Linked evidence synthesis evaluating interventions aiming to improve the mental health of children with long-term conditions: Involvement of young people Liz Shaw¹, Darren Moore¹, Michael Nunns¹, Erin Walker³, Fiona Lockhart², Morwenna Rogers¹, Ruth Garside¹, Obi Ukoumunne¹, Sophie Bennett², Chris Dickens¹, Tamsin Ford¹, Isobel Heyman³, Roz Shafran⁴, Penny Titman³, Russell Viner⁴, Rob Anderson¹, Stuart Logan¹, Jo Thompson Coon¹ ¹University of Exeter Medical School, University of Exeter, St Luke's Campus, Exeter, Devon, UK. ²University College London, ³Great Ormond Street Hospital for Children NHS Trust, ⁴University College London Institute of Child Health

Background

We recently completed a project which involved **two linked** systematic reviews and an overarching synthesis (OS) evaluating the effectiveness and experiences of **mental health** interventions for children and young people (CYP) with long term physical conditions (LTCs).

The Children and Young Person's Advisory Group (CYPAG)

CYP were invited to become group members by Erin Walker (Patient and Public Involvement Lead at Great Ormond Street Hospital).

The CYPAG was a tight-knit group of young people aged between 12 and 18 years of age, all of whom had accepted the initial invitation to attend the first meeting. This was to encourage cohesion between CYPAG members and the study team and maintain knowledge about the project across all four meetings at Great Ormond Street Hospital.

Review 1 focused on **quantitative** evidence evaluating the effectiveness and cost-effectiveness of interventions aiming to improve the mental health of CYP with LTCs. **Review 2** focused on qualitative evidence aiming to identify factors which may support or hinder the delivery of interventions aiming to improve the mental health and wellbeing of CYP with LTCs. The **Overarching Synthesis** sought to **bring together** the findings from Review 1 and Review 2.

We involved CYP throughout the project, from planning to dissemination of the findings.

The CYP lived with primarily neurological or rheumatic LTCs and had all experienced issues which affected their mental health and emotional wellbeing.

Aim

To work alongside CYP with lived experience of LTCs and mental health difficulties whilst conducting a linked-evidence synthesis, to ensure the research **remained relevant** to the CYP it was intended to benefit¹.

"she feels	Н		<i>"…a lot of other young</i>		
that her contribution is important to	Planning (Session 1)	Methods (Session 2)	Analysis (Session 3)	Dissemination (Session 4)	on people with

important to	Project		
change things			
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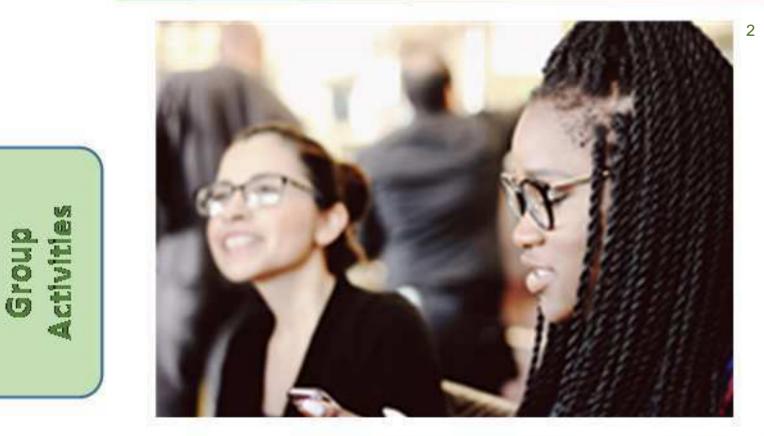
[Parent of CYPAG Member]

"…you've made it ok to say how you feel without

(Session 1)

What do CYP think about the focus of the project?

How can we define "Mental Health" and "Long Term Condition" so CYP living with these difficulties do not feel stigmatised and can understand the purpose of the project?



We had an open conversation. CYP drew upon their own experiences and gave their views on the projects focus.

Relaxation techniques can be hard to do CYP did not always see their mental health as being separate from their LTC. when you are stressed.

(Session 2)

Which of the interventions included in **Review 1** do the group think would work best for CYP with LTCs?

Which intervention outcomes do CYP feel are the most important?

Play Therapy

Music Therapy

Two card sorting activities: CYP ranked

interventions on how effective they would

be for CYP with LTCs and which outcomes

Relaxation

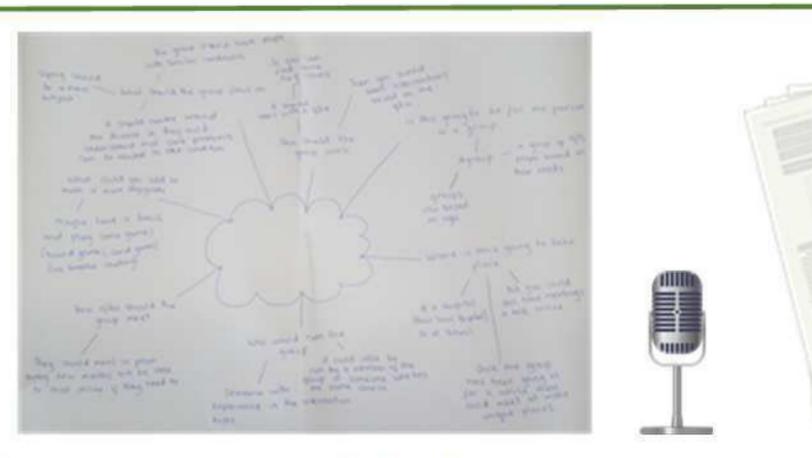
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were most important.

(Session 3)

Are the ideas and themes developed through the synthesis for Review 2 relevant to the group?

Are there any views that have not been captured in the synthesis for Review 2?



CYP were asked to design their own mental health intervention, using questions based upon the preliminary results of review 2.

The group did not always think about the

focus of an intervention, they just

wanted to feel better.

(Session 4)

How can we ensure the results of this research are accessed the CYP and families to whom it is relevant?

How can we make sure that other CYP with LTCs can understand the results of our research?

CYP helped to record a podcast

summaries gave their views on

CYP felt they could give this

to

friends and

and edit plain language

the results of the project.

information

teachers at school.

want to hear our voices because it shows that being with others who have a similar experience...is beneficial and can help them to get through it."

> [CYPAG *Member*]

"...here, this is something we aro voru annd

any fear of reprisal. It's been a really	CYP VI	U U	CYP felt that school attendance and learning to cope with school were key outcomes.	Therapists need to have relevant expertise and be able to help CYP feel safe.	CYP added detail to the draft pl language summaries developed the study team.	by have good
great experience."	act	Our conversation reinforced the need to acknowledge the link between physical and mental health.	Few school-related outcomes were reported within studies included in Review 1. This should be considered in future randomised controlled trials.	Discussions reinforced ideas emerging from Review 2 Synthesis. Some points raised challenged the	Two podcasts and several pla language summaries we developed. These can be given other CYP, families, clinicians ar	re and to knowledge."
[Parent of CYPAG Member]	gml	This supported our rationale to include all reported outcomes within the synthesis for results for Review 1.	Discussion informed the development of preliminary themes for Review 2 and the OS.	initial synthesis. This meant researchers checked studies included in Review 2 for any refutational data.	policy-makers who may interested in the findings of th research.	
¹ Thompson J, Bai	rber R, Ward P	PR, Boote JD, Cooper CL, Armitage CJ, et al. Health	researchers' attitudes towards public involvement in he ³ Clip art sourced from https://openclipart.org		 ²Photo sourced from https://unsplash 	.com/ Accessed: 30.8.17.
UNIV	ERSIT	TYOF Twitter: @EvidSynthTea Web: http://bit.ly/2vbee4 Blog: evidsynthteam.wo Blog: evidsynthteam.wo Email: e.h.shaw@exete For posters relating to the overarching	Im #TLC4LTC IM Indpress.com The views expr	vas funded by the NIHR HTA programme (14.157.06) essed are those of the authors and not ne e NHS, the NIHR or the Department of Hea he review see posters 2051 and 4033. For an oral talk o	cessarily those of alth.	Funded by NHS nal Institute for lealth Research