		process			
		Formal screening of search			
		results against eligibility criteria			
		Data extraction			
		Risk of bias (quality)			
		assessment			
		Data analysis			
24.	Named contact	5a. Named contact			
		Guideline Updates Team			

		5b Named contact e-mail
		LACYPupdate@nice.org.uk
		5c Organisational affiliation of the review
		National Institute for Health and Care Excellence (NICE)
25.	Review team members	From the Guideline Updates Team:
		Caroline Mulvihill
		Stephen Duffield
		Bernadette Li
		Rui Martins
26.	Funding sources/sponsor	This systematic review is being completed by the Guideline Updates Team,
		which is part of NICE.
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE
		guidelines (including the evidence review team and expert witnesses) must
		declare any potential conflicts of interest in line with NICE's code of practice
		for declaring and dealing with conflicts of interest. Any relevant interests, or
		changes to interests, will also be declared publicly at the start of each
		guideline committee meeting. Before each meeting, any potential conflicts of
		interest will be considered by the guideline committee Chair and a senior
		member of the development team. Any decisions to exclude a person from
		all or part of a meeting will be documented. Any changes to a member's
		declaration of interests will be recorded in the minutes of the meeting.
		Declarations of interests will be published with the final guideline.
28.	Collaborators	Development of this systematic review will be overseen by an advisory
		committee who will use the review to inform the development of evidence-
		based recommendations in line with section 3 of Developing NICE
		guidelines: the manual. Members of the guideline committee are available on

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		the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10121			
29.	Other registration details	N/ A			
30.	Reference/URL for published protocol				
31.	Dissemination plans	 NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as: notifying registered stakeholders of publication publicising the guideline through NICE's newsletter and alerts issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE. 			
32.	Keywords	Looked after children, looked after young people, interventions, higher education, further education, interventions, systematic review			
33.	Details of existing review of same topic by same authors	N/ A			
34.	Current review status	□ Ongoing			
		☐ Completed but not published			
		☐ Completed and published			
		☐ Completed, published and being updated			
		□ Discontinued			
35	Additional information				
36.	Details of final publication	www.nice.org.uk			

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Appendix B – Literature search strategies

Effectiveness searches

Bibliographic databases searched for the guideline:

- Cochrane Database of Systematic Reviews CDSR (Wiley)
- Cochrane Central Register of Controlled Trials CENTRAL (Wiley)
- Database of Abstracts of Reviews of Effects DARE (CDSR)
- PsycINFO (Ovid)
- EMBASE (Ovid)
- MEDLINE (Ovid)
- MEDLINE Epub Ahead of Print (Ovid)
- MEDLINE In-Process (Ovid)
- Social policy and practice (Ovid)
- ERIC (ProQuest)

A NICE information specialist conducted the literature searches for the evidence review. The searches were originally run in June 2019 with an additional search of the ERIC database in October 2019.

Searches were run on population only and the results were sifted for each review question (RQ). The searches were rerun on all databases reported above in July 2020 and again in October 2020.

The principal search strategy was developed in MEDLINE (Ovid interface) and adapted, as appropriate, for use in the other sources listed in the protocol, taking into account their size, search functionality and subject coverage.

The MEDLINE strategy below was quality assured (QA) by trained NICE information specialist. All translated search strategies were peer reviewed to ensure their accuracy. Both procedures were adapted from the <u>2016 PRESS Checklist</u>. The translated search strategies are available in the evidence reviews for the guideline.

The search results were managed in EPPI-Reviewer v5. Duplicates were removed in EPPI-R5 using a two-step process. First, automated deduplication is performed using a high-value algorithm. Second, manual deduplication is used to assess 'low-probability' matches. All decisions made for the review can be accessed via the deduplication history.

English language limits were applied in adherence to standard NICE practice and the review protocol.

A date limit of 1990 was applied to align with the approximate advent of the Children Act 1989.

The limit to remove animal studies in the searches was the standard NICE practice, which has been adapted from: Dickersin, K., Scherer, R., & Lefebvre, C. (1994). <u>Systematic Reviews</u>: <u>Identifying relevant studies for systematic reviews</u>. *BMJ*, 309(6964), 1286.

No study design filters were applied, in adherence to the review protocol.

Table 1: search strategy

Medline Strategy, searched 10th June 2019

Database: Ovid MEDLINE(R) 1946 to June 10, 2019

- 1 child, orphaned/ (659)
- 2 child, foster/ (71)
- 3 child, adopted/ (46)
- 4 adolescent, institutionalized/ (126)

Database: Ovid MEDLINE(R) 1946 to June 10, 2019

- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (123)
- 6 ("care leaver*" or "leaving care").tw. (31)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (236)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (111)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (74)
- ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (2973)
- 11 "ward of court*".tw. (12)
- 12 or/1-11 (4225)
- 13 residential facilities/ (5286)

Database: Ovid MEDLINE(R) 1946 to June 10, 2019

- 14 group homes/ (948)
- 15 halfway houses/ (1051)
- 16 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1131)
- 17 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (6595)
- 18 or/13-17 (13612)
- 19 orphanages/ (435)
- 20 adoption/ (4727)
- 21 foster home care/ (3503)
- 22 (special adj1 guardian*).tw. (7)
- 23 ((placement* or foster*) adj2 (care* or family or families)).tw. (3144)
- 24 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (279)
- 25 or/19-24 (9589)

Database: Ovid MEDLINE(R) 1946 to June 10, 2019

- 26 exp Infant/ or Infant Health/ or Infant Welfare/ (1098738)
- 27 (prematur* or pre-matur* or preterm* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neonat* or neonat* or baby* or babies or toddler*).ti,ab,in,jn. (811620)
- 28 exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (1838706)
- 29 Minors/ (2505)
- 30 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (2212038)
- 31 exp pediatrics/ (55350)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (768069)
- 33 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (1937435)
- 34 Puberty/ (12990)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubert* or pre
- 36 Schools/ (35128)

Database: Ovid MEDLINE(R) 1946 to June 10, 2019

Search Strategy:

- 37 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (8591)
- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (440583)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (3651)
- 40 or/26-39 (4935665)
- 41 18 and 40 (4519)
- 42 12 or 25 or 41 (15912)
- 43 animals/ not humans/ (4554892)
- 44 42 not 43 (15801)
- 45 limit 44 to english language (14199)
- 46 limit 45 to ed=19900101-20190606 (11059)

No study design filters were used for the search strategy

Cost-effectiveness searches

Sources searched:

- Econlit (Ovid)
- Embase (Ovid)
- MEDLINE (Ovid)
- MEDLINE In-Process (Ovid)
- PsycINFO (Ovid)
- NHS EED (Wiley)

Search filters to retrieve cost utility, economic evaluations and quality of life papers were appended to the MEDLINE, Embase and PsycINFO searches reported above. The searches were conducted in July 2019. The searches were re-run in October 2020.

Databases	Date searched	Version/files	No. retrieved with CU filter	No retrieved with Econ Eval and QoL filters	No. retrieved with Econ Eval and QoL filters and NOT out CU results
EconLit (Ovid)	09/07/2019	1886 to June 27, 2019	176 (no filter)	Not run again	Not run again
NHS Economic Evaluation Database (NHS EED) (legacy database)	09/07/2019	09/07/2019	105 (no filter)	Not run again	Not run again
Embase (Ovid)	09/07/2019 15/07/2019	1946 to July 08, 2019 1988 to 2019 Week 28	307	2228	1908
MEDLINE (Ovid)	09/07/2019 15/07/2019	1946 to July 08, 2019 1946 to July 12, 2019	269	1136	1135

MEDLINE In-Process (Ovid)	09/07/2019 15/07/2019	1946 to July 08, 2019 1946 to July 12, 2019	6	122	93
MEDLINE Epub Ahead of Print	09/07/2019 15/07/2019	July 08, 2019 July 12, 2019	12	38	29
PsycINFO (Ovid)	09/07/2019 15/07/2019	1987 to July Week 1 2019 1987 to July Week 2 2019	265	Not searched for econ eval and QoL results	Not searched for econ eval and QoL results

Search strategies: Cost Utility filter

Database: PsycINFO <1987 to July Week 1 2019>

Search Strategy:

- 1 Foster children/ (1566)
- 2 Adopted children/ (1578)
- 3 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (433)
- 4 ("care leaver*" or "leaving care").tw. (282)
- 5 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (772)

- 6 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (309)
- 7 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (142)
- 8 "ward of court*".tw. (0)
- 9 ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (1638)
- 10 or/1-9 (6348)
- 11 group homes/ (884)
- 12 halfway houses/ (114)
- 13 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1917)
- 14 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or facilit*)).tw. (8380)
- 15 or/11-14 (10954)
- 16 orphanages/ (301)
- 17 adoption/ (2693)
- 18 foster home care/ (0)
- 19 (special adj1 guardian*).tw. (5)
- 20 ((placement* or foster*) adj2 (care* or family or families)).tw. (7275)
- 21 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (790)
- 22 or/16-21 (10189)

- 23 exp Infant/ or Infant Health/ or Infant Welfare/ (0)
- 24 (prematur* or pre-matur* or preterm* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or baby* or babies or toddler*).ti,ab,in,jn. (119577)
- 25 exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (8166)
- 26 Minors/ (0)
- 27 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (762095)
- 28 exp pediatrics/ (26284)
- 29 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (71640)
- 30 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (1874)
- 31 Puberty/ (2287)
- 32 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (291098)
- 33 Schools/ (25726)
- 34 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (0)
- 35 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (578348)
- 36 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (811)
- 37 or/23-36 (1281612)
- 38 15 and 37 (5647)
- 39 10 or 22 or 38 (18267)
- 40 animals/ not humans/ (4267)

- 41 39 not 40 (18266)
- 42 limit 41 to english language (17063)
- 43 (1990* or 1991* or 1992* or 1993* or 1994* 1995* or 1996* or 1997* or 1998* or 1999* or 2000* or 2001* or 2002* or 2003* or 2004* or 2005* or 2006* or 2007* or 2008* or 2009* or 2010* or 2011* or 2012* or 2013* or 2014* or 2015* or 2016* or 2017* or 2018* or 2019*).up. (3398945)
- 44 42 and 43 (16072)
- 45 Markov chains/ (1336)
- 46 ((qualit* adj2 adjust* adj2 life*) or qaly*).tw. (1638)
- 47 (EQ5D* or EQ-5D* or ((euroqol or euro-qol or euro-quol or euro-quol or euro-col) adj3 ("5" or five)) or (european* adj2 quality adj3 ("5" or five))).tw. (1711)
- 48 "Costs and Cost Analysis"/ (14750)
- 49 cost.ti. (7067)
- 50 (cost* adj2 utilit*).tw. (745)
- 51 (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (29345)
- 52 (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (7025)
- 53 ((incremental* adj2 cost*) or ICER).tw. (1058)
- 54 utilities.tw. (1742)
- 55 markov*.tw. (3797)
- (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (8371)
- 57 ((utility or effective*) adj2 analys*).tw. (2844)
- 58 (willing* adj2 pay*).tw. (2253)

or sibling* or youth*)).tw. (74)

45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 (60767) 44 and 59 (265) 60 Database: Ovid MEDLINE(R) <1946 to July 08, 2019> (line 65) Search Strategy: child, orphaned/ (661) child, foster/ (74) child, adopted/ (48) adolescent, institutionalized/ (126) ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (123) ("care leaver*" or "leaving care").tw. (32) (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (240) ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (111)

((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin*

- 10 ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (2986)
- 11 "ward of court*".tw. (12)
- 12 or/1-11 (4244)
- 13 residential facilities/ (5299)
- 14 group homes/ (950)
- 15 halfway houses/ (1052)
- 16 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1136)
- 17 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (6631)
- 18 or/13-17 (13661)
- 19 orphanages/ (436)
- 20 adoption/ (4728)
- 21 foster home care/ (3508)
- 22 (special adj1 guardian*).tw. (7)
- 23 ((placement* or foster*) adj2 (care* or family or families)).tw. (3156)
- 24 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (282)
- 25 or/19-24 (9605)
- 26 exp Infant/ or Infant Health/ or Infant Welfare/ (1101046)
- 27 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or babies or toddler*).ti,ab,in,jn. (813997)

- 28 exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (1843400)
- 29 Minors/ (2509)
- 30 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (2221342)
- 31 exp pediatrics/ (55492)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (771944)
- 33 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (1942946)
- 34 Puberty/ (13005)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (395382)
- 36 Schools/ (35299)
- 37 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (8611)
- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (442260)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (3665)
- 40 or/26-39 (4951548)
- 41 18 and 40 (4537)
- 42 12 or 25 or 41 (15959)
- 43 animals/ not humans/ (4563292)
- 44 42 not 43 (15848)
- 45 limit 44 to english language (14243)
- 46 limit 45 to ed=19900101-20190606 (11059)

46 and 63 (269)

limit 45 to dt=19900101-20190611 (10685) Markov Chains/ (13500) 48 Quality-Adjusted Life Years/ or (qualit* adj2 adjust* adj2 life*).tw. or galy*.tw. (15718) (EQ5D* or EQ-5D* or ((eurogol or euro-gol five))).tw. (6545) Cost-Benefit Analysis/ (77012) exp Models, Economic/ (14227) 52 cost.ti. (60952) (cost* adj2 utilit*).tw. (4392) 54 (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (162969) 55 (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (26515) 56 ((incremental* adj2 cost*) or ICER).tw. (10100) 57 58 utilities.tw. (5428) markov*.tw. (16739) 59 (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (36613) ((utility or effective*) adj2 analys*).tw. (14480) 61 (willing* adj2 pay*).tw. (4632) or/48-62 (287270) 45 and 63 (311)

Database: Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <1946 to July 08, 2019>

(Line 66)

Search Strategy:

- 1 child, orphaned/ (0)
- 2 child, foster/ (0)
- 3 child, adopted/ (0)
- 4 adolescent, institutionalized/ (0)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (17)
- 6 ("care leaver*" or "leaving care").tw. (6)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (45)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (18)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (4)
- ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (361)
- 11 "ward of court*".tw. (0)

or/1-11 (443) residential facilities/ (0) 13 group homes/ (0) halfway houses/ (0) (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (122) ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (785) or/13-17 (897) orphanages/ (0) adoption/(0) foster home care/ (0) (special adj1 guardian*).tw. (0) 22 ((placement* or foster*) adj2 (care* or family or families)).tw. (367) ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (31) 24 or/20-24 (391) exp Infant/ or Infant Health/ or Infant Welfare/ (0) 26 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or babies or toddler*).ti,ab,in,jn. (71122) exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (0) Minors/(0)

- 30 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (282655)
- 31 exp pediatrics/ (0)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (105594)
- 33 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (0)
- 34 Puberty/ (0)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (52576)
- 36 Schools/ (0)
- 37 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (0)
- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (61256)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (516)
- 40 or/26-39 (410151)
- 41 18 and 40 (260)
- 42 12 or 25 or 41 (962)
- 43 animals/ not humans/ (0)
- 44 42 not 43 (962)
- 45 limit 44 to english language (945)
- 46 limit 45 to ed=19900101-20190606 (256)
- 47 limit 45 to dt=19900101-20190611 (916)
- 48 Markov Chains/ (0)

Quality-Adjusted Life Years/ or (qualit* adj2 adjust* adj2 life*).tw. or qaly*.tw. (1713) (EQ5D* or EQ-5D* or ((eurogol or euro-gol or euroguol or euro-guol or eurocol or euro-col) adj3 ("5" or five)) or (european* adj2 quality adj3 ("5" or five))).tw. (1364) Cost-Benefit Analysis/ (0) exp Models, Economic/ (0) cost.ti. (9867) (cost* adj2 utilit*).tw. (767) 54 (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (29070) (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (4431) 56 57 ((incremental* adj2 cost*) or ICER).tw. (1607) 58 utilities.tw. (947) markov*.tw. (4984) 59 60 (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (4280) ((utility or effective*) adj2 analys*).tw. (2504) (willing* adj2 pay*).tw. (911) or/48-62 (45705) 45 and 63 (28) 46 and 63 (6) 47 and 63 (27)

Database: Ovid MEDLINE(R) Epub Ahead of Print <July 08, 2019> (Line 64)

Search Strategy:

- 1 child, orphaned/ (0)
- 2 child, foster/ (0)
- 3 child, adopted/ (0)
- 4 adolescent, institutionalized/ (0)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (8)
- 6 ("care leaver*" or "leaving care").tw. (5)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (13)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (8)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (3)
- ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (170)
- 11 "ward of court*".tw. (0)
- 12 or/1-11 (198)

Minors/(0)

29

residential facilities/ (0) group homes/ (0) 14 halfway houses/ (0) (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (60) ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (232) or/13-17 (288) orphanages/(0) adoption/(0) 20 foster home care/ (0) 22 (special adj1 guardian*).tw. (0) ((placement* or foster*) adj2 (care* or family or families)).tw. (185) ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (11) or/20-24 (191) exp Infant/ or Infant Health/ or Infant Welfare/ (0) (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or babies or toddler*).ti,ab,in,jn. (14304) exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (0)

(child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (49388)

- 31 exp pediatrics/ (0)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (19442)
- 33 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (0)
- 34 Puberty/ (0)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (12671)
- 36 Schools/ (0)
- 37 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (0)
- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (11661)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (95)
- 40 or/26-39 (72744)
- 41 18 and 40 (102)
- 42 12 or 25 or 41 (409)
- 43 animals/ not humans/ (0)
- 44 42 not 43 (409)
- 45 limit 44 to english language (407)
- 46 limit 45 to ed=19900101-20190606 (0)
- 47 limit 45 to dt=19900101-20190611 (382)
- 48 Markov Chains/ (0)
- 49 Quality-Adjusted Life Years/ or (qualit* adj2 adjust* adj2 life*).tw. or qaly*.tw. (419)

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(EQ5D* or EQ-5D* or ((eurogol or euro-gol or euroguol or euro-guol or euro-col) adj3 ("5" or five)) or (european* adj2 quality adj3 ("5" or
five))).tw. (316)
     Cost-Benefit Analysis/ (0)
     exp Models, Economic/ (0)
52
     cost.ti. (1350)
     (cost* adj2 utilit*).tw. (162)
     (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (4696)
55
     (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (838)
     ((incremental* adj2 cost*) or ICER).tw. (342)
57
     utilities.tw. (155)
58
59
     markov*.tw. (807)
     (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (712)
60
     ((utility or effective*) adj2 analys*).tw. (482)
     (willing* adj2 pay*).tw. (178)
     or/48-62 (7346)
     45 and 63 (12)
Database: Embase <1988 to 2019 Week 27>
Search Strategy:
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- 1 orphaned child/ (606)
- 2 foster child/ (72)
- 3 adopted child/ (507)
- 4 institutionalized adolescent/ (16)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (239)
- 6 ("care leaver*" or "leaving care").tw. (60)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (328)
- 8 ((nonparent* or non-parent* or parentless* or parentless) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (137)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (66)
- 10 ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (3301)
- 11 "ward of court*".tw. (13)
- 12 or/1-11 (4918)
- 13 residential home/ (5797)
- 14 halfway house/ (616)
- 15 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1546)
- 16 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (8776)

- 17 or/13-16 (15272)
- 18 orphanage/ (851)
- 19 foster care/ (3851)
- 20 (special adj1 guardian*).tw. (7)
- 21 ((placement* or foster*) adj2 (care* or family or families)).tw. (4024)
- 22 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (359)
- 23 *adoption/ (2710)
- 24 or/18-23 (6865)
- exp juvenile/ or Child Behavior/ or Child Welfare/ or Child Health/ or infant welfare/ or "minor (person)"/ or elementary student/ (2784798)
- 26 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or baby* or babies or toddler*).ti,ab,in,ad,jw. (990094)
- 27 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,ad,jw. (3070275)
- 28 exp pediatrics/ (89360)
- 29 (pediatric* or paediatric* or peadiatric*).ti,ab,in,ad,jw. (1438284)
- 30 exp adolescence/ or exp adolescent behavior/ or adolescent health/ or high school student/ or middle school student/ (88098)
- 31 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or preteen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,ad,jw. (568613)
- 32 school/ or high school/ or kindergarten/ or middle school/ or primary school/ or nursery school/ or day care/ (91653)
- 33 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jw. (588621)
- 34 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (6349)

or/25-34 (5334085) 17 and 35 (5115) 36 24 and 35 (5358) 12 or 24 or 36 or 37 (14911) nonhuman/ not human/ (3937063) 39 40 38 not 39 (14760) (letter or editorial).pt. (1540594) (conference abstract or conference paper or conference proceeding or "conference review").pt. (4222564) 41 or 42 (5763158) 40 not 43 (12196) limit 44 to dc=19900101-20190606 (11884) limit 45 to english language (11023) Markov chain/ (4090) quality adjusted life year/ or (qualit* adj2 adjust* adj2 life*).tw. or galy*.tw. (30409) 48 (EQ5D* or EQ-5D* or ((european* adj2 quality adj3 ("5" or five)) or (european* adj2 quality adj3 ("5" or five))).tw. (15875) "cost benefit analysis"/ (76518) exp economic model/ (1504) cost.ti. (88995) 52 (cost* adj2 utilit*).tw. (8688) 53

(cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (264435) 54 (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (44462) 55 ((incremental* adj2 cost*) or ICER).tw. (20797) utilities.tw. (10291) 57 markov*.tw. (26990) 58 (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (49359) 59 ((utility or effective*) adj2 analys*).tw. (25580) 60 (willing* adj2 pay*).tw. (8767) 61 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 (437018) 46 and 62 (307) (conference abstract or conference paper or conference proceeding or "conference review" or letter or editorial).pt. (5763158) 63 not 64 (307) 65 Database: Econlit <1886 to June 27, 2019> Search Strategy: [child, orphaned/] (0) [child, foster/] (0) [child, adopted/] (0)

- 4 [adolescent, institutionalized/] (0)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (3)
- 6 ("care leaver*" or "leaving care").tw. (2)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (15)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (34)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (6)
- ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (111)
- 11 "ward of court*".tw. (0)
- 12 or/1-11 (163)
- 13 [residential facilities/] (0)
- 14 [group homes/] (0)
- 15 [halfway houses/] (0)
- 16 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (42)
- 17 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (208)
- 18 or/13-17 (250)
- 19 [orphanages/] (0)

- 20 [adoption/] (0)
- 21 [foster home care/] (0)
- 22 (special adj1 guardian*).tw. (0)
- 23 ((placement* or foster*) adj2 (care* or family or families)).tw. (154)
- 24 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (23)
- 25 or/20-24 (172)
- 26 [exp Infant/ or Infant Health/ or Infant Welfare/] (0)
- 27 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or baby* or babies or toddler*).ti,ab,in,jn. (5404)
- 28 [exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/] (0)
- 29 [Minors/] (0)
- 30 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (45263)
- 31 [exp pediatrics/] (0)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (168)
- 33 [Adolescent/ or Adolescent Behavior/ or Adolescent Health/] (0)
- 34 [Puberty/] (0)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (8812)
- 36 [Schools/] (0)
- 37 [Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/] (0)

- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (47608)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (56)
- 40 or/26-39 (91121)
- 41 18 and 40 (71)
- 42 12 or 25 or 41 (359)
- 43 limit 42 to yr="2009 -Current" (176)

Database: NHSEED (CRD)

- 1 MeSH DESCRIPTOR Child, Orphaned EXPLODE ALL TREES IN NHSEED 0
- 2 MeSH DESCRIPTOR Adoption EXPLODE ALL TREES IN NHSEED 3
- 3 (("looked after" NEAR2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*))) IN NHSEED 0
- 4 ("care leaver*" or "leaving care") IN NHSEED 0
- 5 ("in care") IN NHSEED 40
- 6 ("care experience") IN NHSEED 1
- 7 (nonparent* or non-parent* or parentless* or parent-less) IN NHSEED 0
- 8 (relinquish* or estrange*) IN NHSEED 0
- 9 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*):TI IN NHSEED 22
- 10 ("ward of court*") IN NHSEED 0

11 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 64

12 (((residential or supported or remand* or secure or correctional) NEAR1 (accommodation* or institut* or care or lodging or home* or centre* or facilit*))) IN NHSEED 88

13 MeSH DESCRIPTOR orphanages EXPLODE ALL TREES IN NHSEED 0

14 (guardian) IN NHSEED 13

15 (((placement* or foster*) NEAR2 (care* or family or families))) IN NHSEED 7

16 (((kinship or nonkinship or non kinship or connected or substitute*) NEAR1 care*)) IN NHSEED 1

17 #13 OR #14 OR #15 OR #16 21

18 (infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or baby* or babies or toddler* or child* or minor or minors or boy* or girl* or kid or kids or young* or adolescen* or pubescen* or pre-pubescen* or pubert* or pre-pubert* or p

19 #12 AND #18 23

20 #11 OR #17 OR #19 105

Search strategies: Economic Evaluation and Quality of Life filters

Database: Ovid MEDLINE(R) <1946 to July 12, 2019>

Search Strategy:

- 1 child, orphaned/ (664)
- 2 child, foster/ (74)
- 3 child, adopted/ (48)
- 4 adolescent, institutionalized/ (126)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (123)
- 6 ("care leaver*" or "leaving care").tw. (32)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (240)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (111)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (74)
- ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (2989)
- 11 "ward of court*".tw. (12)
- 12 or/1-11 (4249)
- 13 residential facilities/ (5301)
- 14 group homes/ (951)
- 15 halfway houses/ (1052)

- 16 (("out of home" or "out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1136)
- 17 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (6640)
- 18 or/13-17 (13672)
- 19 orphanages/ (438)
- 20 adoption/ (4729)
- 21 foster home care/ (3508)
- 22 (special adj1 guardian*).tw. (7)
- 23 ((placement* or foster*) adj2 (care* or family or families)).tw. (3156)
- 24 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (282)
- 25 or/19-24 (9924)
- 26 exp Infant/ or Infant Health/ or Infant Welfare/ (1101512)
- 27 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or perinat* or peri-nat* or neo-nat* or neo-nat* or baby* or babies or toddler*).ti,ab,in,jn. (814530)
- 28 exp Child/ or exp Child Behavior/ or Child Health/ or Child Welfare/ (1844269)
- 29 Minors/ (2509)
- 30 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,jn. (2223285)
- 31 exp pediatrics/ (55515)
- 32 (pediatric* or paediatric* or peadiatric*).ti,ab,in,jn. (772838)
- 33 Adolescent/ or Adolescent Behavior/ or Adolescent Health/ (1944098)

- 34 Puberty/ (13005)
- 35 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,jn. (395763)
- 36 Schools/ (35334)
- 37 Child Day Care Centers/ or exp Nurseries/ or Schools, Nursery/ (8611)
- 38 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jn. (442578)
- 39 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (3674)
- 40 or/26-39 (4954893)
- 41 18 and 40 (4538)
- 42 12 or 25 or 41 (16193)
- 43 animals/ not humans/ (4565244)
- 44 42 not 43 (16082)
- 45 limit 44 to english language (14416)
- 46 limit 45 to ed=19900101-20190714 (11278)
- 47 limit 45 to dt=19900101-20190715 (10852)
- 48 Markov Chains/ (13507)
- 49 Quality-Adjusted Life Years/ or (qualit* adj2 adjust* adj2 life*).tw. or qaly*.tw. (15740)
- 50 (EQ5D* or EQ-5D* or ((european* adj2 quality adj3 ("5" or five)) or (european* adj2 quality adj3 ("5" or five))).tw. (6562)
- 51 Cost-Benefit Analysis/ (77068)

exp Models, Economic/ (14240) 52 cost.ti. (61003) 53 (cost* adj2 utilit*).tw. (4395) 54 (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (163128) (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (26542) 56 57 ((incremental* adj2 cost*) or ICER).tw. (10113) utilities.tw. (5434) 58 59 markov*.tw. (16747) (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (36633) 60 ((utility or effective*) adj2 analys*).tw. (14500) (willing* adj2 pay*).tw. (4638) 62 or/48-62 (287514) 45 and 63 (314) 46 and 63 (272) 65 47 and 63 (267) Economics/ (27059) exp "Costs and Cost Analysis"/ (226218) Economics, Dental/ (1906) exp Economics, Hospital/ (23683)

budget\$.tw. (22462)

expenditure\$.tw. (46305)

88

exp Economics, Medical/ (14107) Economics, Nursing/ (3986) 72 Economics, Pharmaceutical/ (2868) 74 Budgets/ (11138) exp Models, Economic/ (14240) Markov Chains/ (13507) Monte Carlo Method/ (26889) Decision Trees/ (10615) econom\$.tw. (220798) cba.tw. (9569) cea.tw. (19685) cua.tw. (941) 82 markov\$.tw. (16747) (monte adj carlo).tw. (28270) 84 (decision adj3 (tree\$ or analys\$)).tw. (12136) 85 (cost or costs or costing\$ or costly or costed).tw. (428019) (price\$ or pricing\$).tw. (31251) 87

(value adj3 (money or monetary)).tw. (1946) (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw. (3350) 91 or/67-91 (869079) "Quality of Life"/ (178315) quality of life.tw. (210147) "Value of Life"/ (5653) 95 Quality-Adjusted Life Years/ (11173) 97 quality adjusted life.tw. (9768) (galy\$ or gald\$ or gale\$ or gtime\$).tw. (8028) disability adjusted life.tw. (2374) daly\$.tw. (2184) 100 Health Status Indicators/ (22927) 101 (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or short form thirtysi 102 thirty six).tw. (21132) (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw. (1258) 103 (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw. (4470) 104 (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw. (28) 105 (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw. (370) 106 (eurogol or euro gol or eg5d or eg 5d).tw. (7790) 107 (gol or hgl or hgol or hrgol).tw. (39934) 108

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109
      (hye or hyes).tw. (58)
      health$ year$ equivalent$.tw. (38)
110
      utilit$.tw. (158839)
111
112
      (hui or hui1 or hui2 or hui3).tw. (1208)
      disutili$.tw. (351)
113
      rosser.tw. (82)
114
      quality of wellbeing.tw. (11)
115
      quality of well-being.tw. (367)
116
      qwb.tw. (186)
117
      willingness to pay.tw. (3952)
118
      standard gamble$.tw. (763)
119
      time trade off.tw. (981)
120
121
      time tradeoff.tw. (223)
122
      tto.tw. (848)
      or/93-122 (455927)
123
      92 or 123 (1261859)
124
125
      45 and 124 (1599)
      46 and 124 (1395)
126
127
      47 and 124 (1345)
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128 125 not 64 (1300)

129 126 not 65 (1136)

130 127 not 66 (1090)

Database: Embase <1988 to 2019 Week 28>

Search Strategy:

1 orphaned child/ (608)

- 2 foster child/ (73)
- 3 adopted child/ (510)
- 4 institutionalized adolescent/ (16)
- 5 ("looked after" adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (239)
- 6 ("care leaver*" or "leaving care").tw. (60)
- 7 (("in care" or "care experience*") adj1 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (328)
- 8 ((nonparent* or non-parent* or parentless* or parent-less) adj3 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (137)
- 9 ((relinquish* or estrange*) adj2 (juvenile* or child* or adolescen* or toddler* or infant* or infancy* or teen* or tween* or young* or baby* or babies* or twin* or sibling* or youth*)).tw. (66)

- 10 ((child* or infancy or adolescen* or juvenile* or toddler* or infant* or teen* or tween* or young* or baby or babies or twin* or sibling* or youth*) adj2 (orphan* or foster* or adopt* or abandon* or unwanted or unaccompanied or homeless or asylum* or refugee*)).ti. (3308)
 11 "ward of court*".tw. (13)
 12 or/1-11 (4928)
- 13 residential home/ (5806)
- 14 halfway house/ (618)
- 15 (("out of home" or " out-of-home" or placement* or "semi independent" or "semi-independent") adj2 care*).tw. (1548)
- 16 ((residential or supported or remand* or secure or correctional) adj1 (accommodation* or institut* or care or lodging or home* or centre* or center* or facilit*)).tw. (8794)
- 17 or/13-16 (15298)
- 18 orphanage/ (851)
- 19 foster care/ (3854)
- 20 (special adj1 guardian*).tw. (7)
- 21 ((placement* or foster*) adj2 (care* or family or families)).tw. (4029)
- 22 ((kinship or nonkinship or non kinship or connected or substitute*) adj1 care*).tw. (360)
- 23 *adoption/ (2704)
- 24 or/18-23 (9315)
- exp juvenile/ or Child Behavior/ or Child Welfare/ or Child Health/ or infant welfare/ or "minor (person)"/ or elementary student/ (2788952)
- 26 (prematur* or pre-matur* or pre-term* or pre-term* or infan* or newborn* or new-born* or peri-nat* or peri-nat* or neo-nat* or neo-nat* or babies or toddler*).ti,ab,in,ad,jw. (991635)
- 27 (child* or minor or minors or boy* or girl* or kid or kids or young*).ti,ab,in,ad,jw. (3075545)

- 28 exp pediatrics/ (89475)
- 29 (pediatric* or paediatric* or peadiatric*).ti,ab,in,ad,jw. (1440596)
- 30 exp adolescence/ or exp adolescent behavior/ or adolescent health/ or high school student/ or middle school student/ (88253)
- 31 (adolescen* or pubescen* or pre-pubescen* or pre-pubescen* or pubert* or pre-pubert* or pre-pubert* or teen* or pre-teen* or pre-teen* or juvenil* or youth* or under*age*).ti,ab,in,ad,jw. (569652)
- 32 school/ or high school/ or kindergarten/ or middle school/ or primary school/ or nursery school/ or day care/ (91782)
- 33 (pre-school* or preschool* or kindergar* or daycare or day-care or nurser* or school* or pupil* or student*).ti,ab,jw. (589614)
- 34 ("under 18*" or "under eighteen*" or "under 25*" or "under twenty five*").ti,ab. (6369)
- 35 or/25-34 (5342804)
- 36 17 and 35 (5123)
- 37 24 and 35 (6834)
- 38 12 or 24 or 36 or 37 (16935)
- 39 nonhuman/ not human/ (3943285)
- 40 38 not 39 (16745)
- 41 (letter or editorial).pt. (1542836)
- 42 (conference abstract or conference paper or conference proceeding or "conference review").pt. (4231963)
- 43 41 or 42 (5774799)
- 44 40 not 43 (13711)
- 45 limit 44 to dc=19900101-20190606 (13274)
- 46 limit 45 to english language (12254)

65

exp "Health Care Cost"/ (271264)

Markov chain/ (4122) quality adjusted life year/ or (qualit* adj2 adjust* adj2 life*).tw. or qaly*.tw. (30497) 48 (EQ5D* or EQ-5D* or ((eurogol or euro-gol five))).tw. (15926) "cost benefit analysis"/ (76622) exp economic model/ (1511) cost.ti. (89185) 52 (cost* adj2 utilit*).tw. (8710) 53 (cost* adj2 (effective* or assess* or evaluat* or analys* or model* or benefit* or threshold* or quality or expens* or saving* or reduc*)).tw. (264961) 54 (economic* adj2 (evaluat* or assess* or analys* or model* or outcome* or benefit* or threshold* or expens* or saving* or reduc*)).tw. (44536) 55 ((incremental* adj2 cost*) or ICER).tw. (20854) 56 utilities.tw. (10311) 57 58 markov*.tw. (27064) (dollar* or USD or cents or pound or pounds or GBP or sterling* or pence or euro or euros or yen or JPY).tw. (49454) ((utility or effective*) adj2 analys*).tw. (25652) (willing* adj2 pay*).tw. (8797) 61 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 (437885) 46 and 62 (336) exp Health Economics/ (754904)

exp Pharmacoeconomics/ (183070) Monte Carlo Method/ (36411) 67 Decision Tree/ (11234) econom\$.tw. (313756) cba.tw. (8890) 70 cea.tw. (29221) cua.tw. (1304) markov\$.tw. (27064) (monte adj carlo).tw. (42778) 74 (decision adj3 (tree\$ or analys\$)).tw. (20246) (cost or costs or costing\$ or costly or costed).tw. (667335) (price\$ or pricing\$).tw. (48966) 77 budget\$.tw. (32761) expenditure\$.tw. (65082) 79 (value adj3 (money or monetary)).tw. (3103) (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw. (8274) or/64-81 (1524839) 82 "Quality of Life"/ (429148) 83 Quality Adjusted Life Year/ (24150)

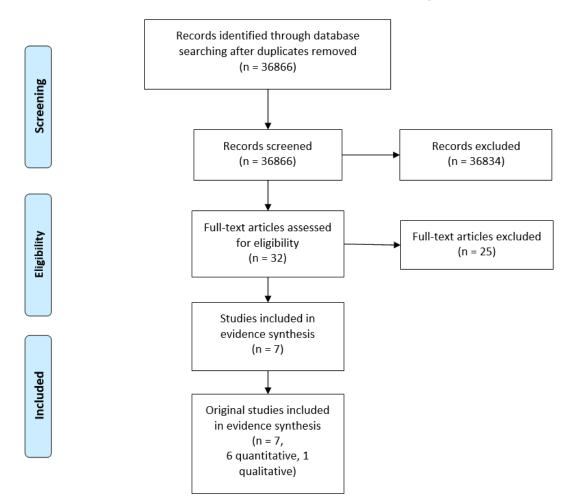
103

(hui or hui1 or hui2 or hui3).tw. (2074)

Quality of Life Index/ (2640) Short Form 36/ (26202) 86 Health Status/ (117486) quality of life.tw. (394895) quality adjusted life.tw. (17693) 89 90 (galy\$ or gald\$ or gale\$ or gtime\$).tw. (18129) disability adjusted life.tw. (3574) daly\$.tw. (3505) 92 (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirtysix or short form thirtysix or short form thirtysix or short form 36 o thirty six).tw. (38927) (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw. (1902) (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw. (8636) (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw. (51) (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw. (403) 97 (eurogol or euro gol or eq5d or eq 5d).tw. (18036) (gol or hgl or hgol or hrgol).tw. (87193) 99 (hye or hyes).tw. (123) 100 health\$ year\$ equivalent\$.tw. (41) 101 utilit\$.tw. (256882) 102

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disutili$.tw. (837)
104
105
      rosser.tw. (116)
      quality of wellbeing.tw. (38)
106
107
      quality of well-being.tw. (464)
      qwb.tw. (234)
108
      willingness to pay.tw. (7664)
109
      standard gamble$.tw. (1054)
110
      time trade off.tw. (1611)
111
      time tradeoff.tw. (279)
112
113
      tto.tw. (1529)
      or/83-113 (891635)
114
      82 or 114 (2273922)
115
      46 and 115 (2228)
116
      116 not 63 (1908)
117
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Appendix C – Effectiveness evidence study selection



Appendix D – Evidence tables

Effectiveness studies (randomised controlled trials)

Blakeslee 2020

Study Details

Study type	Randomised controlled trial (RCT)
Study location	United States
Study setting	The study was conducted by combining two concurrent, rigorous, large-scale randomized trials of the My Life model, funded by the National Institutes of Health (NIH) and the Institute for Educational Sciences (IES). The NIH study involved adolescents in foster care ($n = 139$) and the IES study involved adolescents in foster care who also received special education services ($n = 154$).
Study dates	Not reported
Duration of follow-up	One year follow up
Sources of funding	the Institute of Educational Sciences and Eunice Kennedy Shriner National Institute of Child Health and Human Development, National Institutes of Health
Inclusion criteria	Care situation under the guardianship of Oregon DHS (with at least 90 days in foster care), Age

	Geography Residing in the study's target geography. The sampling of all eligible youth in three counties yielded a geographically diverse sample reflecting the primarily urban areas of Multnomah County (the city of Portland), the primarily suburban areas of Washington County, and the suburban and more rural areas of Clackamas County.
Exclusion criteria	Mental health youth "in crisis" Care situation moving out of state, in detention or secure treatment Language non-English speaking
Sample size	n=288
Split between study groups	Control = 146 Intervention = 142
Loss to follow-up	Loss to follow up by 12 months: Control = 14 Intervention = 26 Loss to follow up by 12 months: Control = 23 Intervention = 36

% Female	53.1%
Mean age (SD)	$17.31 \pm 0.61 \text{ years}$
Condition specific characteristics	non-white ethnicity 53.5% Type of care non-relative foster care: 63.5% relative foster care (Kinship): 25.9% Group home/residential treatment: 5.2% With family member (not a placement): 5.3% Other (e.g. with adoptive family, on own): 1.5% Enrolled in Independent Living Programme: 43.8% time spent in care 5.85 ± 4.72 years Placement changes Experienced placement change in last year: 38.8% Special educational needs received special education services: 58.7% received developmental disability services: 21.5% Education Attending school/GED programme: 89.5%
Outcome measures	Wellbeing outcome 1 Self-determination: Arc Self-Determination Scale (ARC). This 72-item self-report measure (Wehmeyer & Kelchner, 1995) provides data on four components of self-determination and a global self-determination score, Career readiness Career Decision-Making Self-Efficacy (CDSE) scale. The 25-item CDSE short form measures belief that one can complete tasks necessary to achieve career and educational goals. Given the focus on the transition to adulthood and the theoretical

underpinnings of the study, this measure was included to investigate participants' specific development of career-related self-efficacy beliefs.

Agency

My Life Self-Efficacy Scale (MLSES). This 17-item scale was developed for this study to measure self-efficacy related to self-determination, reflecting the model's theoretical association with self-efficacy theory (Bandura, 1997) (i.e., the MLM focus on promoting youths' enactive attainment or mastery, vicarious learning, exposure to positive verbal persuasion, and positive self-attribution). Examples of items include: I am confident that I can solve problems that keep me from achieving goals; I am confident that I can make agreements with adults to help me in specific ways; and I am confident that I can keep myself from being overwhelmed by stressful situations.

Agency 2

Self-attribution of accomplishments. At each annual assessment, participants were interviewed by a trained assessor and asked to name all their accomplishments in the past year, with access to cognitive tools such as a calendar and reference to key past events in their lives to anchor their recollections. The total number of identified accomplishments was recorded, excluding restated accomplishments and future accomplishments. An observational coding system was developed by the investigators and implemented by two research assistants and an investigator. Coders completed 20 hours of training, followed by 40 hours of supervised coding of study tapes; protocols and procedures were refined until inter-rater reliability consistently exceeded 85%. Coders were blind to study condition. Coding measured: (a) identification of at least one goal, and identification and count of discrete steps to reach that stated goal; (b) identification and count of discrete activities named to enlist adult support; and (c) identification and count of discrete activities named to manage stress, and assignment of each of to an a priori category: (i) Seek/do activities with others; (ii) Self-expression (e.g., journal, painting); (iii) Self-talk or self-reflection (e.g. keep a positive outlook, self-monitoring); (iv) Physical activities (e.g., running, sports, yoga); (v) Nonphysical relaxation activities (games, meditation, listen to music); or (vi) Other (e.g., organizing). One-third of the tapes at each time point were coded by both observers and inter-observer agreement was calculated for each coding category at each time point, with a mean inter-observer agreement rate of 89.1–98.3% for the four indicators used in this study. These are steps to reach a goal, number of adult support strategies, the sum of identified stress management strategies across all categories, and the count of categories for which at least one strategy was named (i.e., the range of

categories or breadth of stress management repertoire).

Study Arms

My Life Model (N = 108)

The My Life model includes one-on-one weekly coaching of participants over the course of one year, with the expectation that about one-third of this time is engagement in experiential or in-situ activities to pursue goals or manage challenges (e.g., gathering information, meeting with others, visiting a college, taking a walk together). Youth also attend quarterly workshops co-facilitated by "near-peer" mentors who were formerly in foster care and who could speak to their own successful transition experiences. A fidelity of implementation checklist was used to measure participant engagement in the intervention components (detailed model fidelity findings will be reported in a separate paper). Youth in the intervention group spent an average of 50.00 hours (SD = 26.44) with their coach over 32.39 (SD = 14.06) in-person meetings. The average distribution of coaching minutes was 31.56% experiential, 36.54% didactic, and 31.13% relationship-building time. Youth attended an average of 3.21 mentoring workshops (out of four). Coaching was delivered by 16 unique coaches (10 staff members and 6 supervised MSW students), three of whom had lived experience in foster care, supporting the feasibility of intervention delivery by those with diverse backgrounds. For participants randomized to the intervention, current caregivers were oriented and consented, and throughout the intervention were provided with monthly updates on the youth's progress and invited to share their feedback with coaches.

% Female	57.0%	
Mean age (SD)	17.30 ± 0.62 years	
Condition specific characteristics	non-white ethnicity 56.7% Type of care non-relative foster care: 59.7%	

relative foster care (Kinship): 29.2%

Group home/residential treatment: 4.9%

With family member (not a placement): 5.0%

Other (e.g. with adoptive family, on own): 2.2%

Enrolled in Independent Living Programme: 40.1%

time spent in care 5.74 ± 4.94 years

Placement changes

Experienced placement change in last year: 42.3%

Special educational needs

received special education services: 59.2%

received developmental disability services: 22.5%

Education

Attending school/GED programme: 89.3%

Control group (N = 123)

The control group received typical transition services, which could include special education classes, case managers, individualized transition planning, and ILP services; these typical services were also still accessible to youth in the intervention group.

% Female 49.3%

non-white ethnicity 50.3% Type of care non-relative foster care: 67.6% relative foster care (Kinship): 20.7% Group home/residential treatment: 5.4% With family member (not a placement): 5.5% Other (e.g. with adoptive family, on own): 0.7% Enrolled in Independent Living Programme: 47.3% time spent in care 5.92 ± 4.51 years Placement changes Experienced placement change in last year: 35.6% Special educational needs received special education services: 58.2% received developmental disability services: 20.5%	Mean age (SD)	17.32 ± 0.61 years
Education	Condition specific	non-white ethnicity 50.3% Type of care non-relative foster care: 67.6% relative foster care (Kinship): 20.7% Group home/residential treatment: 5.4% With family member (not a placement): 5.5% Other (e.g. with adoptive family, on own): 0.7% Enrolled in Independent Living Programme: 47.3% time spent in care 5.92 ± 4.51 years Placement changes Experienced placement change in last year: 35.6% Special educational needs received special education services: 58.2%

Risk of Bias

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns (Two randomised controlled trials were combined in this study, the study didn't go into great detail concerning randomisation methods or whether allocation was concealed.)
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	High (it is unclear how many participants were lost to follow up. It is unclear if intent to treat analysis was used.)
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	High (There is no detailed discussion of missing data.)
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
	Overall Directness	Indirectly applicable (Study was non-UK based)

Courtney 2008

Study type	Randomised controlled trial (RCT)		
Study location	USA		
Study setting	Foster care placements under the guardianship of the Los Angeles County Department of Child and Family Services		
Study dates	October 2001 to January 2003		
Duration of follow-up	2 years		
Sources of funding	funded by the Children's Bureau and directed by the Children's Bureau and the Office of Planning, Research, and Evaluation in the U.S. Department of Health and Human Services.		
Inclusion criteria	Age 17 years old Care situation out-of-home care and eligible for Chafee services Other deemed to be able to benefit from life skills training		
Exclusion criteria	Diagnosed health problem Youth with severe disabilities Interventions received youths who had previously been contacted to take part in life skills training		
Sample size	482		

Split between study groups	234 referred to the intervention group, 248 to the control group		
Loss to follow-up	17.2% lost to follow up in the intervention group, 13.2% lost to follow up in the control group		
% Female	58.5%		
Mean age (SD)	all youth were 17 at intake		
Condition specific characteristics	Non-white ethnicity 63.1% Type of care group home/residential care: 22.9%; non-kin foster care: 33.0%; Kinship care: 42.4% Special educational needs participates in a special education programme: 35.6%; learning disability: 24.6% Mental health needs PTSD: 6.4% Parent Has children or is currently pregnant: 10.1% Participants with emotional and behavioural problems internalising or externalising problems: 27.6%		
Outcome measures	Agency outcome 1 Preparedness and job preparedness: Youths were asked how prepared they felt in 18 areas of adult living. The response categories were very prepared (4), somewhat prepared (3), not very well prepared (2), and not at all prepared (1). Efforts to identify underlying dimensions of preparedness based on these items led to the development of two scales, an overall scale of the average of all 18 items and a job preparedness scale, the average of three employment-related items. These scales are not independent since the job preparedness items are included in the overall scale. Education outcomes 1 Completion of high school diploma or general equivalency diploma (GED)		

Employment outcome 1

Current employment status

Education outcome 2

Attended college

Economic outcome 1

Reported earnings: Total of earnings from formal and informal employment. Specifically, youths were asked to list their employers over the past 12 months and then to estimate how much they had earned from each. To this subtotal were added estimates of the total amount earned from all "informal jobs."

Economic outcome 2

Net worth: Sum of estimated bank balances and selling prices of all vehicles, less outstanding credit card balances.

Homelessness and hardship 1

Economic hardship: Summative scale comprising the following four questions: In the past 12 months, have you (a) panhandled or begged for money, (b) made money by recycling cans, bottles, or other items, (c) sold your blood or plasma, and (d) sold or pawned any personal possessions?

Economic outcome 3

Formal financial assistance: Youths were asked if, in the past 12 months, they had received any (a) Temporary Assistance for Needy Families (TANF) benefits, commonly known as welfare, (b) Women, Infants, and Children (WIC) benefits, (c) Food Stamp benefits, (d) Supplemental Security Income benefits, (e) general relief payments, or (f) other welfare payments.

Homelessness and hardship 2

Homelessness: Youths reported being homeless or having lived in any of the following during the two 12-month periods preceding the first and second follow-up interviews: (a) Motel, hotel, or SRO (single room occupancy); (b) Car, truck, or some other type of vehicle; (c) Abandoned building, on the street or outside somewhere; (d) Shelter for battered women; or (e) Shelter for the homeless.

Behavioural outcome 1

Delinquency: Youths were asked if they had engaged in the following behaviors during the 12 months preceding the second follow-up interview. Comparisons were based on a summated scale. (a) Been loud, rowdy, or unruly in a public place so that people complained about it or you got in trouble? (b) Been drunk in a public place? (c) Avoided paying for things such as movies, bus or subway rides, food, or clothing? (d) Been involved in a gang fight? (e) Carried a handgun? (f) Purposely damaged or destroyed property that did not belong to you? (g) Purposely set fire to a house, building, car, or other property or tried to do so? (h) Stolen something from a store or something that did not belong to you worth \$50 or more, including stealing a car? (j) Committed other property crimes such as fencing, receiving, possessing, or selling stolen property, or cheated someone by selling them something that was worthless or worth much less than what you said it was? (k) Attacked someone with the idea of seriously hurting them or have a situation end up in a serious fight or assault of some kind? (l) Sold or helped sell marijuana (pot, grass), hashish (hash), or other hard drugs such as heroin, cocaine, or LSD? (m)Been paid cash for having sexual relations with someone? (n) Did you receive anything in trade for having sexual relations, such as food or drugs? (o) Had or tried to have sexual relations with someone against their will?

Pregnancy

Female youths were asked at first and second follow-up interviews if they had been pregnant at any point during previous 12 months.

Study arms

Life Skills Training Programme (N = 196)

The Life Skills Training program is similar in many respects to services provided in numerous locations throughout the United States (i.e., classroom- and practicum-based training), though there are special aspects as well. There is an extensive outreach component, and the community college locale enables youths to be served in their communities and also exposed to community college campuses. The program serves a large number of youth and was oversubscribed for service, having nearly twice as many youths referred as program participants. The five-week curriculum consists of ten three-hour classes held twice a week in 19 community colleges throughout Los Angeles County. The program is based on seven state-adopted competency skill areas: education, employment, daily living skills, survival skills, choices and consequences, interpersonal/social skills, and computer/Internet skills. Instructors have the flexibility to design their own classes and activities, invite guest speakers, and use experiential methods to impart information. Pre- and post-test assessments are provided to evaluate whether a youth has made progress in skill acquisition. In addition, an outreach component is staffed with 20 full- and part-time workers dedicated to recruiting youths into the classes. Outreach advisors are responsible for recruiting youths, providing short-term case management, and documenting services. Outreach advisors assess the youths with the Ansell-Casey assessment tool as well as other tools at the beginning and end of the class modules.

Study type	Randomised controlled trial (RCT)	
Study location	USA	
Study setting	Foster care placements under the guardianship of the Los Angeles County Department of Child and Family Services	
Study dates	October 2001 to January 2003	
Duration of follow- up	2 years	

Sources of funding	funded by the Children's Bureau and directed by the Children's Bureau and the Office of Planning, Research, and Evaluation in the U.S. Department of Health and Human Services.
Sample size	482
Split between study groups	234 referred to the intervention group, 248 to the control group
Loss to follow-up	17.2% lost to follow up in the intervention group, 13.2% lost to follow up in the control group
% Female	57.7%
Mean age (SD)	all youth were 17 at intake
Condition specific characteristics	Non-white ethnicity 60.4% Type of care group home/residential care: 23.9%; non-kin foster care: 32.0%; Kinship care: 41.4% Special educational needs participates in a special education programme: 37.4%; learning disability: 29.7% Mental health needs PTSD: 7.2% Parent Has children or is currently pregnant: 11.7% Participants with emotional and behavioural problems internalising or externalising problems: 46.4%

Agency outcome 1 Overall preparedness score at 2 years follow up: 3.5 ± 0.3. Job-related preparedness score at 2 years follow up: 3.7 ± 0.5 **Education outcomes 1** Completion of high school diploma or general equivalency diploma (GED) at 2 year f/u: 117 (59.7%) Employment outcome 1 Currently emplyed at 2 year f/u: 89 (45.4%) Education outcome 2 Attended college at 2-year f/u: 68 (34.7%) Economic outcome 1 Reported earnings (in thousands): 3.8 ± 8.5 Outcome Economic outcome 2 measures Net worth (in thousands) at 2-year f/u: 3.1 ± 7.7 Homelessness and hardship 1 Economic hardship, one or more hardships over the past 12 months at 2 years f/u: 68 (46.3%) Economic outcome 3 Received public assistance at 2 year follow up: 36 (18.4%); 5-item Scale of Hardship and Financial Assistance at 2-year f/u: 0.3 ± 0.3 Homelessness and hardship 2 Homelessness over 2-year follow up: 25 (12.8%) Behavioural outcome 1 1 or more delinquent behaviours: 68 (34.7%); Number of delinquent behaviours: 0.81 ± 1.45 Pregnancy Became pregnant (n=130): 29 (24.4%) Services as usual (N = 215)

Note though assigned to care as usual, as in other field experiments involving social services where the control over program receipt is not complete, some members of the control group received services (e.g., attended one or more LST class sessions). Specifically, according to administrative records, 26.6 percent of the 248 youths in the control group enrolled in the program, 25 percent attended at least one class, and 22.6 percent graduated from the program. The levels of reported receipt of most independent living services by the second follow-up did not differ significantly between assignment groups.

% Female	59.2%		
Mean age (SD)	all youth were 17 at intake		
Condition specific characteristics	Non-white ethnicity 66.1% Type of care group home/residential care: 22.0%; non-kin foster care: 33.9%; Kinship care: 43.3% Special educational needs participates in a special education programme: 33.9%; learning disability: 20.0% Mental health needs PTSD: 5.7% Parent Has children or is currently pregnant: 9.8% Participants with emotional and behavioural problems internalising or externalising problems: 26.5%		
Outcome measures	Agency outcome 1 Overall preparedness score at 2 years follow up: 3.5 ± 0.4. Job-related preparedness score at 2 years follow up: 3.7 ± 0.5 Education outcomes 1 Completion of high school diploma or general equivalency diploma (GED) at 2 year f/u: 126 (58.6%) Employment outcome 1		

Currently employed at 2 year f/u: 107 (49.8%)

Education outcome 2

Attended college at 2-year f/u: 88 (40.9%)

Economic outcome 1

Reported earnings (in thousands): 4.4 ± 6.4

Economic outcome 2

Net worth (in thousands) at 2-year f/u: 2.5 ± 5.7

Homelessness and hardship 1

Economic hardship, one or more hardships at 2 years f/u: 90 (53.9%)

Economic outcome 3

Received public assistance at 2 year follow up: 51 (30.5%); 5-item Scale of Hardship and Financial Assistance at 2-year f/u: 0.3 ± 0.3

Homelessness and hardship 2

Homelessness over 2-year follow up: 36 (16.7%)

Behavioural outcome 1

1 or more delinquent behaviours: 66 (30.7%); Number of delinquent behaviours: 0.79 ± 1.76

Pregnancy

Became pregnant (n=130): 30 (23.1%)

Risk of bias

Domain 1: Bias arising from the randomisation process

Low

Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)

High

(Intention to treat analysis used. 26.6% of the control group took part in life skills training while 23.5% of the intervention group did not take part in life skills training. The levels of reported receipt of most independent living services by the second follow-up did not differ significantly between assignment groups.)

Domain 3. Bias due to missing outcome data

High

(in the intervention group: 76% randomised were interviewed at baseline; 70% at first follow up; 67% at second follow up. in the control group: 80% randomised were interviewed at baseline; 73% at first follow up; 70% at second follow up. It is likely that missing data would be related to likelihood of behaviour problems, placement change, educational outcomes, and other outcomes of interest)

Domain 4. Bias in measurement of the outcome

Some concerns

(Unlikely that blinding was performed for either the child in care or interviewer. Outcomes were self-reported. However, outcomes were generally non-subjective (other than job-preparedness for which the risk should be considered high))

Domain 5. Bias in selection of the reported result

Some concerns

(Results from first follow up not reported - only second follow up. However, this was reported to be because many of the outcomes referred to independence after care and 40% of the sample were still in care at first follow up.)

Overall bias and Directness

High

Overall Directness

Indirectly applicable

(Non-UK)

Geenen 2013

Study type	Randomised controlled trial (RCT)
Study location	USA
Study setting	Youth in Foster Care
Study dates	Not reported (published 2013)
Duration of follow-up	9 month follow up
Sources of funding	Funded by the Institute of Educational Sciences, U.S. Department of Education.
Inclusion criteria	Age In the freshman, sophomore, or junior year of high school Care situation In the state foster care system Educational status receiving special education services within an urban school district
Exclusion criteria	Care situation scheduled to move out of state Language Non-English speaking
Sample size	133
Split between study groups	63 in the TAKE CHARGE intervention group, 60 in the usual care group

Loss to follow-up	10 were lost to follow up in total, unclear how loss to follow up varied between intervention groups
% Female	46.3
Mean age (SD)	$15.49 \pm 2.21 \text{ years}$
Condition specific characteristics	At risk or victims of exploitation Physical abuse: 38.2%; Sexual abuse: 33.3%; Neglect: 27.6% Disabilities, speech or communication needs, or special education needs Intellectual disability: 8.1%; Learning disability: 26.8%; Speech disability: 14.6%; Physical disability: 1.6%; Autism: 3.25%; Non-white ethnicity 50.4% Care characteristics Non kinship: 82.1%; Kinship: 13.0%; group home: 4.9%; length of time in foster care (mean): 84.6 months Number of placement moves mean 7.1
Outcome measures	Educational outcome 1 Youth knowledge and engagement in educational planning: measured using The student, parent, and teacher versions of the Educational Planning Assessment Educational outcome 2 Postsecondary preparation: On the outcome survey, youth completed a checklist indicating activities they had performed in planning for college. In all, 10 postsecondary items included "talked with guidance counselor or teacher about going to college" and "visited colleges". Item sums were calculated for each category. Educational outcome 3 Career development: Information regarding key activities youth had engaged in around career exploration and preparation for employment was also gathered on the outcome survey. 7 career items included "talked with family members about my career interests" and "job shadowed someone in my career area." Item sums were calculated for each category. Educational outcome 4 Student self-attribution of accomplishments: To assess selfattribution of educational success, conceptualized as an essential element of self-determination, youth were asked to list all their educational accomplishments for the past 6 months and a total count was gathered at each time point. Agency outcome 1

Self-determination: Self-determination was assessed with the parent, student, and teacher versions of the AIR as well as by asking youth to describe their goals and accomplishments as respective indices of youths' future directedness and positive self-attribution,

Emotional and behaviour outcomes 1

Measured with the Teacher Report Form (TRF) and the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001), and Youth Self-Report YSR (Achenbach, 1991). These parallel measures include scales for withdrawn-depressed, anxious-depressed, delinquent, and aggressive behavior, as well as attention problems. Analyses focused on the Withdrawn-Depressed, Anxious-Depressed, and Somatic Complaints subscales.

Educational outcome 5

Student identification of education goals: At each time point, youth were asked to list all of their educational goals for the upcoming year and a total count was taken, gauged to reflect students' self-directedness.

Educational outcome 6

Hours spent doing homework

Study arms

TAKE CHARGE intervention (N = 60)

Youth participated in two components of TAKE CHARGE: (a) Individualised coaching in applying self-determination skills to achieve their educational and related goals and to participate in educational planning meetings and (b) group mentoring, where the youth and near-peer foster care alumni who had completed high school and were working or in college gathered for information sharing and peer support. Mentors were recruited from college campuses, nominations from caseworkers, and study participants from earlier waves. To ensure fidelity, all coaches completed formal training and observation, and they attended weekly meetings where they discussed their work with youth and received ongoing support. Coaches also completed weekly log sheets where they documented the activities they engaged in and the time spent with each participant. The mean number of coaching sessions over an approximate 9-month period was 30.5 (SD = 7.8) with youth participating in an average of 32.97 (SD = 8.71) coaching hours over the duration of the intervention. Coaches and youth typically met weekly for 60 to 90 min; 13 was the minimum number of coaching hours and 55 was the maximum; youth availability accounted for much of the variation in coaching hours. Typically, one third of coaching time was didactic (M = 9.05, SD = 3.4) and two thirds experiential (M = 23.9, SD = 7.1). Overall fidelity for 79 coaching elements across all waves was 90.68%. Youth were invited to participate in three mentoring workshops, and they attended an average of 1.79 workshops. Workshop topics selected by youth included leading your education planning meeting, postsecondary education, careers, transportation, and relationships.

Study type	Randomised controlled trial (RCT)	
Study location	USA	
Study setting	Youth in Foster Care	
Study dates	Not reported (published 2013)	
Duration of follow- up	9 month follow up	
Sources of funding	Funded by the Institute of Educational Sciences, U.S. Department of Education.	
Inclusion criteria	Age In the freshman, sophomore, or junior year of high school Care situation In the state foster care system Educational status receiving special education services within an urban school district	
Sample size	133	
Split between study groups	63 in the TAKE CHARGE intervention group, 60 in the usual care group	
Loss to follow-up	10 were lost to follow up in total, unclear how loss to follow up varied between intervention groups	
% Female	40.0	

Mean age (SD)	mean 15.79 years
Condition specific characteristics	At risk or victims of exploitation Physical abuse: 45.0%; Sexual abuse: 26.7%; Neglect: 26.7% Disabilities, speech or communication needs, or special education needs Intellectual disability: 8.3%; Learning disability: 26.7%; Speech disability: 23.3%; Physical disability: 45.0%; Autism: 1.7% Non-white ethnicity 53.3% Care characteristics Non kinship: 85.0%; Kinship: 11.7%; group home: 4.9%; length of time in foster care (mean): 84.6 months Number of placement moves mean 7.9
Outcome measures	Educational outcome 1 Educational Planning Assessment score (following intervention/9-month follow up): Student-reported: 26.10 ± 5.71/26.61 ± 6.99; Parent reported: 22.13 ± 7.31/22.62 ± 8.05; Teacher reported: 20.40 ± 7.95/20.88 ± 7.84 Educational outcome 2 Postsecondary preparation score: mean 2.53 ± 0.92/2.58 ± 0.94 Educational outcome 3 Career development mean score (postintervention/9-month follow up): 2.64 ± 0.97/2.18 ± 0.78 Educational outcome 4 Student self-attribution of accomplishments mean score (post-intervention/9-month follow up): 2.75 ± 1.44/2.31 ± 1.34 Agency outcome 1 AIR self-determination score (post-intervention/9-month follow up): 66.43 ± 8.90/65.76 ± 8.56 Emotional and behaviour outcomes 1 Youth Self Report Anxiety mean score (post-intervention/9-month follow up): 53.60 ± 5.11/54.09 ± 6.05; Child Behaviour Checklist anxiety: 55.33 6.84/56.20 ± 6.94; Child Behaviour Checklist withdrawn score: 58.89 ± 7.04/58.23 ± 6.52; Child Behaviour Checklist somatic mean score: 57.84 ± 9.88/55.56 ± 6.52

Educational outcome 5

Student identification of education goals score (postintervention/9-month follow up): 2.30 ± 1.23/1.90 ± 1.03

Educational outcome 6

Hours spent doing homework mean (post intervention/9-month follow up): 1.32 ± 1.27/1.08 ± 1.13

Usual Care (N = 60)

Youth participating in the control group received typical educational services (business as usual), including general and special education classes, related services, interaction with special education case managers, individualised educational planning, and extracurricular activities.

Educational outcome 1

Educational Planning Assessment score (following intervention/9-month follow up): Student-reported: $23.65 \pm 7.85/23.93 \pm 9.15$; Parent reported: $19.32 \pm 12.89/19.40 \pm 8.14$; Teacher reported: $17.89 \pm 8.05/18.11 \pm 8.90$

Educational outcome 2

Postsecondary preparation score (postintervention/9-month follow up): mean 1.52 ± 0.40/2.56 ± 0.89

Educational outcome 3

Career development mean score (postintervention/9-month follow up): 2.04 ± 0.71/2.01 ± 0.69

Outcome measures

Educational outcome 4

Student self-attribution of accomplishments mean score (post-intervention/9-month follow up): 1.95 ± 1.20/2.07 ± 1.23

Agency outcome 1

Parent reported AIR self-determination score (post-intervention/9-month follow up): 63.52 ± 8.94/62.96 ± 8.81

Emotional and behaviour outcomes 1

Youth Self Report Anxiety mean score (post-intervention/9-month follow up): 56.19 ± 6.61/54.61 ± 5.79; Child Behaviour Checklist anxiety: 60.43 ± 8.60/59.00 ± 8.58; Child Behaviour Checklist withdrawn score: 62.36 ± 9.60/61.19 ± 9.08; Child Behaviour Checklist somatic mean score: 60.70 ± 9.39/60.00 ± 9.53

Educational outcome 5

Student identification of education goals score (postintervention/9-month follow up): 2.05 ± 1.14/1.92 ± 1.05

High

Educational outcome 6 Hours spent doing homework mean (post intervention/9-month follow up): 0.81 ± 1.11/0.94 ± 0.96 Risk of bias Domain 1: Bias arising from the randomisation process High (Some considerable differences between comparison groups for length of time in foster care, speech and language disability, autism, and emotional/behavioural needs) Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) Some concerns (unclear if any deviations from intended interventions; unclear if intention to treat analysis used (but most likely)) Domain 3. Bias due to missing outcome data High (Just over 10% with missing data post randomisation; unclear whether any further missing outcome data; unclear reasons for drop out; unclear how drop out varied between groups; It is possible that missingness of data is related to outcomes.) Domain 4. Bias in measurement of the outcome Some concerns (It is unclear how assessments were performed (by whom). Unclear if facilitators were aware of intervention status of participants. Measurements used are often crude indicators of the phenomenon of interest.) Domain 5. Bias in selection of the reported result

(unclear that analysis was conducted according to a pre-specified protocol. Data not provided for certain non-significant results. Evidence of multiple analyses used for different outcomes)

Overall bias and Directness

Risk of bias judgement

High

Overall Directness

This question has not yet been answered.

Geenen 2015

Study type	Randomised controlled trial (RCT)
Study location	USA
Study setting	Children in foster care
Study dates	youth aging out of foster care in 2012
Duration of follow-up	6 month follow up post-intervention
Sources of funding	The National Institute of Disability and Rehabilitation Research, United States Department of Education, and the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services.
Inclusion criteria	Educational status

	in high school or a GED program and 1 or 2 years away from completion of secondary education. youth had to say they were not opposed to the idea of exploring college or vocational school, and they had not yet applied.
	Care situation in the guardianship of the state foster care system
	Other living within the project's geographic area
	Diagnosed health problem identified as experiencing a significant mental health condition, defined by receiving special education services for an emotional disability, taking psychotropic medication, living in therapeutic settings (such as treatment foster care), or receiving mental health counseling.
Sample size	67
Split between study groups	36 intervention group, 31 control group
Loss to follow-up	By 6 months, 8 participants were lost to follow up. This included 2 participants from the intervention group and 6 participants from the control group.
% Female	51.6%
Mean age (SD)	16.76 ± 0.62
Condition specific characteristics	Non-white ethnicity 52.3% Type of care Non-relative foster care: 64.2%; Relative foster care: 26.8%; Group home/residential treatment: 7.5%; Number of placement moves mean 2.77 moves
	Participants at risk or victims of exploitation Reason for entering foster care (maltreatment): physical: 51.5%; sexual: 19.7%; neglect: 68.2%; Parental substance abuse: 34.8%

Special educational needs

receiving special education services: 35.8%

Mental health needs

taking mental health medication: 39.4%; receiving mental health services: 68.7%; receiving developmental disability services: 10.4%

Outcome measures

Agency outcome 1

AIR self-determination scale: scales were previously used and validated. No further information provided.

Quality of Life

Quality of life questionnaire: scales were previously used in research (cited) and validated. No further information provided.

Education outcomes 1

Assessing barriers to education. scales were previously used in research (cited) and validated. No further information provided.

Employment outcome 1

Career decision self-efficacy scale. scales were previously used in research (cited) and validated. No further information provided.

Agency outcome 2

Arc's self-determination scale: scales were previously used in research (cited) and validated. No further information provided.

Agency outcome 3

Youth efficacy/empowerment scale. scales were previously used in research (cited) and validated. No further information provided.

Agency outcome 4

Transition planning assessment: scales were previously used in research (cited) and validated. No further information provided.

Education outcome 2

Post-secondary preparation scale. A post-secondary preparation questionnaire, successfully used in a previous study of the educational outcomes of self-determination enhancement, was expanded to include 24 key activities associated with preparing for and applying to college (e.g., completing FAFSA, touring a college campus, submitting a college application, etc.). scales were previously used in research (cited) and validated. No further information provided.

Emotional and mental health outcome 1

Hopelessness scale for children: scales were previously used in research (cited) and validated. No further information provided.

Emotional and mental health outcomes 2

Mental health recovery measure: scales were previously used in research (cited) and validated. No further information provided.

Education outcome 3

High school completion.

Education outcome 4
Participating in post-secondary education

Employment outcome 2
Taking part in paid employment

Study arms

Better Futures (N = 36)

Intervention group youth participated in three interrelated components over approximately 10 months: (1) a 4-day, 3-night Summer Institute on a university campus; (2) individual, bimonthly peer coaching; and (3) four mentoring workshops. Summer institute: Youth lived in the dorms and participated in a variety of experiences, including informational sessions, tours of both the university and a nearby community college campus, and facilitated discussions of higher education preparation, mental health, accommodation needs, and transition resources, with near peers who had lived experience with foster care and mental health, high school and college or vocational education representatives, and other professionals. Evening social activities more informally connected youth and near peers. The Summer Institute was facilitated by peer coaches, other project staff, and two young adults from the FosterClub, a national leadership group for young people in foster care. Peer coaching: peer coaching was provided by young adults (under the age of 28), who were in higher education and had shared experiences around foster care and/or mental health challenges. Peer coaches were recruited from the university and community college, and they received about 40 h of initial training in a variety of areas, including foster care, mental health, secondary education, and postsecondary issues, support strategies, and resources related to accessing higher education, self-determination promotion, strategic self-disclosure, and intervention and fidelity protocols. Coaches participated in weekly individual and group supervision meetings facilitated by the intervention manager. Commencing just prior to the Summer Institute, individualised one-on-one peer coaching was provided to youth approximately twice a month for 9 months and was focused on supporting youth in working toward their goals and managing barriers. Youth were supported to identify postsecondary goals and strategies and supports to reach goals, to share their goals with others and enlist support, to problem-solve solutions to barriers, to carry out activities needed to achieve goals, and to identify and apply strategies for self-care and wellness. Exposure to 11 targeted experiential activities and 11 self-determination skills was specified in the intervention protocol (e.g., visit a college or vocational program, review high school transcript, practice in negotiation and problem-solving). Peer coaches met with youth in their schools, neighborhoods, and other convenient places. Mentoring workshops: five workshops were organized for each cohort by peer coaches and other project staff. Youth were

asked to attend at least four of the workshops, in an effort to provide them with some scheduling flexibility. Mentoring workshops brought together youth and their coaches for discussions and experiences that were guided by speakers with expertise around child welfare, mental health, and higher education. Youth selected the topics for the workshops, which typically included an overview of the college application process, review of the senior timeline for college application activities, mental health and self-care, and transition services and resources. All of the workshops included foster care alumni and/or professionals who presented information on a given workshop topic and facilitated youth in an activity (e.g., Scholarship and College Admission with an essay writing activity), as well as providing opportunities for informal networking during a fun activity (e.g., food and bowling).

Study type	Randomised controlled trial (RCT)
Study location	USA
Study setting	Children in foster care
Study dates	youth aging out of foster care in 2012
Duration of follow-up	6 month follow up post-intervention
Sources of funding	The National Institute of Disability and Rehabilitation Research, United States Department of Education, and the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services.
Sample size	67
Split between study groups	36 intervention group, 31 control group

Loss to follow-up	By 6 months, 8 participants were lost to follow up. This included 2 participants from the intervention group and 6 participants from the control group.
% Female	52.8%
Mean age (SD)	16.78 years
Condition specific characteristics	Non-white ethnicity 56.6% Type of care Non-relative foster care: 63.9%; Relative foster care: 27.7%; Group home/residential treatment: 8.3% Number of placement moves mean 2.82 moves Participants at risk or victims of exploitation Reason for entering foster care (maltreatment): physical: 54.3%; sexual: 25.7%; neglect: 68.5%; Parental substance abuse: 31.4% Special educational needs receiving special education services: 30.5% Mental health needs taking mental health medication: 48.6%; receiving mental health services: 72.2%; receiving developmental disability services: 8.3%
Outcome measures	Agency outcome 1 AIR self-determination scale, mean ± SD: post-intervention: 99.42 ± 11.87; 6 months follow up: 103.97 ± 11.04 Quality of Life Quality of life questionnaire, mean ± SD: post-intervention: 87.10 ± 14.90; 6-months follow up: post-intervention: 93.86 ± 10.86 Education outcomes 1 Assessing barriers to education: post-intervention: 62.13 ± 17.83; 6-month follow up: 55.09 ± 12.10 Employment outcome 1

Career decision self-efficacy scale, mean ± SD: post-intervention: 4.21 ± 0.69; 6-months follow up: 4.44 ± 0.51

Agency outcome 2

Arc's self-determination scale, mean ± SD: post-intervention: 113.09 ± 18.73; 6-months follow up: 121.80 ± 16.35

Agency outcome 3

Youth efficacy/empowerment scale, mean ± SD: post-intervention: 3.62 ± 0.95; 6-months follow up: 4.07 ± 0.56

Agency outcome 4

Transition planning assessment, mean ± SD: post-intervention: 2.85 ± 0.73; 6-months follow up: 3.01 ± 0.68

Education outcome 2

Post-secondary preparation scale, mean \pm SD: post-intervention: 17.18 \pm 4.95; 6-month follow up 19.05 \pm 4.59

Emotional and mental health outcome 1

Hopelessness scale for children, mean ± SD: post-intervention: 26.46 ± 7.83; 6-months follow up: 26.50 ± 6.07

Emotional and mental health outcomes 2

Mental health recovery measure, mean ± SD: post-intervention: 94.03 ± 16.34; 6-month follow up: 96.56 ± 19.86

Education outcome 3

High school completion: 6-month follow up: 65% of intervention group youth graduated high school, 29% were still attending high school, and 6% had dropped out.

Education outcome 4

Participating in post-secondary education at 6-months: 64% of intervention group. Among intervention youth enrolled in higher education, more than half (59%) were in community college, 14% were attending a vocational school, and 27% were in a 4-year program.

Employment outcome 2

Taking part in paid employment at 6-months: 11 (32%)

Comparison group (N = 31)

Youth participating in the control group received typical services (community as usual), including supports available to all youth (e.g., a guidance counselor at school) and specific to youth in foster care (e.g., Independent Living Program) and youth with mental health conditions (e.g., therapy).

Non-white ethnicity 61.3% Type of care Non-relative foster care: 64.5%; Relative foster care: 25.8%; Group home/residential treatment: 6.5%; Number of placement moves mean 2.73 moves Condition specific characteristics Participants at risk or victims of exploitation Reason for entering foster care (maltreatment): physical: 48.4%; sexual: 12.9%; neglect: 67.7%; Parental substance abuse: 38.7% Special educational needs receiving special education services: 41.9% Mental health needs taking mental health medication: 29.0%; receiving mental health services: 64.5%; receiving developmental disability services: 12.9% Agency outcome 1 AIR self-determination scale, mean ± SD: post-intervention 87.87 ± 19.31; 6-month follow up: 89.99 ± 17.92 Quality of Life Quality of life questionnaire, mean ± SD: post-intervention: 84.68 ± 13.57; 6-month follow up: 85.40 ± 10.72 Education outcomes 1 Assessing barriers to education, mean ± SD: post-intervention: 72.23 ± 22.54; 6-month follow up: 83.66 ± 22.96 Outcome Employment outcome 1 Career decision self-efficacy scale, mean ± SD: post-intervention: 3.51 ± 0.79; 6-month follow up: 3.48 ± 0.76 measures Agency outcome 2 Arc's self-determination scale, mean ± SD: post-intervention: 98.75 ± 21.90 ; 6-month follow up: 99.97 ± 17.45 Agency outcome 3 Youth efficacy/empowerment scale, mean ± SD: post-intervention: 3.50 ± 0.65; 6-months follow up: 3.34 ± 0.54 Agency outcome 4 Transition planning assessment, mean \pm SD: post-intervention: 2.35 ± 0.69 ; 6-month follow up: 2.20 ± 0.69

Education outcome 2

Post-secondary preparation scale, mean ± SD: post-intervention: 10.42 ± 6.50; 6-month follow up 10.70 ± 6.07

Emotional and mental health outcome 1

Hopelessness scale for children, mean ± SD: post-intervention: 32.24 ± 7.25; 6-months follow up: 32.70 ± 7.21

Emotional and mental health outcomes 2

Mental health recovery measure, mean ± SD: post-intervention: 86.52 ± 19.18; 6-month follow up: 87.65 ± 14.75

Education outcome 3

High school completion: 6-month follow up: 52% of control youth had completed high school (graduation or GED), 36% were still attending high school, and 12% dropped out.

Education outcome 4

Participating in post-secondary education at 6-months: 24% of the control group. All control group youth enrolled in post-secondary education were in community college except one youth who was attending a 4-year university.

Employment outcome 2

Taking part in paid employment at 6-months: 9 (36%)

Risk of bias

Domain 1: Bias arising from the randomisation process

Some concerns

Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)

Some concerns

(Unclear approach to analysis e.g. whether participants were excluded due to not receiving intervention as planned (per-protocol analysis))

Domain 3. Bias due to missing outcome data

High

(Missing data reported for certain scales, but amount of missing data unclear or how this varied between sclaes/intervention groups)

Domain 4. Bias in measurement of the outcome

Some concerns
(Scales not described in detail and insufficient information on assessment process (e.g. who assessors were and whether blinded))
Domain 5. Bias in selection of the reported result
Some concerns
(Unclear methods and no protocol cited)
Overall bias and Directness
High
Overall Directness
This question has not yet been answered.

Powers 2012

Study type	Randomised controlled trial (RCT)
Study location	USA
Study setting	Youth in foster care
Study dates	Not reported (published 2012)
Duration of follow-up	Outcomes were measured post-intervention and at 1 year follow up.

Sources of funding	Funded, in part, by grants from the National Institute for Disability and Rehabilitation Research, US Department of Education, and grants from the Oregon Department of Education.
Inclusion criteria	Educational status Receiving special education services. (DHS special problem code) Age 16.5 to 17.5 years Care situation At least 90 days in foster care Other Attending a large school district in the study area
Exclusion criteria	Diagnosed health problem Actively psychotic Language Non-english speaking Care situation scheduled to move out of state
Sample size	69
Split between study groups	33 were assigned to the intervention group and 36 to the comparison group
Loss to follow-up	At the end of the intervention period, 60 youth were assessed (29 intervention, 31 comparison); five youth could not be located and four youth had withdrawn from the study. At one year follow-up, 61 youth were assessed (29 intervention, 32 comparison)

	(follow-up assessment was completed for one of the comparison group youth who was missing at post-intervention). Thus, attrition rate was 13% at post-intervention and 11% at follow-up.
% Female	41%
Mean age (SD)	16.8 ± 0.47
Condition specific characteristics	Non-white ethnicity 49.2% Type of care Non-relative: 76.4%; Kinship care (including birth parent): 11.5%; Group home/residential care: 13.1% Number of placement moves Placement moves in the last year (mean): 2.5 Participants at risk or victims of exploitation Previous maltreatment: physical: 19.7%; sexual: 27.9%; Neglect: 42.6%; Emotional maltreatment: 1.6% Participants with disabilities; speech, language and communication needs; or special education Special education eligibility. Emotional/behavioural: 40.9%; Intellectual disability: 9.8%; Speech/language: 16.4%; Physical: 1.6%; Leaaming: 26.2%; received developmental disabilities services: 26.2%
Outcome measures	Agency outcome 1 Self determination. The Arc Self-determination Scale is a 72-item self-report measure that provides data on four components of self-determination as well as providing a global overall score of self-determination. Quality of Life Quality of Life Questionnaire (QofL Q, Schalock & Keith, 1993), a widely used standardized measure of quality of life, was used to assess youth quality of life. It has been used with older children and adolescents with behavioral and educational impairments, and it has well established validity and reliability. The instrument provides information on a young person's connections with others, social inclusion, individual control, community integration, productivity and overall satisfaction and wellbeing. Education outcomes 1 High school completion. School data was collected from school records (i.e., transcripts, IEP). Participants completed their secondary education (either through graduation or obtaining their GED)

Employment outcome 1

Employment. The Outcome Survey is a self-report measure completed by youth that captures perceptions about their readiness for independent life. It was used to assess employment, education and living status (e.g. stable housing). It also gathered information on usage of transition services (such as Vocational Rehabilitation, Chafee Housing, or WIA funded programs) and had a series of items that asked about indicators of independent living, such as whether youth paid their own rent, utilities and phone bill, shopped for their own groceries, earned enough to pay their own bills and whether they made their own medical appointments.

Agency outcome 2

Identification of accomplishments. Subscale of the Arc Self-determination Scale.

Agency outcome 3

Identification of transition goals. Subscale of the Arc Self-determination Scale.

Agency outcome 4

Transition planning. The Transition Planning Assessment was used to measure youth transition planning knowledge and engagement. It consists of 14 Likert-type questions such as "People ask about my opinions and ideas at meetings", "I help run my transition planning meetings" and "I understand everything decided at the meeting".

Independent living outcome 1

Independent living activities. The Outcome Survey is a self-report measure completed by youth that captures perceptions about their readiness for independent life. It was used to assess employment, education and living status (e.g. stable housing). It also gathered information on usage of transition services (such as Vocational Rehabilitation, Chafee Housing, or WIA funded programs) and had a series of items that asked about indicators of independent living, such as whether youth paid their own rent, utilities and phone bill, shopped for their own groceries, earned enough to pay their own bills and whether they made their own medical appointments.

Education outcome 2

Post-secondary education: attending either a 2 or 4-year college programme.

Study Arms

TAKE CHARGE (self-determination coaching and mentoring) (N = 29)

The intervention group participated in TAKE CHARGE for approximately 12 months. The intervention included two elements: (a) individual, weekly coaching sessions for youth in the application of self-determination skills to achieve self-identified goals and to carry out a youth-led transition planning meeting; and (b) quarterly workshops for youth with young adult mentors who were formerly in foster care. The intervention was designed as a universally accessible approach for supporting the transition to adulthood of all youth while being accessible to young people with disabilities. Weekly coaching was typically conducted during unscheduled school class periods, immediately before or after school, or in the evenings or on weekends, whichever was most feasible for the student. Each youth learned to apply skills in achievement (e.g. set goals, problem-solving), partnership development (e.g., schmoozing, negotiation), and self-regulation (focus on your accomplishments, ARM yourself against stress) to identify and work toward personally valued transition goals, and to develop an individualised transition plan that s/he shared with those adults considered by the youth to be important in his or

her life (e.g., teachers, foster care case worker, attorney, foster parent, biological family, athletic coaches, etc.). These skills and the transition planning process were presented in a self-help guide that leads youth through the process of short-term goal identification and achievement, with each strategy presented as a small number of systematic steps. For example, the steps youth learn for SET GOALS are: 1) Look at what you are doing now; 2) Choose activities that: are important to you, a good place to start, and others will support; and 3) Decide exactly what you will do (break your goal down to bite-sized pieces). Coaches assist, encourage, and challenge youth to apply the skills to achieve their personal goals. They assist youth to review their self-help materials, to cheer their progress, to occasionally challenge them to take action, and to help them rehearse their use of strategies (i.e. role-play negotiating a goal with a foster parent) or to perform particular activities necessary for goal achievement (i.e. call an agency to obtain information). Over time, as the youth demonstrates increasing skill and motivation to accomplish chosen activity goals, the coach fades his/her direct involvement in activity completion and encourages the youth to select more complex goals and apply the meta-cognitive skills to achieve them. To accommodate instability in the lives of many youth in foster care, adaptations were made to TAKE CHARGE coaching. For example, rather that supporting youth to learn and apply skills sequentially as presented in the self-help guide, coaches introduce skills as "learning" and "practice" moments emerged for each youth. Thus, a youth who was in a foster care placement crisis at the beginning of the intervention could be exposed to the steps of problem-solving before setting any goals. Once his or her immediate problem is addressed, the coach would then steer the youth toward goal setting. The TAKE CHARGE guide also was revised to address issues specific to foster youth, such as recording historic and/or important information in a "Personal Profile"; establishing "support agreements" with adults who are willing to help the youth during the first year or two after exiting care; and learning how to work with professionals and agencies that are important for the youth's success (e.g., child welfare, judges, attorneys). Coaches provided an intervention orientation to each foster parent and monthly updates on the youth's activities to the foster parent and foster care case worker. Youth participated in updates as they desired, and they were always informed and approved of the information the coach planned to share. The intervention program also was designated as an unpaid Independent Living Programme so that youth randomized to the intervention could access housing and educational funding available to youth in foster care. Youth were invited to participate in up to 4 mentoring workshops with the peers in their cohort and mentors who were young adult alumni of foster care, usually 3-4 years older than the study participants. Mentors were attending college, working successfully in a particular career area, and/or had particular experience in overcoming barriers to transition success (e.g. homelessness). Mentors completed an application, interview, and training to prepare them to participate in selected workshops related to their interests and

expertise. Mentoring workshop topics were selected by each cohort of youth, with topics such as employment, postsecondary education, exiting foster care, and leading a transition meeting typically selected. For each topic, a specific agenda and structured didactic, experiential, and fun activities were included.

Sources of funding	Funded, in part, by Grant # H133A031727 from the National Institute for Disability and Rehabilitation Research, US Department of Education, and Grant # 9854 from the Oregon Department of Education.		
Loss to follow-up	At the end of the intervention period, 60 youth were assessed (29 intervention, 31 comparison); five youth could not be located and four youth had withdrawn from the study. At one year follow-up, 61 youth were assessed (29 intervention, 32 comparison) (follow-up assessment was completed for one of the comparison group youth who was missing at post-intervention). Thus, attrition rate was 13% at post-intervention and 11% at follow-up.		
% Female	41.4%		
Mean age (SD)	mean 16.8 years		
Condition specific characteristics	Non-white ethnicity 57.6% Type of care Non-relative: 75.8%; Kinship care (including birth parent): 13.8%; Group home/residential care: 10.3% Number of placement moves Placement moves in the last year (mean): 2.0 Participants at risk or victims of exploitation Previous maltreatment: physical: 17.2%; sexual: 37.9%; Neglect: 41.4%; Emotional maltreatment: 0% Participants with disabilities; speech, language and communication needs; or special education Special education eligibility. Emotional/behavioural: 27.6%; Intellectual disability: 10.3%; Speech/language: 17.2%; Physical: 0%; Learning: 31%; received developmental disabilities services: 31.0%		

Agency outcome 1 Self determination, mean ± SD. post-intervention: 111.83 ± 15.16; 1 year follow-up: 115.02 ± 17.01 Quality of Life Quality of life, mean ± SD. post-intervention: 84.3 ± 8.65; 1-year follow up: 87.63 ± 12.78 Education outcomes 1 High school completion. Post-intervention: 38% 1-year follow up: 72% Employment outcome 1 Employment. Post-intervention: 34% 1-year follow-up: 45% Outcome Agency outcome 2 Average number of accomplishments identified, mean ± SD. Post-intervention: 2.93 ± 1.67; 1 year follow-up: 2.97 ± 1.64 measures Agency outcome 3 Number of transition goals, mean ± SD. Post-intervention: 2.25 ± 1.42; 1-year follow up: 2.69 ± 1.03 Agency outcome 4 Transition planning assessment, mean ± SD. Post-intervention: 27.97 ± 6.81; 1-year follow up: 27.93 ± 10.28. Independent living outcome 1 Average number of independent living activities. Post-intervention: 1.72 ± 1.27; 1-year follow up: 3.14 ± 1.62

Foster Care Independent Living Programme (N = 32)

Education outcome 2

The study comparison condition was the Foster Care Independent Living Program (ILP), funded through the John H. Chafee Foster Care Independence Program which provides independent living services to youth ages 16 and older in foster care. ILP services included classes on transition topics such as budgeting, cooking, and preparing a resume, support from an ILP case manager, drop-in peer support, and assistance to apply for resources such as Chaffee housing, subsidy, and Educational Training Vouchers. All youth consented to the study agreed to participate only in the ILP or TAKE CHARGE during the intervention year; case worker referral to the ILP was obtained for youth in the comparison group who had not been previously referred to the ILP, and study staff supported the youth to attend an ILP orientation. Post-intervention assessment

Post-secondary education: post-intervention: 2/29 (6.9%) 1-year follow up: 10/29 (34.5%)

indicated that 24 (77%) of comparison group youth reported they participated in the ILP post-orientation; 13 youth (42%) reported they attended ILP classes (average of 4.92 classes during the intervention year); and 17 youth (55%) said they had an ILP case manager, with an average of 5.88 contacts.		
Sources of funding	Funded, in part, by Grant # H133A031727 from the National Institute for Disability and Rehabilitation Research, US Department of Education, and Grant # 9854 from the Oregon Department of Education.	
Loss to follow-up	At the end of the intervention period, 60 youth were assessed (29 intervention, 31 comparison); five youth could not be located and four youth had withdrawn from the study. At one year follow-up, 61 youth were assessed (29 intervention, 32 comparison) (follow-up assessment was completed for one of the comparison group youth who was missing at post-intervention). Thus, attrition rate was 13% at post-intervention and 11% at follow-up.	
Condition specific characteristics	Non-white ethnicity 60.6% Type of care Non-relative: 75.0%; Kinship care (including birth parent): 9.4%; Group home/residential care: 15.6% Number of placement moves Placement moves in the last year (mean): 2.8 Participants at risk or victims of exploitation Previous maltreatment: physical: 21.9%; sexual: 18.7%; Neglect: 43.8%; Emotional maltreatment: 3.1% Participants with disabilities; speech, language and communication needs; or special education Special education eligibility. Emotional/behavioural: 53.0%; Intellectual disability: 9.4%; Speech/language: 15.6%; Physical: 3.1%; Learning: 21.8%; received developmental disabilities services: 21.9%	
Outcome measures	Agency outcome 1 Self determination, mean ± SD. post-intervention: 97.61 ± 24.64; 1-year follow up: 100.82 ± 23.41 Quality of Life Quality of life, mean ± SD. post-intervention: 75.81 ± 11.36; 1-year follow up: 78.00 ± 12.54	

Education outcomes 1 High school completion. Post-intervention: 26%. 1-year follow up: 50% Employment outcome 1 Employment. Post-intervention: 16%. 1-year follow-up: 28% Agency outcome 2 Number of accomplishments identified, mean ± SD. Post-intervention: 1.37 ± 0.93. 1-year follow up: 1.68 ± 1.28. Agency outcome 3 Number of transition goals, mean ± SD. Post-intervention: 1.96 ± 1.16; 1-year follow up: 1.76 ± 1.12. Agency outcome 4 Transition planning assessment, mean ± SD. Post-intervention: 23.29 ± 11.93; 1-year follow up: 25.55 ± 8.77. Independent living outcome 1 Average number of independent living activities. Post-intervention: 0.73 ± 0.81; 1-year follow up: 1.81 ± 1.64 Education outcome 2 Post-secondary education: post-intervention: 1/31 (3.1%) 1-year follow up: 6/32 (18.8%) Domain 1: Bias arising from the randomisation process Some concerns (Unclear how randomisation was performed. Unclear if allocation concealment. Unclear if important (significant) differences between groups at baseline) Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention) Risk of bias High Domain 3. Bias due to missing outcome data High

(Unclear if missing information, how much, or whether different amounts between groups)

Domain 4. Bias in measurement of the outcome
Some concerns
(Unclear how outcomes were assessed (by who) or if blinded for intervention group)
Domain 5. Bias in selection of the reported result
Some concerns
(Insufficient information provided about conducting the study e.g. approach to missing data, no protocol cited).
Overall bias and Directness
Risk of bias judgement
High
Overall Directness
This question has not yet been answered.

Effectiveness studies (non-randomised controlled trials)

Barnow 2015

Study type	Prospective cohort study
Study location	USA

Study setting	Children and alumni of the foster care services	
Study dates	2004	
Duration of follow-up	2 years	
Sources of funding	The US Department of Labor's (DOL) Employment and Training Administration (ETA)	
Inclusion criteria	Age between the ages of 16 and 21 Care situation in out-of-home care currently or formerly Other Workforce Investment Act and foster care systems in the following locations: (i) Pasadena and South Central Los Angeles, California; (ii) Chicago, Illinois; (iii) Detroit, Michigan; (iv) New York City, New York; and (v) Houston, Texas.	
Sample size	1058 (for employment or any positive outcome), 971 (for achieving post-secondary education),** 687 (for achieving GED or diploma)* *Only youth who were in high school or were high school dropouts at enrolment were considered for this outcome. **Only youth who were not in post-secondary school at enrolment were considered for this outcome.	
Split between study groups	Job preparation: 76.3%; College preparation: 31.3%; life skills classes 41.1%; parenting classes 6.8%; income support 33.0%; substance abuse counselling: 4.1%.	
Loss to follow-up	Not reported	

% Female	58.4%	
	Under 17: 19.0%	
Mean age (SD)	17 and older: 81.0%	
Condition specific characteristics	Non-white ethnicity 90.5% Type of care 56.3% in foster care at baseline; 21.9% adjudicated or incarcerated; Special educational needs In high school: 42.3%; in post-secondary education: 8.6%; Dropped out of highschool: 22.9%; high school graduate but not enrolled in post-secondary education.	
Outcome measures	Education outcomes 1 Completion of GED or diploma Employment outcome 1 employment in a paid job including apprenticeship and the military Education outcome 2 post-secondary enrolment full-time (or part-time if also employed part-time) Education outcome 3 any positive outcome (employment or education) defined as having one or more of the other three outcomes	
Study arms	College preparation (N = 331) Youth participated in activities intended to prepare youth for post-secondary education Outcome measures Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): -0.317 (-1.00 to 0.37) Employment outcome 1	

employment in a paid job including apprenticeship and the military, beta coefficient (95%CI): 0.561 (0.08 to 1.04) Education outcome 2 post-secondary enrolment full-time, beta coefficient (95%CI): 0.49 (-0.16 to 1.14) Education outcome 3 any positive outcome, beta coefficient (95%CI): 0.42 (-0.04 to 0.89) Job preparation (N = 807)Participant received one or more of the following: subsidized work experience/internship, unsubsidized work experience or other job preparation class/activity, such as leadership development classes or SCANS training Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): 0.546 (-0.23 to 1.32) Employment outcome 1 Employment in a paid job, beta coefficient (95%CI): 0.99 (0.41 to 1.58) Outcome measures Education outcome 2 Post-secondary enrolment full-time, beta coefficient (95%CI): 1.25 (0.11 to 2.39) Education outcome 3 any positive outcome, beta coefficient (95%CI): 1.03 (0.53 to 1.53) Life skills courses (N = 435) Participants were enrolled in life skills courses Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): 0.34 (-0.31 to 0.99) Outcome Employment outcome 1 measures employment in a paid job, beta coefficient (95%CI): 0.26 (-0.21 to 0.73) Education outcome 2

	post-secondary enrolment full-time, beta coefficient (95%CI): 0.45 (-0.23 to 1.12)		
	Education outcome 3 any positive outcome, beta coefficient (95%CI): 0.33 (-0.10 to 0.78)		
	Substance abuse counselling (N = 43) Participants received substance abuse counselling at any time		
ranticipant	s received substance abuse counselling at any time		
	Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): -0.66 (-1.57 to 0.25)		
Outcome	Employment outcome 1 employment in a paid job, beta coefficient (95%CI): -0.86 (-1.66 to -0.06)		
measures	Education outcome 2 post-secondary enrolment full-time (or part-time if also employed part-time), beta coefficient (95%CI): 0.017 (-0.83 to 0.86)		
	Education outcome 3 any positive outcome, beta coefficient (95%CI): -1.015 (-1.84 to -0.19)		
•	Income support services (N = 349) Participants received income support such as "TANF", "SSI", "Chafee" or "Pell"		
	Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): 1.37 (0.82 to 1.91)		
Outcome	Employment outcome 1 employment in a paid job, beta coefficient (95%CI): 0.421 (-0.01 to 0.85)		
measures	Education outcome 2		
	post-secondary enrolment full-time (or part-time if also employed part-time), beta coefficient (95%CI): 0.92 (0.40 to 1.43)		
	Education outcome 3 any positive outcome, beta coefficient (95%CI): 0.71 (0.28 to 1.15)		

Parenting support classes (N = 72)

Participants were enrolled in parenting classes

Education outcomes 1

Completion of GED or diploma, beta coefficient (95%CI): 0.82 (0.06 to 1.58)

Employment outcome 1

Outcome measures

employment in a paid job including apprenticeship and the military, beta coefficient (95%CI): 0.23 (-0.43 to 0.90)

Education outcome 2

post-secondary enrolment full-time, beta coefficient (95%CI): 0.01 (-0.71 to 0.74)

Education outcome 3

any positive outcome, beta coefficient (95%CI): 0.40 (-0.28 to 1.09)

GED preparation/remedial education (N = 585)

Participants were enrolled in GED preparation or remedial education

Education outcomes 1

Completion of GED or diploma, beta coefficient (95%CI): 0.18 (-0.37 to 0.72)

Employment outcome 1

employment in a paid job including apprenticeship and the military, beta coefficient (95%CI): 0.35 (-0.11 to 0.81)

Outcome measures

Education outcome 2

post-secondary enrolment full-time, beta coefficient (95%CI): 0.05 (-0.53 to 0.62)

Education outcome 3

any positive outcome, beta coefficient (95%CI): 0.30 (-0.15 to 0.75)

Health support (N = 72)

Health support (including medical, mental health or prescription drug services at any time);

	Outcome measures	Education outcomes 1 Completion of GED or diploma, beta coefficient (95%CI): -0.486 (-1.11 to 0.14) Employment outcome 1 employment in a paid job including apprenticeship and the military, beta coefficient (95%CI): 0.17 (-0.31 to 0.65) Education outcome 2 post-secondary enrolment full-time, beta coefficient (95%CI): -0.59 (-1.17 to -0.01) Education outcome 3 any positive outcome, beta coefficient (95%CI): -0.165 (-0.65 to 0.32)	
	1. Bias due to confounding Critical (Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or		
Risk of bias	service.)	ion of participants into the study	
	(Unlikely that inte service specifical	erventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each ly.)	
	3. Bias in classification of interventions		
	Serious		
	(Interventions were not clearly defined and could have differed significantly between sites and participants.)		
	4. Bias due to deviations from intended interventions		
	Serious		

(Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received.)

5. Bias due to missing data

Serious

(Amount of missing data, and approach to missing data for analysis is not described)

6. Bias in measurement of outcomes

Serious

(Workers at each programme collected participant data via interviews at time of entry into the programme and quarterly. Unclear if outcomes were valid or had been validated.)

7. Bias in selection of the reported result

Moderate

(Unclear how variables were selected for entry into multivariable analysis.)

Overall bias

Risk of bias judgement

Critical

Directness

This question has not yet been answered.

Qualitative studies

Gazeley 2018

Bibliographic Reference

Gazeley, Louise; Hinton-Smith, Tamsin; The 'Success' of Looked after Children in Higher Education in England: Near Peer Coaching, 'Small Steps' and Future Thinking; Higher Education Research and Development; 2018; vol. 37 (no. 5); 952-965

Study Characteristics

Study type	Focus Groups Interviews (unclear) Mixed Methods RQ4.3
Aim of study	To inform future innovation by delivering impartial insights into the needs addressed by the programme, its most useful aspects and the qualities most valued in a coach, including the importance of whether they were careexperienced themselves
Study location	UK
Study setting	The HE Champions Coaching Programme: this programme was developed out of an established collaborative relationship between Aimhigher London South (a third sector WP organisation) and stakeholders in eight universities and seven LAs.
Study methods	Mixed methods approach. Questionnaires for young people, combined with focus groups for young people and their coaches. This involved collaborative mind mapping exercises. Unclear how thematic analysis was performed.
Population	Looked after young people and their near peer coahces taking part in a coaching intervention to support higher education

Study dates	Not reported
Sources of funding	Aimhigher London South
Inclusion Criteria	Involvement in an intervention Young people participating in Higher Education Champions Coaching Programme Delivering an intervention Near peer coaches
Exclusion criteria	None reported
Sample characteristics	Sample size young people, n = 6; coaches, n = 12; key adults, n = 8; trainers and other adults involved in programme delivery, n = 5
Relevant themes	Theme 1 Gaps in support at the pre-entry phase - Key Adults emphasised the importance of this issue to many of those involved: 'Anyone in my field is going to see HE support as a priority and there's a limited range of programmes supporting that' (KA1 S2Q). The programme was primarily built around the idea that there were gaps in support and knowledge at the pre-entry phase and that these had consequences later on: "What we've found with the young people in care is they're making quite ill informed decisions about universities and courses. They're accepting offers without even going to unis. One accepted a place because it looked nice in photos." (KA,S1Q) Theme 2 Need for practical, knowledgable advice, particularly for asylum seekers - Despite the additional practical support that is now often available to LAC, finance and accommodation emerged as particular concerns, with vacation periods identified as difficult and requiring careful planning. One Key Adult also highlighted the changing profile of LAC in the LA and the additional demands on young people from asylum seeking backgrounds: "Growing up in another country you may not have this knowledge of uni and how to get the most from a university experience and confidence to do so. It's all very aspirational but it takes a lot of guts to get there. It's a big step in terms of independence." (KA,S1Q) Theme 3 lack of family network leads to lack of preparedness - Research into student preparedness for HE suggests that those leaving a family environment and expected to take responsibility for their own lives experience an 'abrupt shift'the absence of a family network might intensify this: "Many of ours have to repeat the first year or change courses. They are vulnerable because they don't have a safe place, a family to go back to. The other issue is accommodation. There's a whole load of things we need to sort out. (KA,S1Q) Theme 4 Simply gaining access is not enough - Overall, there was a strong sense that simply gaining access to HE was not enough as many we

Theme 5

Additional challeneges for those in the role of corporate parent - One Key Adult emphasised the value of making joint visits once a university had been identified and the importance of establishing a connection with the designated university lead for LAC, especially where later difficulties arose. However, another discussed the difficulty of establishing and utilising these lines of communication in order to ensure continuing care: 'I try and visit them. I try to keep involved...but it is hard' (KA,S1Q). The programme was therefore proactive and future orientated in aiming to deliver: "Survival skills for...care leavers...without any local support systems. Soft care skills re mental and physical health." (KA,S1Q) Key Adults conceptualised their responsibilities holistically, reflecting a life-cycle approach: "Supporting care leavers in having a full uni life. Helping care leavers think about work in the future. Help care leavers think ahead about accommodation." (KA,S1Q)

Theme 6

University admission processes insufficiently adapted to take into account differences in level of support - "Our children don't have parents and teachers preparing them for [courses where the entry criteria are difficult and an interview required] like some others. Knowing how to jump through the hoops." (KA,S1Q)

Theme 7

Key adults insufficientcy to fill in the knowledge gaps - "Social workers in our set up didn't feel equipped to help out much with uni applications or have time to devote to it. The initial idea was for me to fill that gap. But with my new job role now I don't have time to either." (KA,S1Q)

Theme 8

Not knowing where to find the information - Although there are resources available to inform stakeholders working with LAC, there is no guarantee that they will reach them, leaving some dependent on informal sources: "The young people always ask a lot about finance for uni and I don't know the right answers. I read a newspaper article about all the bursaries young people can apply for. I wish I kept it so I could advise the young people I work with." (KA,S1Q)

Theme 9

Coaches could fill in the knowledge gaps - Key Adults felt strongly that the undergraduate students recruited to work as coaches could supply something that would better fill these gaps: 'For children in care what's missing is not teachers but that friend outside the system' (KA,S1Q). There was a strong sense that some questions would be more comfortably addressed by a near peer and that not all relate to formal areas of knowledge: "It's often indiscernible stuff that I can't answer or kids won't ask me...It might be a question they feel silly about, or just a general chat about their work. Myself, foster carer – it's lots of middle aged women around a teenage lad." (KA,S1Q)

Theme 10

Qualities desirable in a coach - Asked to comment on the qualities desirable in a coach the young people confirmed the importance of more personal relationships built on shared understandings: "You have to be comfortable with each other to come up with more questions. (YP,FG) They've just come out of university or they've just gone to university, so they kind of understand what we're going to go through. (YP,FG)"

Theme 11

Sense of powerlessness from Key Adults - Some of the concerns raised by Key Adults were considered to lie outside their control, highlighting a sense of powerlessness: "For LACs, particularly asylum seekers...Successes can be little and far between but you have to hold on to them. It can be soul destroying – how it feels for young people who have worked so hard against obstacles." (KA,S1Q)

Theme 12

Young people identify their own coaching goals - Although much of this aligned closely with the concerns that Key Adults suggested jeopardised future 'success', a key tenet of the programme was that 'the learners lead' (T2). The young people therefore identified their own coaching goals and this appeared essential as they were at different stages in their HE journeys: "I haven't done the uni [application] thing so for me it was what to expect at uni and...talking about what I study and how I can improve on it and get the grades I want. (YP,FG)" The coaches' questioning of the young people's self-identified goals was seen to be a way of bridging the 'disconnect between aspiration and reality: trying to connect these

two' (C,S2WN). It was described by one coach as being 'like onion peeling' and another as 'allowing room to share without being judged' (C,S2WN). One young person explained how the process had opened up lines of communication: "It was quite natural which kind of helps to get the problems out in the open quicker and deal with them in a more realistic way. (YP,FG)"

Theme 13

Tailoring to individual strengths and barriers - The young people expressed different motivations for joining the programme including 'experience and knowledge of what uni has in store for us' (YP,S1Q) and 'to feel more comfortable in the suitability of higher education' (YP,S1Q). The coaches needed to become attuned to each young person as an individual with different strengths and facing different barriers: "Didn't really know at beginning how can help her...Already got place at university. Faced a lot of setbacks, people telling her she can't do the things she wants to do. (C.FCEO)"

Theme 14

Gaining knowledge through coaching - Some indicated having gained knowledge and understanding in areas that aligned closely with the concerns motivating the programme's development: "My goal was really to see what I really wanted to do at uni...I was like 'I want to do this, this and this' and then at the end of it, I kind of know what I want to do now and what unis I want to go to. (YP,FG) If I didn't go for this I wouldn't have read through all the modules, I would have said, 'Yeah I want to go here and do [subject name]...so it actually made us more knowledgeable in the sense of what we need to do to know what we're doing. (YP,FG)" Coaches also highlighted the acquisition of new knowledge in key areas, including how to identify the point of contact for LAC at a university and the kinds of financial support available. Other areas of learning encompassed the social aspects of HE such as the nightlife and music scene. These more contextualised insights are important given the increased risk of social isolation amongst LAC and they have a part to play in building an understanding of how new networks can be built: "But societies, I had no idea, like societies had loads of stuff...I've spoken to a lot of people about the union and [they have] never come across that. (YP,FG)"

Theme 15

Encouragement to keep going - The mixed feelings that the young people might experience during the first week at the university were explored during the final celebration event. One trainer explained that all students feel alien at first and need to keep going, encouraging the coaches to share their own experiences of feeling this way and surviving. This mixture of open engagement with real-life concerns alongside positive insights into lived 'success' appeared to provide an experience of mutuality as a protective resource for the future.

Theme 16

Connecting pasts with futures, seeing the past as a strength - A life-cycle approach to 'success' in HE does not automatically entail an understanding of challenging life experiences in the way that these understandings were embedded in the programme. This appeared to be structured as a reflexive space in which to make sense of the past in preparation for the future: "In care or not it is such a good way of reflecting on where a person stands in their life and in relation to themselves and others. (C,S2Q)" One Key Adult had a sense of how the personal statement, written as part of the university admissions process, might unfairly work against such a forward-looking focus: "My own daughter was able to take up opportunities that the young people we work with don't know about...People need to know not just about the young person's history in care, but about where they can go in life. (KA.S1Q)" The uncomfortable feelings that might be engendered around the need to 'sell themselves' in the personal statement were addressed by one trainer at the final celebration event who asked the young people to reflect on the question: "What does your history - that you got to this point - what does your willingness say to the university?" The personal statement was then re-presented as a way of connecting 'all your life experiences'. The coaches suggested that this repositioning of the past was about the empowerment of the young person and a rejection of anything deterministic: 'Your social workers do not define your life you define it!' (C,S2WN). Consequently, there was a strong emphasis on utilising the experience to foster independence and deliver sustainable benefits: "[I am] a care leaver who believes that all care [leavers] should be supported to reach their full potential. To do this I believe that we need people who care for care leavers, who care about them and who enable them to care for themselves \rightarrow this programme does enable them to care for themselves that is why I did this programme. (C,S2FG)" One young person described the process as starting with being challenged but ending with challenging himself. Another described having become more optimistic based on the realisation 'that if I'm really positive I can do way more than I thought I could'. The coaches identified their similar life experiences as a motivating factor when it came to applying for the role: "I have been in care myself and know how hard it can be. (C,S1Q) On paper I come from a disadvantaged background, young carer, teenage pregnancy, low income...so I want to give back to other disadvantaged groups. (C1,S1Q)" Participation in the programme was described by one trainer as involving a reconfiguring and sharing of narratives around their own pasts: "It's...how they use that experience...It was set up by taking them back to their experience. It was difficult for some. (T1, S2I)"

Theme 17

Importance of coaches being care-experienced - One young person indicated that this connection had been important in securing her involvement in the programme: "They were talking about personal things that they had to go through and...I was really inspired, cos I just felt really uplifted and I felt like I wanted to participate in this. (YP,FG)" Coaches highlighted the positives arising from their involvement, important given that some were care-experienced themselves: 'The benefits to both coaches and learners are equal' (C,S2WN). In addition to developing a range of inter-personal skills relevant to their future careers, some coaches highlighted more far-reaching consequences: "Not only will you enrich the life of another, you will also learn a tremendous amount about yourself. Whatever career path you choose, having a high level of emotional intelligence will help you in your path to success. (C,S2Q)" On one level the coaches seemed to both promote and mirror future success. Considered from a life-cycle approach, the reciprocal benefits experienced by coaches who had already overcome significant challenges seemed equally important.

Theme 18

Problems with recruitment into the programme (too many people) - There was an overarching concern that more LAC could have benefited from the intervention than the 16 who ultimately took part. Those who did also experienced varying levels of involvement. Some explanations of the problems around recruitment reflected wider challenges in their lives: "When you are a LAC you have a lot of adults in your life and you don't necessarily want to add more. (KA,S1Q)" Reflecting on the difficulties with recruitment one trainer questioned the initial reliance on unfamiliar people in unfamiliar settings, an approach that was subsequently changed.

Theme 19

Geographical access problems - The most common explanation for difficulty involving young people related to the decision to bring them together for whole group events at the start as this posed a geographical challenge given that 'children in care are so scattered' (KA10,S2Q).

Theme 20

Two young people also suggested the need for more information: "I wasn't sure of what was going to happen, what it was about, but I thought I would take a risk and see what it is, especially since people telling me 'You should do this, do that' so I thought I would just give it a try. (YP,FG)"

Theme 21

Tailored appoaches and measures of success needed - These difficulties reinforced the perception that more reflexive, personalised approaches were needed: "It's trying to be flexible, meeting each person's needs. Humans are individuals. That's the challenge. (KA,S1Q)" Key Adults asked to reflect on the 'success' of the programme made judgements on a similar case by case basis, highlighting a wide range of internal and external factors as potentially relevant: "The quality of the relationships was strong. They had shared interests in common...[there was] a stronger network of support at home. The [other YP is] in a foster relationship. It's very different. (KA,S2Q)"

Theme 22

Successes not readily quantified - There was some sense of ripples out from the programme into other aspects of the young people's lives, including their immediate educational experiences, although these influences were neither straightforward nor readily quantified: "Although we weren't really sure if he was engaging fully, he did really well in his AS grades. Prior to that there had been a dip...We felt that involvement in the programme had really helped his motivation. (KA,S2Q) The young person was going through a period of significant change...Unsurprisingly A levels didn't go that well...They've got supportive housing and are getting up and going to college. They're on a path, that's the important thing. (KA,S2Q)"

Study arms

Higher Education Champions Coaching Programme (N = 31)

A near peer, pre-entry to higher education coaching programme. The model comprised pre-established whole group start and end points, with regular individual coaching meetings undertaken by selected undergraduates in between. The HE Champions Coaching Programme developed out of an established collaborative relationship between Aimhigher London South (a third sector WP organisation) and stakeholders in eight universities and seven local authorities.

Risk of Bias

Section	Question	Answer
Aims of the research	Was there a clear statement of the aims of the research?	Yes
Appropriateness of methodology	Is a qualitative methodology appropriate?	Yes
Research Design	Was the research design appropriate to address the aims of the research?	Can't tell (Research methods were not clearly designed)
Recruitment Strategy		Can't tell (Researchers did not show how the participants selected were the most appropriate to provide access to the type of knowledge sought by the study. No discussion regarding why some chose not to take part.)
Data collection	Was the data collected in a way that addressed the research issue?	Can't tell (No justification of data collection; interview methods have not been made explicit; form of data unclear; no discussion of saturation of data)

Section	Question	Answer
Researcher and participant relationship	Has the relationship between researcher and participants been adequately considered?	Can't tell (Unclear that researchers critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location)
Ethical Issues	Have ethical issues been taken into consideration?	Yes
Data analysis	Was the data analysis sufficiently rigorous?	Can't tell (no clear description of thematic analysis)
Findings	Is there a clear statement of findings?	Can't tell (Unclear how data was sourced (e.g. from questionaires or interviews/focus groups) themes were not clearly laid out.)
Research value	How valuable is the research?	The research is valuable
Overall risk of bias and directness	Overall risk of bias	High
	Directness	Directly applicable

Appendix E – Forest plots

No forest plots were produced for this review question as meta-analysis was not possible.

Appendix F – GRADE tables

Quantitative evidence

My Life Model vs Usual Services

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
Young person-reported self-determination score at postintervention defined by the ARC Self-Determination Scale									
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.24, p=0.03	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Young persor	Young person-reported self-determination score at 12 months follow up defined by the ARC Self-Determination Scale								
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.27, p=0.025	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Observer rate	d steps to reach	goals score	at 12 months asse	essed using sel	f-determination s	kills assessmer	nt		
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.20, p=0.017	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Observer rate	d range of stres	s manageme	nt strategies score	e at 12 months a	assessed using s	elf-determinatio	on skills assess	ment	

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.37, p=0.012	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Young person-reported career decision making score at 12 months defined by the Career Decision-Making Self-Efficacy									
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.27, p=0.031	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Young-person	reported self-a	ttribution of a	ccomplishments	score at postint	ervention				
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.27, p=0.006	Very serious ¹	N/A	Serious ²	NE ³	Very low	
Young-person	reported self-a	ttribution of a	ccomplishments	score at 12 mon	ths				
1 (Blakeslee 2020)	Parallel RCT	288	Standardised MD 0.16, p=0.033	Very serious ¹	N/A	Serious ²	NE ³	Very low	
detail co unclear	oncerning randon if intent to treat a	nisation metho analysis was u	sk of bias: Two rand ods or whether alloo sed. There is no de ness since study wa	cation was conce tailed discussion	aled. it is unclear h				

No. of studies St	tudy design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
3. Downgrade	e twice as impr	recision was n	ot estimable					

Life Skills Training Programme (classroom and practicum-based training) vs Usual Care

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
Completion of	high school dip	oloma or gene	eral equivalency d	iploma (GED) at	2 year follow up			
1 (Courtney 2008)	Parallel RCT	482	RR 1.02 (0.87 to 1.20)	Very serious ¹	N/A	Serious ²	Not Serious	Very low
Attended colle	ege at 2-year foll	low up						
1 (Courtney 2008)	Parallel RCT	482	RR 0.85 (0.66 to 1.09)	Very serious ¹	N/A	Serious ²	Serious ³	Very low

1. Downgrade 2 levels for very serious risk of bias: 26.6% of the control group took part in life skills training while 23.5% of the intervention group did not take part in life skills training. The levels of reported receipt of most independent living services by the second follow-up did not differ significantly between assignment groups. In the intervention group: 76% randomised were interviewed at baseline; 70% at first follow up; 67% at second follow up. in the control group: 80% randomised were interviewed at baseline; 73% at first follow up; 70% at second follow up. It is likely that missing data would be related to likelihood of behaviour problems, placement change, educational outcomes, and other outcomes of interest. Unlikely that blinding was performed for either the child in care or interviewer. Outcomes were self-reported. However, outcomes were generally non-subjective (other than job-preparedness for which the risk should be considered high). Results from first follow up not reported - only second follow up. However, this was reported to be because many of the outcomes referred to independence after care and 40% of the sample were still in care at first follow up.

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
Downgr	2. Downgrade 1 level for serious indirectness since study was based in USA							
3. Downgr	ade 1 level for se	erious imprecis	sion since estimate	of effect crossed	1 line of MID (def	ined as 0.8 and	1.25 for risk ration	s).

TAKE CHARGE (individualised coaching and group mentoring) vs Usual Care

TAKE CHARG	E (IIIuiviuualise	u coaciiiiy ai	na group mentorir	iy) və Usuai Cai	E	·			
No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
Post-secondary preparation score following intervention: assessed using a checklist indicating activities performed in planning for college. 10 postsecondary items included "talked with guidance counsellor or teacher about going to college" and "visited colleges". Item sums were calculated for each category									
1 (Geenen 2012)	Parallel RCT	120	MD 1.01 (0.76 to 1.26)	Very serious ¹	N/A	Serious ²	Not Serious	Very low	
college. 10 pc		ms included '	nths follow up: as: "talked with guida ry			_	-		
1 (Geenen 2012)	Parallel RCT	120	MD 0.02 (-0.31 to 0.35)	Very serious ¹	N/A	Serious ²	Serious ³	Very low	
career explor	Career development score following intervention: assessed using information regarding key activities youth had engaged in around career exploration and preparation for employment - 7 career items included "talked with family members about my career interests" and "job shadowed someone in my career area." Item sums were calculated for each category.								
1 (Geenen 2012)	Parallel RCT	120	MD 0.60 (0.30 to 0.90)	Very serious ¹	N/A	Serious ²	Serious ⁴	Very low	

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
around caree	r exploration and	d preparation	nonths follow up: a for employment - my career area." I	7 career items	included "talked	with family mer		
1 (Geenen 2012)	Parallel RCT	120	MD 0.17 (-0.09 to 0.43)	Very serious ¹	N/A	Serious ²	Serious ⁵	Very low
	as by asking yo		ntion: assessed us be their goals and					
1 (Geenen 2012)	Parallel RCT	120	MD 2.91 (-0.28 to 6.10)	Very serious ¹	N/A	Serious ²	Serious ⁶	Very low
Determinatio		s by asking y	nths follow up: as outh to describe t					
1 (Geenen	Parallel RCT	120	MD 2.80 (-0.31 to 5.91)	Very serious ¹	N/A	Serious ²	Serious ⁷	Very low
2012)								
Student ident			following interver o reflect students'			of their educat	tional goals for	the upcomi

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
1 (Geenen 2012)	Parallel RCT	120	MD -0.02 (-0.39 to 0.35)	Very serious ¹	N/A	Serious ²	Not Serious	Very low

- 1. Downgrade 2 levels for very serious risk of bias: Downgrade 2 levels for very serious risk of bias: Some considerable differences between comparison groups for length of time in foster care, speech and language disability, autism, and emotional/behavioural needs; unclear if any deviations from intended interventions; unclear if intention to treat analysis used (but most likely); Just over 10% with missing data post randomisation; unclear whether any further missing outcome data; unclear reasons for drop out; unclear how drop out varied between groups; It is possible that missingness of data is related to outcomes; It is unclear how assessments were performed (by whom). Unclear if facilitators were aware of intervention status of participants. Measurements used are often crude indicators of the phenomenon of interest; unclear that analysis was conducted according to a pre-specified protocol. Data not provided for certain non-significant results. Evidence of multiple analyses used for different outcomes.
- 2. Downgrade 1 level for serious indirectness since study was based in USA
- 3. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=0.45).
- 4. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=0.36).
- 5. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=0.35).
- 6. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=4.47).
- 7. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=4.41).
- 8. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=0.57).

TAKE CHARGE (individualised coaching and group mentoring) vs Foster Care Independent Living Programme

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
Self-determination post intervention: assessed using the Arc Self-determination Scale									

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
1 (Powers 2012)	Parallel RCT	69	MD 14.22 (4.06 to 24.38)	Very serious ¹	N/A	Serious ²	Serious ³	Very low	
Self-determination at 1-year follow up: assessed using the Arc Self-determination Scale									
1 (Powers 2012)	Parallel RCT	69	MD 14.20 (4.00 to 24.40)	Very serious ¹	N/A	Serious ²	Serious ⁴	Very low	
High school completion post-intervention: School data was collected from school records (i.e., transcripts, IEP). Participants completed their secondary education (either through graduation or obtaining their GED)									
1 (Powers 2012)	Parallel RCT	69	OR 1.83 (0.61 to 5.49)	Very serious ¹	N/A	Serious ²	Very Serious ⁵	Very low	
			: School data was graduation or obta			i.e., transcripts,	IEP). Participar	nts complete	
1 (Powers 2012)	Parallel RCT	69	OR 2.63 (0.90 to 7.65)	Very serious ¹	N/A	Serious ²	Serious ⁶	Very low	
Employment post-intervention: assessed by self-report ("the outcome survey")									
1 (Powers 2012)	Parallel RCT	69	OR 2.84 (0.84 to 9.66)	Very serious ¹	N/A	Serious ²	Very Serious ⁵	Very low	
Employment at 1-year follow up: assessed by self-report ("the outcome survey")									

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
1 (Powers 2012)	Parallel RCT	69	OR 2.08 (0.72 to 6.01)	Very serious ¹	N/A	Serious ²	Very Serious ⁵	Very low		
Post-secondary education post-intervention: defined as attending either a 2 or 4-year college programme.										
1 (Powers 2012)	Parallel RCT	69	OR 2.30 (0.20 to 26.75)	Very serious ¹	N/A	Serious ²	Very Serious ⁵	Very low		
Post-secondar	Post-secondary education at 1-year follow up: defined as attending either a 2 or 4-year college programme.									
1 (Powers 2012)	Parallel RCT	69	OR 2.28 (0.71 to 7.37)	Very serious ¹	N/A	Serious ²	Very Serious ⁵	Very low		

- 1. Downgrade 2 levels for very serious risk of bias: Unclear how randomisation was performed. Unclear if allocation concealment. Unclear if important (significant) differences between groups at baseline; Unclear if missing information, how much, or whether different amounts between groups; Unclear how outcomes were assessed (by who) or if blinded for intervention group; Insufficient information provided about conducting the study e.g. approach to missing data, no protocol cited.
- 2. Downgrade 1 level for serious indirectness since study was based in USA
- 3. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=12.32)
- 4. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=11.71)
- 5. Downgrade 2 levels for serious imprecision since estimate of effect crossed 2 lines of MID (defined as 0.80 and 1.25 for Odds Ratios).
- 6. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.80 and 1.25 for Odds Ratios).

Better futures (summer institute; individual coaching; mentoring workshop) vs Usual Care

o. of tudies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
	as by asking yo	_	ntion: assessed us be their goals and					
(Geenen 015)	Parallel RCT	67	MD 11.55 (3.72 to 19.38)	Very serious ¹	N/A	Serious ²	Serious ³	Very low
Determination		s by asking y	nths follow up: as outh to describe t					
(Geenen 015)	Parallel RCT	67	MD 13.98 (6.71 to 21.25)	Very serious ¹	N/A	Serious ²	Serious ⁴	Very low
			t-intervention: me ver is more favou		ssessing barriers	to education s	cale a measure	of
(Geenen 2015)	Parallel RCT	67	MD -10.10 (- 19.94 to -0.26)	Very serious ¹	N/A	Serious ²	Serious ⁵	Very low
			41 6 11	u magaurad uai	na according bor	riore to aducati	on scale, a mea	sure of
	rriers to educati y and transition		-months follow up	i measured usi	ny assessiny dar	ners to educati	on scale, a mea	

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
1 (Geenen 2015)	Parallel RCT	67	MD 0.70 (0.34 to 1.06)	Very serious ¹	N/A	Serious ²	Serious ⁶	Very low		
Career decision self-efficacy scale at 6 months follow up: measured using Career Decision Self-Efficacy Scale, a measure of post-secondary and transition planning.										
1 (Geenen 2015)	Parallel RCT	67	MD 0.96 (0.64 to 1.28)	Very serious ¹	N/A	Serious ²	Not Serious	Very low		
Self-determination post intervention: assessed by the Arc self-determination scale										
1 (Geenen 2015)	Parallel RCT	67	MD 14.34 (4.50 to 24.18)	Very serious ¹	N/A	Serious ²	Serious ⁷	Very low		
Self-determin	nation at 6 month	s follow up:	assessed by the A	arc self-determin	nation scale					
1 (Geenen 2015)	Parallel RCT	67	MD 21.83 (13.69 to 29.97)	Very serious ¹	N/A	Serious ²	Not Serious	Very low		
Post-secondary preparation post-intervention: assessed using the post-secondary preparation scale, which includes include 24 key activities associated with preparing for and applying to college (e.g., completing FAFSA, touring a college campus, submitting a college application, etc.).										
1 (Geenen 2015)	Parallel RCT	67	MD 6.76 (3.96 to 9.56)	Very serious ¹	N/A	Serious ²	Not Serious	Very low		

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
	ies associated w		nths follow up: ass g for and applying	_						
1 (Geenen 2015)	Parallel RCT	67	MD 8.35 (5.74 to 10.96)	Very serious ¹	N/A	Serious ²	Not serious	Very low		
High school completion at 6-months follow up ⁸										
1 (Geenen 2015)	Parallel RCT	67	OR 1.66 (0.62 to 4.42)	Very serious ¹	N/A	Serious ²	Very Serious ⁹	Very low		
Participating	in post-seconda	ry education	at 6-months follow	w up						
1 (Geenen 2015)	Parallel RCT	67	OR 6.07 (2.06 to 17.90)	Very serious ¹	N/A	Serious ²	Not Serious	Very low		
Taking part i	n paid employme	ent at 6-mont	hs follow up:							
1 (Geenen 2015)	Parallel RCT	67	OR 0.91 (0.33 to 2.50)	Very serious ¹	N/A	Serious ²	Very Serious ⁹	Very low		
interve	ention as planned	(per-protocol	sk of bias: Unclear a analysis)); Missing o oups; Scales not de	data reported for	certain scales, but	t amount of miss	ing data unclear	or how this		

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
assessors were and whether blinded)); Unclear methods and no protocol cited. Multiple measures used for the same phenomenon e.g. self-									

- 2. Downgrade 1 level for serious indirectness since study was based in USA
- 3. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=9.66).
- 4. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=8.96).
- 5. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=11.27).
- 6. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=0.40).
- 7. Downgrade 1 level for serious imprecision since estimate of effect crossed 1 line of MID (defined as 0.5*SD in the control group=10.95).
- 8. Imputed using reported percentages
- 9. Downgrade 2 levels for very serious imprecision since estimate of effect crossed 2 lines of MID (defined as 0.5*SD in the control group, or 0.8 and 1.25 for odds ratios).

College preparation services vs no college preparation services

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
Completion of GED or diploma: assessed by self-report ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.317 (-1.00 to 0.37)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality			
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.561 (0.08 to 1.04)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			
Post-secondary education enrolment full-time (or part-time if also employed part-time): assessed by self-report ¹											
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.49 (-0.16 to 1.14)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			
	Any positive outcome (employment or education) defined as having one or more of the other three outcomes: assessed by composite of self-report outcomes ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.42 (-0.04 to 0.89)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			

- 1. Adjusted for: being 17 or older; Male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
4. Downgrade twice as imprecision was not estimable								

Job preparation services vs no job preparation services

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
Completion of GED or diploma: assessed by self-report ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.546 (-0.23 to 1.32)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		
Employment in	Employment in a paid job including apprenticeship and military: assessed by self-report ¹									
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.99 (0.41 to 1.58)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		
Post-secondary education enrolment full-time (or part-time if also employed part-time): assessed by self-report ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 1.25 (0.11 to 2.39)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		

No. of studies Any positive of self-report out		Sample size yment or edu	Effect size (95% CI) cation) defined as	Risk of bias	Inconsistency more of the other	Indirectness three outcome	Imprecision s: assessed by	Quality composite of
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 1.03 (0.53 to 1.53)	Very serious ²	N/A	Serious ³	NE ⁴	Very low

- 1. Adjusted for: being 17 or older; Male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Life skills courses vs no life skills courses

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
Completion of	GED or diplom	a: assessed b	oy self-report ¹					

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.34 (-0.31 to 0.99)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Employment i	in a paid job incl	uding apprer	nticeship and milit	ary: assessed b	y self-report ¹			
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.26 (-0.21 to 0.73)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Post-seconda	ary education en	rolment full-ti	me (or part-time i	f also employed	part-time): asses	ssed by self-rep	oort ¹	
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.45 (-0.23 to 1.12)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Any positive of self-report ou		yment or edu	cation) defined as	having one or ı	more of the other	three outcome	s: assessed by	composite of
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.33 (-0.10 to 0.78)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
time in	services; other se	ervices receive	ethnicity; highschoo ed. sk of bias: Unclear					-

none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study

No. of		Sample	Effect size	5.1.61.				.	
studies	Study design		(95% CI)	Risk of bias				Quality	
part wa	ay through an inte	rvention or ser	vice. Unlikely that i	nterventions wer	e started at point o	of entry into the s	tudy. Study adju	sted for length	
of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly									
	between sites and participants. Study is observational and does not provide information about the adherence of participants to their								
interve	interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for								
analys	analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into								
multiva	riable analysis.								
3 Downe	rade 1 level for se	erious indirectr	ness since study wa	as hased in LISA					

- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Substance abuse counselling vs no substance abuse counselling

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
Completion of	GED or diplom	a: assessed b	oy self-report ¹					
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.66 (-1.57 to 0.25)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Employment i	n a paid job incl	uding appren	ticeship and milit	ary: assessed b	y self-report ¹			
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.86 (-1.66 to - 0.06)	Very serious ²	N/A	Serious ³	NE ⁴	Very low

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
Post-secondary education enrolment full-time (or part-time if also employed part-time): assessed by self-report ¹								
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.017 (-0.83 to 0.86)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Any positive outcome (employment or education) defined as having one or more of the other three outcomes: assessed by composite of self-report outcomes ¹								
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -1.015 (-1.84 to -0.19)	Very serious ²	N/A	Serious ³	NE ⁴	Very low

- 1. Adjusted for: being 17 or older; Male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Income support services vs no income support services

meeme eapp	ort services vs ii									
No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality		
Completion o	Completion of GED or diploma: assessed by self-report ¹									
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 1.37 (0.82 to 1.91)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		
Employment in a paid job including apprenticeship and military: assessed by self-report ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.421 (-0.01 to 0.85)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		
Post-seconda	ary education en	rolment full-t	ime (or part-time i	f also employed	part-time): asses	ssed by self-rep	oort ¹			
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.92 (0.40 to 1.43)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		
Any positive outcome (employment or education) defined as having one or more of the other three outcomes: assessed by composite of self-report outcomes ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.71 (0.28 to 1.15)	Very serious ²	N/A	Serious ³	NE ⁴	Very low		

No. of		Sample	Effect size					
studies	Study design	<u> </u>	(95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality

- 1. Adjusted for: being 17 or older; male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services: other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Parenting support services vs no parenting support services

Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
GED or diploma	a: assessed b	oy self-report ¹					
Prospective cohort study	1058	Beta coefficient 0.82 (0.06 to 1.58)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
•	GED or diploma	Study design size GED or diploma: assessed by the size of the siz	Study design size (95% CI) GED or diploma: assessed by self-report¹ Prospective cohort study 1058 Beta coefficient 0.82 (0.06 to	Study design size (95% CI) Risk of bias GED or diploma: assessed by self-report¹ Prospective cohort study 1058 Beta coefficient 0.82 (0.06 to	Study design size (95% CI) Risk of bias Inconsistency GED or diploma: assessed by self-report¹ Prospective cohort study Beta coefficient 0.82 (0.06 to Very serious² N/A	Study design size (95% CI) Risk of bias Inconsistency Indirectness GED or diploma: assessed by self-report¹ Prospective cohort study Beta coefficient 0.82 (0.06 to Very serious² N/A Serious³	Study design size (95% CI) Risk of bias Inconsistency Indirectness Imprecision GED or diploma: assessed by self-report¹ Prospective cohort study 1058 Beta coefficient 0.82 (0.06 to Very serious² N/A Serious³ NE⁴

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.23 (-0.43 to 0.90)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Post-seconda	ry education en	rolment full-ti	me (or part-time i	f also employed	part-time): asses	ssed by self-rep	ort ¹	
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.01 (-0.71 to 0.74)	Very serious ²	N/A	Serious ³	NE ⁴	Very low
Any positive of self-report out		yment or edu	cation) defined as	having one or ı	more of the other	three outcome	s: assessed by	composite of
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.40 (-0.28 to 1.09)	Very serious ²	N/A	Serious ³	NE ⁴	Very low

- 1. Adjusted for: being 17 or older; male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality
4. Downgra	ade twice as imp	recision was r	not estimable					

GED preparation/remedial education support vs no GED preparation/remedial education support

No. of		Sample	Effect size		ar education supp				
studies	Study design	size	(95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality	
Completion of GED or diploma: assessed by self-report ¹									
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.18 (-0.37 to 0.72)	Very serious ²	N/A	Serious ³	NE ⁴	Very low	
Employment i	Employment in a paid job including apprenticeship and military: assessed by self-report ¹								
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.35 (-0.11 to 0.81)	Very serious ²	N/A	Serious ³	NE ⁴	Very low	
Post-secondary education enrolment full-time (or part-time if also employed part-time): assessed by self-report ¹									
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.05 (-0.53 to 0.62)	Very serious ²	N/A	Serious ³	NE ⁴	Very low	

No. of studies	Study design		Effect size (95% CI) cation) defined as	Risk of bias		Indirectness	Imprecision	Quality
self-report out		ymont or cau		liaring one or i			o. accessed by	
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.30 (-0.15 to 0.75)	Very serious ²	N/A	Serious ³	NE ⁴	Very low

- 1. Adjusted for: being 17 or older; male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Health support services vs no health support services

No. of studies	Study design	Sample size	Effect size (95% CI)	Risk of bias	Inconsistency	Indirectness	Imprecision	Quality			
Completion of GED or diploma: assessed by self-report ¹											
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.49 (-1.11 to 0.14)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			
Employment	Employment in a paid job including apprenticeship and military: assessed by self-report ¹										
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient 0.17 (-0.31 to 0.65)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			
Post-seconda	ary education en	rolment full-	time (or part-time i	f also employed	part-time): asses	ssed by self-rep	oort ¹				
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.59 (-1.17 to - 0.01)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			
Any positive outcome (employment or education) defined as having one or more of the other three outcomes: assessed by composite of self-report outcomes ¹											
1 (Barnow 2015)	Prospective cohort study	1058	Beta coefficient -0.17 (-0.65 to 0.32)	Very serious ²	N/A	Serious ³	NE ⁴	Very low			

- 1. Adjusted for: being 17 or older; male; ethnicity; highschool success; housing situation; formerly in foster care; being a parent; adjudication; time in services; other services received.
- 2. Downgrade 2 levels for very serious risk of bias: Unclear validity of the measures/data sources used. Many variables were corrected for, but none related to substance use, mental health problems, behavioural or emotional disorders. Participants may have entered into the study part way through an intervention or service. Unlikely that interventions were started at point of entry into the study. Study adjusted for length of time in programme, but not for each service specifically. Interventions were not clearly defined and could have differed significantly between sites and participants. Study is observational and does not provide information about the adherence of participants to their interventions, or whether there was cross-over between services received. Amount of missing data, and approach to missing data for analysis is not described. Unclear if outcomes were valid or had been validated. Unclear how variables were selected for entry into multivariable analysis.
- 3. Downgrade 1 level for serious indirectness since study was based in USA
- 4. Downgrade twice as imprecision was not estimable

Qualitative evidence

Experience of young people, coaches, key adults, trainers and other adults involved in programme delivery regarding Higher Education Champions Coaching Programme (Gazelev 2018)

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
Gaps in support at the pre-entry phase - Key Adults emphasised the importance of this issue to many of those involved: 'Anyone in my field is going to see HE support as a priority and there's a limited range of programmes supporting that' (KA1 S2Q). The programme was primarily built around the idea that there were gaps in support and knowledge at the pre-entry phase and that these had consequences later on: "What we've found with the young people in care is they're making quite ill informed decisions about universities and courses. They're accepting offers without even going to unis. One accepted a place because it looked nice in photos." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
Need for practical, knowledgeable advice, particularly for asylum seekers - Despite the additional practical support that is now often available to LAC, finance and accommodation emerged as particular concerns, with vacation periods identified as difficult and requiring careful planning. One Key Adult also highlighted the changing profile of LAC in the LA and the additional demands on young people from asylum seeking backgrounds: "Growing up in another country you may not have this knowledge of uni and how to get the most from a university experience and confidence to do so. It's all very aspirational but it takes a lot of guts to get there. It's a big step in terms of independence." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
lack of family network leads to lack of preparedness - Research into student preparedness for HE suggests that those leaving a family environment and expected to take responsibility for their own lives experience an 'abrupt shift'the absence of a family network might intensify this: "Many of ours have to repeat the first year or change courses. They are vulnerable because they don't have a safe place, a family to go back to. The other issue is accommodation. There's a whole load of things we need to sort out. (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Simply gaining access is not enough - Overall, there was a strong sense that simply gaining access to HE was not enough as many went on to experience stressors in the first year that increased the risk of drop out. Normative assumptions around the forms of involvement provided by 'good' parents have implications for how disadvantage is recognised and worked with in practice yet it could not be assumed that even those LAC still in touch with family had access to networks with knowledge of HE: "Even family members they stay in contact with tend not to have had university pathway,	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
so there's not that understanding or knowledge." (KA,S1Q)						
Additional challeneges for those in the role of corporate parent - One Key Adult emphasised the value of making joint visits once a university had been identified and the importance of establishing a connection with the designated university lead for LAC, especially where later difficulties arose. However, another discussed the difficulty of establishing and utilising these lines of communication in order to ensure continuing care: 'I try and visit them. I try to keep involvedbut it is hard' (KA,S1Q). The programme was therefore proactive and future orientated in aiming to deliver: "Survival skills forcare leaverswithout any local support systems. Soft care skills re mental and physical health." (KA,S1Q) Key Adults conceptualised their responsibilities holistically, reflecting a lifecycle approach: "Supporting care leavers in having a full uni life. Helping care leavers think about work in the future. Help care leavers think ahead about accommodation." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	Minor concerns Some lack of clarity regarding what works for	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
University admission processes insufficiently adapted to take into account differences in level of support - "Our children don't have parents and teachers preparing them for [courses where the entry criteria are difficult and an interview required] like some others. Knowing how to jump through the hoops." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Key adults insufficient to fill in the knowledge gaps - "Social workers in our set up didn't feel equipped to help out much with uni applications or have time to devote to it. The initial idea was for me to fill that gap. But with my new job role now I don't have time to	1	Very Serious concerns Study was high risk of bias. Unclear how	No concerns	Serious concerns	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
either." (KA,S1Q)		researchers were selected. Interview methods and method of thematic analysis was unclear.		Only one study contributed to this theme.		
Not knowing where to find the information - Although there are resources available to inform stakeholders working with LAC, there is no guarantee that they will reach them, leaving some dependent on informal sources: "The young people always ask a lot about finance for uni and I don't know the right answers. I read a newspaper article about all the bursaries young people can apply for. I wish I kept it so I could advise the young people I work with." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Coaches could fill in the knowledge gaps - Key Adults felt strongly that the undergraduate students recruited to work as coaches could supply something that would better fill these gaps: 'For children in care what's missing is not teachers but that friend outside the system' (KA,S1Q). There was a strong sense that some questions would be more comfortably addressed by a near peer and that not all relate to formal areas of knowledge: "It's often indiscernible stuff that I can't answer or kids won't ask meIt might be a question they feel silly about, or just a general chat about their work. Myself, foster carer – it's lots of middle aged women around a teenage lad." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Qualities desirable in a coach - Asked to comment on the qualities desirable in a coach the young people confirmed the importance of more personal relationships built on shared understandings: "You have to be comfortable with each other to come up with more questions. (YP,FG) They've just come out of university or they've	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
just gone to university, so they kind of understand what we're going to go through. (YP,FG)"		selected. Interview methods and method of thematic analysis was unclear.				
Sense of powerlessness from Key Adults - Some of the concerns raised by Key Adults were considered to lie outside their control, highlighting a sense of powerlessness: "For LACs, particularly asylum seekersSuccesses can be little and far between but you have to hold on to them. It can be soul destroying – how it feels for young people who have worked so hard against obstacles." (KA,S1Q)	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Young people identify their own coaching goals - Although much of this aligned closely with the concerns that Key Adults suggested jeopardised future 'success', a key tenet of the programme was that 'the learners lead' (T2). The young people therefore identified their own coaching goals and this appeared essential as they were at different stages in their HE journeys: "I haven't done the uni [application] thing so for me it was what to expect at uni andtalking about what I study and how I can improve on it and get the grades I want. (YP,FG)" The coaches' questioning of the young people's self-identified goals was seen to be a way of bridging the 'disconnect between aspiration and reality: trying to connect these two' (C,S2WN). It was described by one coach as being 'like onion peeling' and another as 'allowing room to share without being judged' (C,S2WN). One young person explained how the process had opened up lines of communication: "It was quite natural which kind of helps to get the problems out in the open quicker and deal with them in a more realistic way. (YP,FG)"	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
Tailoring to individual strengths and barriers - The young people expressed different motivations for joining the programme including 'experience and knowledge of what uni has in store for us' (YP,S1Q) and 'to feel more comfortable in the suitability of higher education' (YP,S1Q). The coaches needed to become attuned to each young person as an individual with different strengths and facing different barriers: "Didn't really know at beginning how can help herAlready got place at university. Faced a lot of setbacks, people telling her she can't do the things she wants to do. (C,FCEO)"	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Gaining knowledge through coaching - Some indicated having gained knowledge and understanding in areas that aligned closely with the concerns motivating the programme's development: "My goal was really to see what I really wanted to do at uniI was like 'I want to do this, this and this' and then at the end of it, I kind of know what I want to do now and what unis I want to go to. (YP,FG) If I didn't go for this I wouldn't have read through all the modules, I would have said, 'Yeah I want to go here and do [subject name]so it actually made us more knowledgeable in the sense of what we need to do to know what we're doing. (YP,FG)" Coaches also highlighted the acquisition of new knowledge in key areas, including how to identify the point of contact for LAC at a university and the kinds of financial support available. Other areas of learning encompassed the social aspects of HE such as the nightlife and music scene. These more contextualised insights are important given the increased risk of social isolation amongst LAC and they have a part to play in building an understanding of how new networks can be built: "But societies, I had no idea, like societies	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	Minor concerns The kinds of knowledge sought by looked after young people was varied.	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
had loads of stuffI've spoken to a lot of people about the union and [they have] never come across that. (YP,FG)"						
Encouragement to keep going - The mixed feelings that the young people might experience during the first week at the university were explored during the final celebration event. One trainer explained that all students feel alien at first and need to keep going, encouraging the coaches to share their own experiences of feeling this way and surviving. This mixture of open engagement with real-life concerns alongside positive insights into lived 'success' appeared to provide an experience of mutuality as a protective resource for the future.	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Connecting pasts with futures, seeing the past as a strength - A lifecycle approach to 'success' in HE does not automatically entail an understanding of challenging life experiences in the way that these understandings were embedded in the programme. This appeared to be structured as a reflexive space in which to make sense of the past in preparation for the future: "In care or not it is such a good way of reflecting on where a person stands in their life and in relation to themselves and others. (C,S2Q)" One Key Adult had a sense of how the personal statement, written as part of the university admissions process, might unfairly work against such a forward-looking focus: "My own daughter was able to take up opportunities that the young people we work with don't know aboutPeople need to know not just about the young person's history in care, but about where they can go in life. (KA,S1Q)" The uncomfortable feelings that might be engendered around the need to 'sell themselves' in the personal statement were addressed by one trainer at the final celebration event who asked the young	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

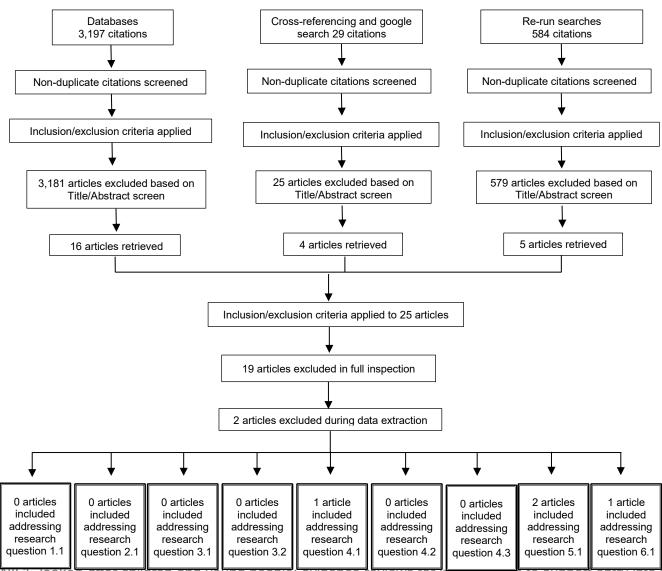
Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
people to reflect on the question: 'What does your history – that you						
got to this point – what does your willingness say to the university?'						
The personal statement was then re-presented as a way of						
connecting 'all your life experiences'. The coaches suggested that						
this repositioning of the past was about the empowerment of the						
young person and a rejection of anything deterministic: 'Your social						
workers do not define your life you define it!' (C,S2WN).						
Consequently, there was a strong emphasis on utilising the						
experience to foster independence and deliver sustainable benefits:						
"[I am] a care leaver who believes that all care [leavers] should be						
supported to reach their full potential. To do this I believe that we						
need people who care for care leavers, who care about them and						
who enable them to care for themselves \rightarrow this programme does						
enable them to care for themselves that is why I did this						
programme. (C,S2FG)" One young person described the process						
as starting with being challenged but ending with challenging						
himself. Another described having become more optimistic based						
on the realisation 'that if I'm really positive I can do way more than I						
thought I could'. The coaches identified their similar life experiences						
as a motivating factor when it came to applying for the role: "I have						
been in care myself and know how hard it can be. (C,S1Q) On						
paper I come from a disadvantaged background, young carer,						
teenage pregnancy, low incomeso I want to give back to other						
disadvantaged groups. (C1,S1Q)" Participation in the programme						
was described by one trainer as involving a reconfiguring and						
sharing of narratives around their own pasts: "It'show they use						
that experienceIt was set up by taking them back to their						
experience. It was difficult for some. (T1, S2I)"						

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
Importance of coaches being care-experienced - One young person indicated that this connection had been important in securing her involvement in the programme: "They were talking about personal things that they had to go through and! was really inspired, cos I just felt really uplifted and I felt like I wanted to participate in this. (YP,FG)" Coaches highlighted the positives arising from their involvement, important given that some were care-experienced themselves: 'The benefits to both coaches and learners are equal' (C,S2WN). In addition to developing a range of inter-personal skills relevant to their future careers, some coaches highlighted more far-reaching consequences: "Not only will you enrich the life of another, you will also learn a tremendous amount about yourself. Whatever career path you choose, having a high level of emotional intelligence will help you in your path to success. (C,S2Q)" On one level the coaches seemed to both promote and mirror future success. Considered from a life-cycle approach, the reciprocal benefits experienced by coaches who had already overcome significant challenges seemed equally important.	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Problems with recruitment into the programme (too many people) - There was an overarching concern that more LAC could have benefited from the intervention than the 16 who ultimately took part. Those who did also experienced varying levels of involvement. Some explanations of the problems around recruitment reflected wider challenges in their lives: "When you are a LAC you have a lot of adults in your life and you don't necessarily want to add more. (KA,S1Q)" Reflecting on the difficulties with recruitment one trainer questioned the initial reliance on unfamiliar people in unfamiliar settings, an approach that was subsequently changed.	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
Geographical access problems - The most common explanation for difficulty involving young people related to the decision to bring them together for whole group events at the start as this posed a geographical challenge given that 'children in care are so scattered' (KA10,S2Q).	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	No concerns	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Two young people also suggested the need for more information: "I wasn't sure of what was going to happen, what it was about, but I thought I would take a risk and see what it is, especially since people telling me 'You should do this, do that' so I thought I would just give it a try. (YP,FG)"	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	Minor concerns Substance of the theme was vague	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Tailored appoaches needed - These difficulties reinforced the perception that more reflexive, personalised approaches were needed: "It's trying to be flexible, meeting each person's needs. Humans are individuals. That's the challenge. (KA,S1Q)" Key Adults asked to reflect on the 'success' of the programme made judgements on a similar case by case basis, highlighting a wide range of internal and external factors as potentially relevant: "The quality of the relationships was strong. They had shared interests in common[there was] a stronger network of support at home. The [other YP is] in a foster relationship. It's very different. (KA,S2Q)"	1	Very Serious concerns Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.	Minor concerns Substance of the theme was vague	Serious concerns Only one study contributed to this theme.	No concerns	Very Low
Successes not readily quantified - There was some sense of ripples out from the programme into other aspects of the young people's	1	Very Serious concerns	No concerns	Serious concerns	No concerns	Very Low

Theme	Studies	Methodological limitations	Coherence	Adequacy	Relevance	Confidence
lives, including their immediate educational experiences, although these influences were neither straightforward nor readily quantified: "Although we weren't really sure if he was engaging fully, he did really well in his AS grades. Prior to that there had been a dipWe felt that involvement in the programme had really helped his motivation. (KA,S2Q) The young person was going through a period of significant changeUnsurprisingly A levels didn't go that wellThey've got supportive housing and are getting up and going to college. They're on a path, that's the important thing. (KA,S2Q)"		Study was high risk of bias. Unclear how researchers were selected. Interview methods and method of thematic analysis was unclear.		Only one study contributed to this theme.		

Appendix G – Economic evidence study selection



NICE looked-after children and young people: evidence reviews for interventions to support entry into further or higher education or training in looked-after children and young people FINAL (October 2021)

Appendix H – Economic evidence tables

No economic evidence was identified for this review question.

Appendix I – Health economic model

No economic modelling was undertaken for this review question.

Appendix J – Excluded studies

Effectiveness studies

Study	Code [Reason]
Bruster, Belinda E and Coccoma, Patricia (2013) Mentoring for educational success: Advancing foster care youth incorporating the core competencies Journal of Human Behavior in the Social Environment 23(3): 388-399	 Non-UK setting No outcomes of relevance to this question [uncontrolled before-and-after study, comparative evidence was available for this question]
Choca, Miryam, Pesce, Michael, Austin, Jane I et al. (2001) Raising competent young adults: Self-sufficiency work with youth and families Preparing youth for long-term success: Proceedings from the Casey Family Program National Independent Living Forum.: 73-81	- Data not reported in an extractable format [no numerical data reported]
Day, Angelique; Riebschleger, Joanne; Wen, Jiebing (2018) The Fostering Academics Mentoring Excellence Program. New Directions for Community Colleges: 39-47	- Predictors of the success of the intervention only
Gates, Lauren B, Pearlmutter, Sue, Keenan, Kat et al. (2018) Career readiness programming for youth in foster care. Children and Youth Services Review 89: 152-164	- non-UK, uncontrolled before and after study
Gairal-Casado, Regina, Garcia-Yeste, Carme, Novo-Molinero, Maria Teresa et al. (2019) Out of school learning scientific workshops: Stimulating	- non-UK qualitative study

Study	Code [Reason]
institutionalized Adolescents' educational aspirations. Children and Youth Services Review 103: 116-126	
Geiger, Jennifer M and Beltran, Susanny J (2017) Readiness, access, preparation, and support for foster care alumni in higher education: A review of the literature Journal of Public Child Welfare 11(45): 487-515	- Systematic review considered for relevant references
Geiger, Jennifer M, Cheung, Justine R, Hanrahan, Jeanne E et al. (2017) Increasing competency, self-confidence, and connectedness among foster care alumni entering a 4-year university: Findings from an early-start program Journal of Social Service Research 43(5): 566-579	- No outcomes of interest for this review question
Geiger, Jennifer M, Piel, Megan Hayes, Day, Angelique et al. (2018) A descriptive analysis of programs serving foster care alumni in higher education: Challenges and opportunities Children and Youth Services Review 85: 287-294	 Survey extracted views (not true qualitative) Comparator in study does not match that specified in protocol [Descriptive study, no comparative group] Not an investigation of an intervention Non-UK setting
Hill, Katharine and Peyton, Larissa (2017) Reaching successful futures: Experiences of participants in the Education and Training Vouchers program Children & Schools 39(2): 89-97	- To be considered for inclusion under a different review question: RQ4.4 [Survey study used to answer a qualitative question (though open-ended questions used)]
HOPKINS Graham (2003) Using your head. Community Care 25903: 42	Not a relevant study designIntervention description/practice report

Study	Code [Reason]
Hudson, Angela L (2013) Career mentoring needs of youths in foster care: voices for change Journal of child and adolescent psychiatric nursing: official publication of the Association of Child and Adolescent Psychiatric Nurses, Inc 26(2): 131-7	- No outcomes of interest for this review question
Jay Miller, J, Benner, Kalea, Kheibari, Athena et al. (2017) Conceptualizing on-campus support programs for collegiate foster youth and alumni: A plan for action Children and Youth Services Review 83: 57-67	- No outcomes of interest for this review question
Jones, Loring P (2010) The educational experiences of former foster youth three years after discharge Child welfare 89(6): 7-22	 Survey extracted views (not true qualitative) Not an investigation of an intervention Comparator in study does not match that specified in protocol [Non-comparative data. Study reports descriptive long-term college outcomes in a group exiting from residential education.] Non-UK setting
Jones, Loring and Lansdverk, John (2006) Residential education: Examining a new approach for improving outcomes for foster youth Children and Youth Services Review 28(10): 1152-1168	 Comparator in study does not match that specified in protocol [Non-comparative evidence, rather descriptive follow up of participants in a residential education centre] Not a relevant study design [Case series]

Study	Code [Reason]
Johnson, Royel M (2019) The state of research on undergraduate youth formerly in foster care: A systematic review of the literature. Journal of Diversity in Higher Education: no-specified	- Systematic review
Kirk, Rosalind and Day, Angelique (2011) Increasing college access for youth aging out of foster care: Evaluation of a summer camp program for foster youth transitioning from high school to college Children and Youth Services Review 33(7): 1173-1180	- No outcomes of interest for this review question
Lawler, Michael J, Sayfan, Liat, Goodman, Gail S et al. (2014) Comprehensive residential education: A promising model for emerging adults in foster care Children and Youth Services Review 38: 10-19	 - Predictors of the success of an intervention only - Comparator in study does not match that specified in protocol [Long term descriptive outcomes of a residential centre and predictors of success, no comparative group] - Non-UK setting
Lee, Bethany and Barth, Rick P (2009) Residential education: An emerging resource for improving educational outcomes for youth in foster care?. Children and Youth Services Review 31(1): 155-160	 - Unclear that population are LACYP [small percentage enrolled in the programmes may be from foster care] - Not an investigation of an intervention [No investigation of specific intervention] - No outcome of interest reported
MITCHELL Iain (2014) The University of Strathclyde summer experience: the impact of a widening access residential summer programme for children in care. Scottish Journal of Residential Child Care 12(3): 23-28	- To be considered for inclusion under a different review question

Study	Code [Reason]
Miller, Rebecca; Blakeslee, Jennifer; Ison, Chanel (2020) Exploring college student identity among young people with foster care histories and mental health challenges. Children and youth services review 114	- non-UK qualitative study
Phillips, Lee Ann, Powers, Laurie E, Geenen, Sarah et al. (2015) Better futures: A validated model for increasing postsecondary preparation and participation of youth in foster care with mental health challenges Children and Youth Services Review 57: 50-59	- No outcome of interest reported [Study reported descriptive survey outcomes (intervention fidelity)]
Randolph, Karen A and Thompson, Heather (2017) A systematic review of interventions to improve post-secondary educational outcomes among foster care alumni Children and Youth Services Review 79: 602-611	- Systematic review considered for relevant references
Sanders, Michael and Et, al (2020) What works in education for children who have had social workers? Summary report.: 56	exclude due to mixed population – "children who have had a social worker"
Wells, Melissa and Zunz, Sharyn (2009) Chafee Educational and Training Voucher Programs: System coordination in rural New England Child & Adolescent Social Work Journal 26(2): 103-120	- No outcomes of interest for this review question
Woodgate, Roberta L, Morakinyo, Oluwatobiloba, Martin, Katrina M et al. (2017) Interventions for youth aging out of care: A scoping review Children and Youth Services Review 82: 280-300	- Systematic review considered for relevant references

Cost-effectiveness studies

Study	Reason for exclusion
Bennett, C.E.; Wood, J.N.; Scribano, P.V. (2020) Health Care Utilization for Children in Foster Care. Academic Pediatrics 20(3): 341-347	- Exclude - compared LAC with non-LAC - Exclude - non-relevant outcomes
DIXON, Jo (2011) How the care system could be improved. Community Care 17211: 16-17	- Exclude - not an economic evaluation
Huefner, Jonathan C, Ringle, Jay L, Thompson, Ronald W et al. (2018) Economic evaluation of residential length of stay and long-term outcomes. Residential Treatment for Children & Youth 35(3): 192-208	- Exclude - costs not applicable to the UK perspective
LOFHOLM Cecilia, Andree; OLSSON Tina, M.; SUNDELL, Knut (2020) Effectiveness and costs of a therapeutic residential care program for adolescents with a serious behavior problem (MultifunC). Short-term results of a non-randomized controlled trial. Residential Treatment for Children and Youth 37(3): 226-243	- Exclude - population not specific to LACYP
Lovett, Nicholas and Xue, Yuhan (2020) Family First or the Kindness of Strangers? Foster Care Placements and Adult Outcomes. Labour Economics 65(0)	- Exclude - not an economic evaluation

Appendix K – Research recommendations – full details

Research recommendation

No research recommendations were drafted for this review chapter

Appendix L – References

Other references

None

Appendix M – Other appendix

No additional information for this review question.