BERRI: Theory of Change

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# Developing a Theory of Change for BERRI

"Crisis is the sea Looked After Children sail in, it isn't the storm"

Dr Dickon Bevington

### BERRI is a clinical evaluation tool for identifying, tracking and improving the outcomes of children with complex needs.



BERRI is based around a questionnaire covering mental health, behaviour, emotional wellbeing, relationships, risk and attachment. It gives individualised advice to support the child's care needs, in the context of life events and by comparison to norms from different types of placements and services.

It was developed by Dr Miriam Silver, an expert clinician with extensive experience of Looked After Children and those with complex needs.

The system makes the data immediately useful through reports, graphs and tables, increasing insight for carers and allowing them to make greater impact on the child's functioning and wellbeing. The BERRI assessment checklist gathers information around five themes:

- **<u>Behaviour</u>** (dysregulation)
- <u>Emotion wellbeing</u>
- **<u>R</u>isk** (vulnerabilities, self harm)
- <u>Relationships</u> (lack of trust; lack of shared reality; theory of mind; unemotional;)
- <u>Indicators</u> (of neuro developmental or psychiatric conditions)



### **Theory of Change**

When talking about what an assessment like BERRI does to bring about change for the young people who are monitored with BERRI assessments (and the widel system which sits around children), it is useful to develop a 'Theory of Change'. A Theory of Change illustrates how BERRI sets out to make a difference to the young people it serves. It traces a logical pathway between our children's needs, the activities of the completing the assessment and the changes (outcomes) that are achieved in our children's lives.

Target group: The target group represented in the BERRI Theory of Change is the young person, the carers and professionals who support them, and the Local Authority (and wider system that sits around the child).

A Theory of Change can also be referred to as a 'logic map': it shows the links between the following elements (the diagram, below, is included at the top of each page, highlighting the section of the theory of change to which the page relates):



- **Needs.** demonstrated by the young people who are monitored by BERRI, and the carers and professionals who support them along with the Local Authority and wider system that sits around the child, "the target group".
- Activities. Carrying out a BERRI assessment and monitoring children with BERRI.
- **Approaches.** Distinctive features of the methods or qualities of the approach that are particularly effective in bringing about change.
- **Responses.** Aspects of the target group's immediate experience that leads to outcomes (whether positive or negative).
- **Primary outcomes.** The short-term, direct changes for the target group that arise from the activities (typically we expect that these align to needs and to take the form of those needs being met).
- **Secondary outcomes.** Who else benefits? The longer-term, indirect changes in the lives of the target group; these outcomes arise from the activities (these may align to needs but may also show positive change beyond the needs identified initially).

The BERRI Theory of change demonstrates how our children's lives can be changed for the better. BERRI meets the needs of our children: Through a BERRI assessment, children's needs are identified and more effectively supported, the narrative that sits around the child is brought into focus; the child starts to find themselves and their place; they have the opportunity to live a fulfilling life....

Needs

2.

"We've stepped 11 children out of residential care into appropriate fostering, based on the information from the BERRIs, and we've had a 100% success rate, we've not had a single placement breakdown, or any serious incidents at all".

Workshop participant

### Understanding our children

compromise their resilience

### **Our children:**

BERRI is used as an assessment tool for children with a wide range of complex needs, particularly those known to children's social care. Needs vary in severity from child to child and fluctuate in intensity over their lives...

The diagram (right) demonstrates that:

at the core, in every child, there is "a resilient child who can progress and succeed".

The 3 concentric rings that flow out from this show:

- a child is a product of its experiences which we see in the "challenges the child carries with them".
- They can be supported by the "community / carers" that sit around the child; and finally,
- the "wider society / state" who have an influence over the • child's care.

### A tapestry of needs:

There are six arenas of need that influence and impact our children. Each arena sits within a combination of the concentric Relational wellbeing rings (described above). These arenas are described in detail overleaf.

In reality the elements which sit within each arena are so interwoven that it is often impossible to distinguish where one thread leaves off and another begins. A "tapestry of need" is formed, and it is unique to each child.

All of our children will demonstrate a varying level of need (or experience and resulting need) within each of the six arenas.

The highlighted segments within the concentric rings demonstrate to which group (child, community, state) each of the six arenas of need relate.

Every child needs an authentic relationship with an attuned carer.

**Clinical Factors** 

learning disabilities,

PTSD, developmental

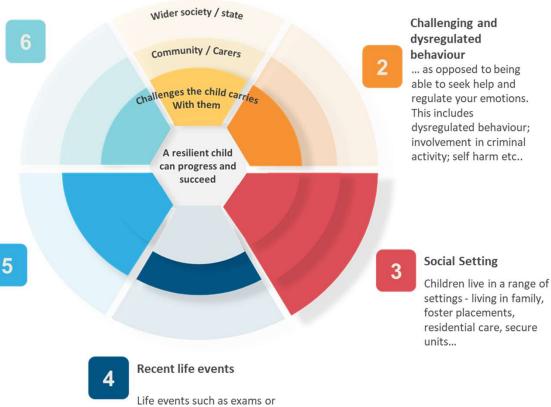
delay, autism traits,

attention difficulties,

anxiety...

Examples might include:

Adverse childhood experiences Events that have happened in the child's life, or in utero which



contact arrangements changing are unsettling and too many can be overwhelming.



### **1. Adverse Childhood Experiences**

These are events that have happened in the child's life, or in utero which compromise the child's resilience now. Examples include:

- Exposure to drugs or alcohol in utero (eg fetal alcohol syndrome),
- Exposure to trauma within the family (eg witnessing or experiencing violence, abuse or trauma)
- Exposure to trauma within the wider community (eg war, migration, trafficking, harassment, bullying, racism)
- Exposure to parental substance misuse, mental health problems or dysfunctional relationships
- Experience of neglect
- Rejection or emotionally abusive experiences
- Breaches of trust
- Multiple losses/changes of attachment figure



## 2. Challenging and dysregulated behaviour

Children are a product of their experiences. Children who don't feel held emotionally and physically may find it hard to manage their feelings. If they have been exposed to threat and have not had a safe attuned caregiver to teach them to recognize and manage their emotions, they can struggle to regulate their readiness for fight or flight, or to control their emotions. Children might be non-compliant, demonstrate destructive or aggressive behavior, express extremes of emotion, or seek attention in dysfunctional ways. There might be lying, cheating, stealing, agitation, shouting, spitting, tantrums or rage.



### 3. Social Setting

### BERRI is used with children in a range of settings:

- Child in Need or Edge of care
- Family Court cases
- Foster care
- Residential Care
- Secure units
- Supported or semi-independent living
- Care Leavers

Some of these children might have experienced multiple placement breakdowns.

The children have a range of legal statuses (and regulatory regimes):

- Unaccompanied Asylum-Seeking Children (UASC)
- Accommodated or under Care Orders
- Ofsted Regulated placements (5-18yrs)
- Supported accommodation that is not regulated by Ofsted (legally only for 16yrs+)



### 4. Recent life events

**Life events** can have a negative impact on our children's wellbeing:

- Change of school / exclusion / exams
- Change of carer
- Change of placement (or another child arriving / leaving)
- Seeing birth family / change in contact arrangements
- Physical illness

These may have echoes of past experiences. Too many life events together are overwhelming.

### Contextual risks include:

- Disengagement
- Vulnerable to exploitation (gang affiliation)
- Going missing
- Criminal Activity (knives, drugs, County Lines)



### 5. Relational wellbeing

Every child needs an authentic relationship with an attuned caregiver. Often our children struggle to form meaningful relationships because of their life experiences - maybe abuse, neglect and/or multiple breaches of trust.... This might result in:

- a feeling that they are 'bad' in some way
- a lack of trust in caregivers.
- difficulty expressing feelings
- a lack of understanding of how other people think and feel

Our children might lack positive role models... Some have never had the opportunity to form a healthy attachment. Sometimes our children will distance themselves to protect others from their own dysregulated feelings.



### 6. Clinical factors

There is an over-representation of psychiatric and neurodevelopmental disorders in this population. Examples of underlying clinical factors include:

- Learning disabilitie
- Physical health condition or disability
- Developmental delay
- ADHD
- Autism
- Or reactions to trauma such as
- PTSD
- Attachment disorde

There may also be mental health conditions such as

- Depression
- Anxiety
- OCD
- Psychosis
- Bi-polar

### **Case Study from CAMHS - Amanda**

14-year-old Amanda had 17 overnight admissions to the children's ward via ambulance or A&E during a 12-month period, after various types of self-harm or ingesting non-food items. Each time she was discharged as no depression was identified. CAMHS staff were considering a diagnosis of emergent Borderline Personality Disorder and wondering if she would spend a lot of time in adulthood going in and out of specialist psychiatric hospitals (at huge cost). Staff at the residential home where she lived were struggling to address this issue and were getting nowhere with teaching her the skills required for independent living.

BERRI identified that Amanda had marked developmental issues, so a clinical psychologist completed a cognitive assessment. This identified that Amanda had a moderate learning disability, which had not been previously recognised (as her difficulties in education were attributed to emotional and behavioural issues, and poor attendance). BERRI clinicians were able to do some consultancy with the home staff and set up a meeting with local emergency services to agree a care plan. When the home pitched demands at the right level for Amanda, and met her nurture needs, she stopped the risky behaviour entirely.

The local authority were then able to move her to a foster placement, where we did some training for the carer. After one incident, she settled well, and we were able to plan her transition to appropriate support for adulthood. BERRI made all the difference in how everyone in the network thought about Amanda, and the path they expected her to take in adulthood.



### **Case Study from CAMHS - Amanda**

Life Without BERRI £cost	(cost)/ gain	Life With BERRI £cost	(cost)/ gain	
4yrs (From age 14 to age 18yrs)				
Residential care <b>cost</b> (LA own provision) at £253,856pa ( <i>Assume</i> 4 years total)	(1,015,424)	Foster care cost (£33,760) per annum (4 years total = £135,040)	(135,040)	
A&E presentations at <b>cost</b> of £160 per visit (assume 7 pa over 4 years)	(4,480)	A&E presentations at <b>cost</b> of £160 per visit (assume 2 attendances over 4 years)	(320)	
Ambulance call out at <b>cost</b> of £233 per call out (assume 3pa over 4 years)	(6,524)			
Hospital stay <b>cost</b> of £4,043 (per average stay) (assume 1 stay over 4 years)	(4,043)			
Mental health services £2,030 (average cost per provision of service) (assume 2 service provisions required over 4 years)	(4,060)	Mental health services £2,030 (average cost per provision of service) (assume 1 service provision required over 4 years)	(2,030)	
Mental health admission - In patient residential care at cost of £1,000 per day (assume 2 months spent as in patient in 4 year period)	(61,000)	Increased educational attainment and employability NEET is avoided, gain of £129,112 (lifetime cost)	129,112	
Net (cost)/ gain of Life Without BERRI £	(1,099,574)	Net (cost)/ gain of Life With BERRI £	(8,278)	
Difference between Life Without BERRI and Life With BERRI : impact	1,091,269			



Note: The figures listed here are not discounted to reflect the time value of money; they do not take into account when in Amanda's life each of the different costs will occur and thus are indicative values only. (The exception to this in Amanda's story is the lifetime cost of being NEET which is a discounted figure).

This illustration shows comparative costs over a period of four years, with only the lifetime NEET figure going beyond that period. The modest inconsistency is acceptable for the benefit of being able to illustrate the positive future path into education and employment for Amanda. Each of these arenas contains the threads that make up the tapestry of a resilient child's life. However, for many children, those threads are tangled and stained by the experiences and circumstances they face.

BERRI is focused on understanding and untangling those threads and removing the elements that compromise the child's wellbeing. By doing this, the 5 areas of need for a child to progress and succeed can be met.

The five needs, from *Every Child Matters: the Five Outcomes,* are:

- 1. Being healthy: our children have physical and emotional wellbeing needs.
- 2. A safe environment: our children need a safe environment that is appropriate to their needs, as well as carers who can understand their needs.
- **3.** Enjoying and achieving: Our children need to build authentic relationships and live a fulfilling life, where they can do the things they enjoy and from which they gain positive feedback.
- 4. Making a positive contribution: our children need to be part of education and the community to gain an understanding of themselves, to find their place, and to create their future.
- **5. Economic wellbeing:** our children need to overcome socio-economic disadvantages to achieve their full potential in life, gaining the skills for employment and financial security.

Our template for learning about ourselves, others and the world comes from our early experiences; for our children these experiences are often ones of abuse and neglect. Through working with BERRI, the carers, professionals and wider society that sit around our children can hold them steady; and - with time - support them to find their place in the world.



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Activitie

### The system and our children

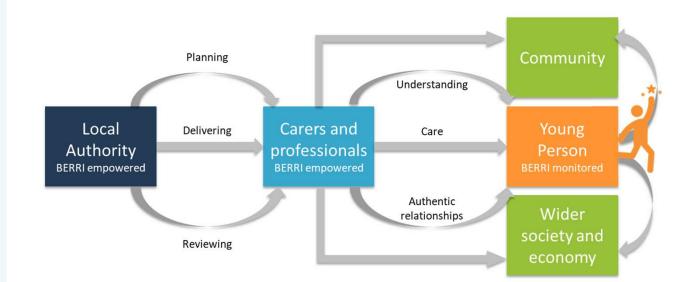
**Starting with our children...**The previous pages describe the lives and needs of our children who are monitored by BERRI. Our children sit within a system. In this system, there is an interplay between **our children** and:

- their carers (and other professionals)
- the **Local Authority** who commissions services for them
- the community in which they live, and
- the **wider society** of which they are part

The diagram right demonstrates this interplay.

- Our **children** see outcomes through their needs being met, but also
- carers needs are met they are empowered, they understand our children better, children can be better matched to carers (and so form authentic relationships)...likewise
- The Local Authority is better able to understand the individual needs of children in their area, and in so doing can better plan services (finding the best placement for our children), deliver (building opportunity to place our children in the right placement) and review (measuring the right things – being able to focus on whether the needs of the child are met – a strengths based approach rather than a risk management focus).

Through using BERRI, Outcomes are generated throughout the system as a whole



The Theory of change focusses on different aspects of this system, to understand needs, and analyse outcomes flowing from these needs. At times, the Theory of Change considers the system as a whole.

The icon below (a miniature version of the diagram above) is used at the top right of each page to highlight the part of the system being discussed, and as a reminder that by influencing one area of the system, BERRI is able to have a positive impact on the whole.

The icon will be greyed out save for the element of the system which is being discussed.



Activities, approaches, responses

3

"Carers have better understanding; they say things like "we'd never thought about that" or considered child needs in that way. Carers speak to young people and get feedback (based on what shows in the reports). We pick up on needs more effectively and can do something about them earlier.".

Workshop participant

## Activities: How BERRI is used with our children

BERRI is used by carers, Activities: - Carrying out a BERRI assessment professionals (clinical - Monitoring using BERRI psychologists, therapists...), Local Authorities and placements ... to carry out an assessment with their children, capturing the areas of psychological need that the **Approaches Primary outcomes Responses** carer and professional network Distinctive features of the methods Aspects of the BERRI user's *Primary outcomes that directly flow from the* can then support. This helps to immediate experience that approaches and responses listed here or qualities of the approach that lcon build a more positive picture of are particularly effective in bringing lead to outcomes (whether the child and their potential. positive or negative). about change A BERRI assessment is needs • A richer picture of the child • The child's existing story is challenged. The narrative that sits around the child is changed. focussed, trauma-informed, and is gained In the BERRI Theory of Change • Our children's behaviour often means emotional tries to identify underlying needs the approaches (the way in which rather than focusing on the and relational needs are missed – BERRI brings a the BERRI assessment is carried behavioural challenges that the sharper focus to needs out) and the responses (aspects child presents. of the BERRI user's immediate Child-centred approach The child experiences more Child feels their needs are recognised experience that mean outcomes • The carer feels more skilled in supporting the child empathy are generated) are fundamental. • The humanity of the child • The young person sees a more positive reflection of their potential shines through It is this shared language and The child is not defined by Emphasis is on the big picture: the background collaborative approach across the BERRI assessments are based on day to day experiences historic incidents. BERRI noise ("life stuff") is separated from progress that whole system which drives assesses the now. the child is making. impact. • It is not a story / label that the child carries with them. In the BERRI Theory of Change, • Carer's understand how children are feeling on a approaches flow directly into day to day basis. Carers feel "helpful, not helpless" responses across the rows of the table (left) Collaborative approach A shared language. • A child's needs can be communicated across all agencies. Carers feel supported, and • The child can be held steady (carers can pre-empt A BERRI assessment provides professionals have a better quantitative values rather than react) Progress is easier to identify (as is lack of progress) overview of the child's needs (any change in score because the scale of values is in small increments can be identified sooner) and maps as against other children.

"Daniel had been through 6 foster placements and two children's homes by the time he was 14. Daniel presented a lot of destructive behaviour, so everyone was worried he would end up in the criminal justice system.

BERRI changed the way people thought about him, it showed that under his challenging behaviour was unrecognised depression. When we looked through his file, we found that Daniel's mother had died not long after the argument that led to him coming into Care. He was still grieving and carrying an unbearable level of guilt. He feared getting close to anyone else, so he hid his depression behind his destructive behaviour.

A BERRI assessment helped us understand this. Initially, Daniel wasn't keen to talk about it, but he accepted antidepressants. This helped him to talk to his keyworker and in time to open himself up to therapy. Bereavement therapy helped Daniel understand that his Mum's death was not his fault. This, in turn, allowed him to form new relationships with caregivers, and opened the possibility of him moving into foster care.

Within a few months Daniel moved out of the children's home and was able to sustain that placement until he was ready for independence. That small change (of recognising his depression) turned around how people saw him, and opened up new possibilities, like getting back into mainstream school. It also saved the local authority over £120,000 per year.



### **Case Study from Commissioner: Daniel**

Life Without BERRI £cost	(cost)/ gain	Life With BERRI £cost	(cost)/ gain	
6yrs (From age 14 to age 20yrs)				
Residential care <b>cost</b> (LA own provision) at £253,856pa ( <i>Assume</i> 4 years total)	(1,015,424)	Foster care cost (£33,760) per annum (4 years total = £135,040)	(135,040)	
Placement breakdown cost (Assume 2 moves pa over 4 years)	(3,296)			
Moves at cost of £321 per new placement (Assume 2 moves pa over 4 years)	(2,568)			
Police call outs at <b>cost</b> of £500 per incident (assume 5 pa over 4 years)	(10,000)			
Assault charges resulting in probation and community rehabilitation at cost of £7018 per annum (assume 2 over 4 years)	(56,144)			
Court appearances and police time at cost of £8,700 (per offence) (assume 2 offences over 4 years)	(69,600)			
Youth Offending Team £1,400 (average cost per offence) (assume 2 offences over 4 years)	(11,200)			
Disengagement from education. Truancy at cost of £1,965pa (assume every year to age 18, – 4yrs)	(7,860)			
Prison cost at cost of £44,640 pa (assume 1 year prison stay)	(44,640)			
Abusive relationships leading to social care involvement for children at <b>cost</b> of £3,402 (average cost of CiN intervention)	(3,402)	Increased educational attainment and employability NEET is avoided, gain of £129,112 (lifetime cost)	129,112	
Net (cost)/ gain of Life Without BERRI £	(1,224,134)	Net (cost)/ gain of Life With BERRI £	(5,928)	
Difference between Life Without BERRI and Life With BERRI : impact		1,218,206		



Note: The figures listed here are not discounted to reflect the time value of money; they do not take into account when in Daniel's life each of the different costs will occur and thus are indicative values only. (The exception to this in Daniel's story is the lifetime cost of being NEET which is a discounted figure).

This illustration shows comparative costs over a period of four years, with only the lifetime NEET figure going beyond that period. The modest inconsistency is acceptable for the benefit of being able to illustrate the positive future path into education and employment for Daniel. Outputs

"Now we use BERRI, we can address underlying need not treat surface symptoms, slow down thinking and not just address the presenting crisis symptoms.

Seeing what else is going on and not blaming and judging an individual can shift the system; even if it doesn't change behaviour, - it can create a narrative shift".

Workshop participant

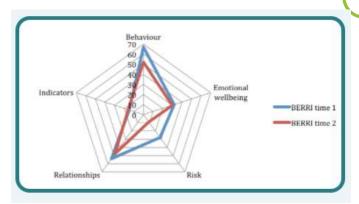
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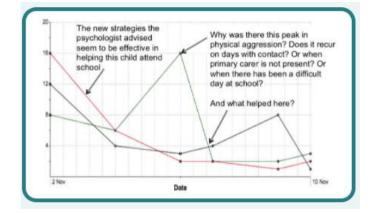
The **BERRI** system produces a number of outputs to make the data immediately useful:

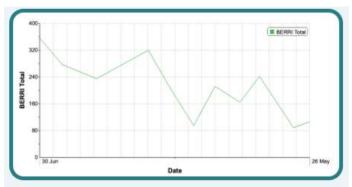
- Automated report, giving scores along with individualised advice about the level of need, likely underpinning reasons for the presenting issues, and strategies for the carers to support the child, across each of the 5 domains of need.
- The report also contains analysis of how the child is coping with recent life events, whether
  they are making expected levels of progress over time, and whether there is a clinical level
  of anxiety or depression, along with the level of risk of self-harm/suicide, vulnerability to
  exploitation/substance misuse/criminal involvement or risk to others.
- Spider plot illustrating the child's score on the 5 domains
- Overlay on the chart to show change since last assessment
- Ability to identify specific goals to address, and track them in more detail over time
- Graphs to visualise change in target behaviours over time, and allow identification of patterns
- The ability to see progress over time for an individual, group or setting
- The ability to visually compare scores to our norms for that setting

This information can be used for:

- 903 return for the Local Authority
- Ofsted and regulation 44 inspectors







Outcomes

5.

"If we didn't have BERRI, we would struggle to ever meet the needs of our LAC population, we would encompass people in risk management that isn't effective, we would not understand what children's basic needs might be, we would struggle to commission effective services".

Workshop participant

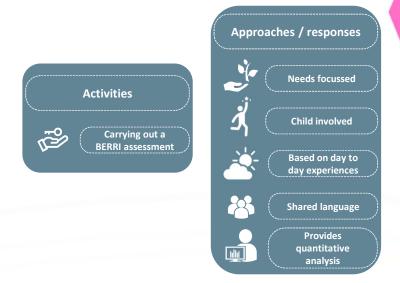
### **BERRI Theory of Change : Outcomes**

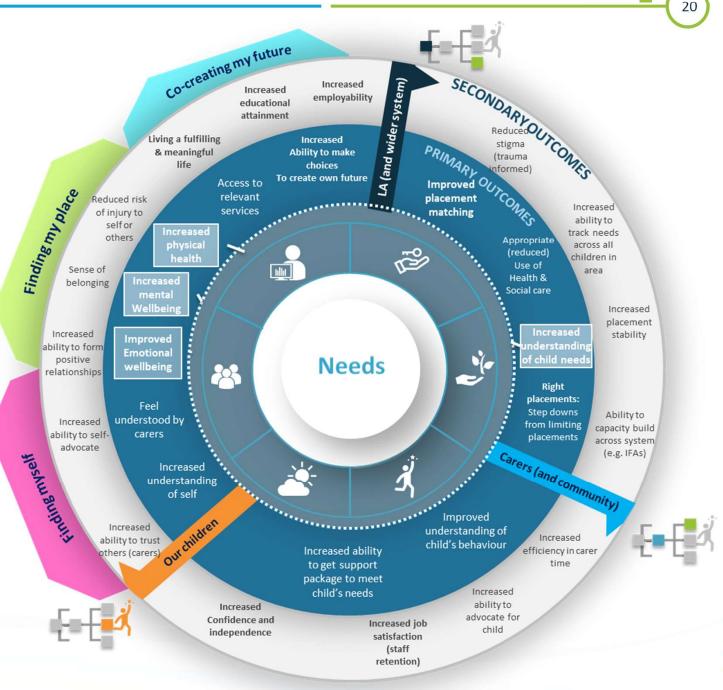
The BERRI Theory of Change (right) presents the numerous outcomes BERRI achieves.

### A summarised version of the Theory of Change is shown here with the full version in Appendix A, and detailed analysis of the outcomes explained overleaf.

- Outcomes flow from meeting the **needs** (at the core of the diagram and described on pages 6-12)
- BERRI activities, approaches and responses (described on page 14) are represented by the icons on the innermost circle (activities key bottom left).
- Outcomes are split by: our children; the Local Authority and wider system; carers and the community that sits around each child.
- Primary Outcomes are listed in the next concentric circle By meeting our children's needs, outcomes are seen in increased mental, emotional and physical wellbeing.
- Secondary Outcomes are listed in the outermost circle. BERRI enables our children to find themselves, understand their place and co-create their future.

Outcomes are further explained overleaf





Looking in detail at the outcomes for our children:

There are **three primary outcomes** for our children which drive positive outcomes across the whole system (for carers; professionals; the community that sits around the child; the Local Authority; and wider system). These are highlighted in the light blue boxes (and link into the dotted circle which demonstrates how these outcomes drive ripples of change across the entire system). They are:

- 1. Improved emotional wellbeing
- 2. Increased mental wellbeing
- 3. Increased physical health

Outcomes for our children fall within three areas: Finding myself, Finding my place, Co-creating my future. Further detail on these is given in the boxes below: (all quotes come from workshops with BERRI users)

### **Recognising Self**

The process of carers engaging with the BERRI assessment enables the child to **better understand themselves**. As a result "they can **better advocate for their needs"** and the child gains a more positive reflection of themselves..

They have "access to positive experiences" and are understood (and therefore, better supported) by those around them. "Demands on them are pitched at the right level" and they grow in confidence.

### **Finding your place**

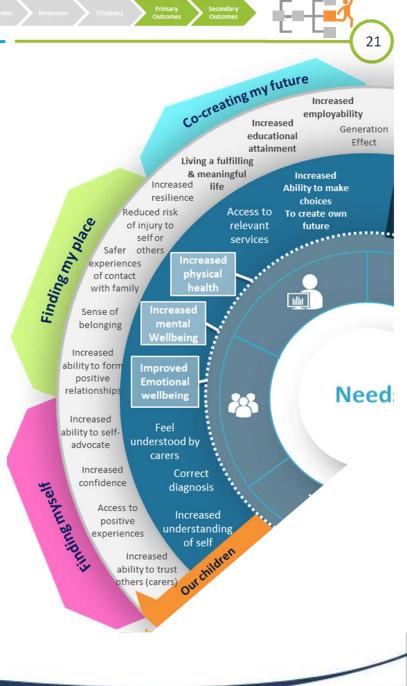
Building on their increased knowledge of self, the child is able to learn to **trust others** (including caregivers); this has a knock-on effect throughout the system as carers in turn feel more confident in their role.

The child **connects with peers** and community activities, "their **sense of belonging** is increased". They feel "they have a more 'normal' life" (with friendships and birthday parties – they track alongside their peers).

### **Co-creating your future**

From this sense of belonging, the child's **placement is more stable**. They are able to **remain in school**. The narrative that sits around them is changed: "they are no longer seen as 'naughty' or 'out of control' or 'a future criminal'. "Their **use of mental health services is reduced** or stopped entirely"."

"They have better expectations as to where there life is leading". As a result they experience **improved** access to education and employment.



### **BERRI Theory of Change: Local Authority outcomes**

Looking in detail at the outcomes for the Local Authority and wider system:

As a result of **increased understanding of our children's needs**, (understanding the underlying emotional, mental health and physical needs of our children), the Local Authority is able better plan services, deliver services and review the effectiveness of services.

Further detail on this is given in the boxes below: (all quotes come from workshops with BERRI users)

### <u>Plan</u>

The Local Authority can understand the needs of individuals within its care. This means it can plan the 'right' placement for the child.

This information on individual needs can be extrapolated out to look at all children in an area to effectively plan placements to meet needs.

### <u>Deliver</u>

Building on this system level understanding of the needs of our children, the Local Authority "can work to build capacity in the right service areas". (e.g. increasing support for foster carers and reducing reliance on residential care).

### **Review**

BERRI means that "the Local Authority can measure the 'right' things". It can "hold placement providers accountable and in the 'right' ways": to work with each child's specific need (rather than management of risk e.g. no. of incidents recorded in a service)

This drives both a systems level focus on need whilst bringing focus to the individual needs of each child. As a result, more needs are met.



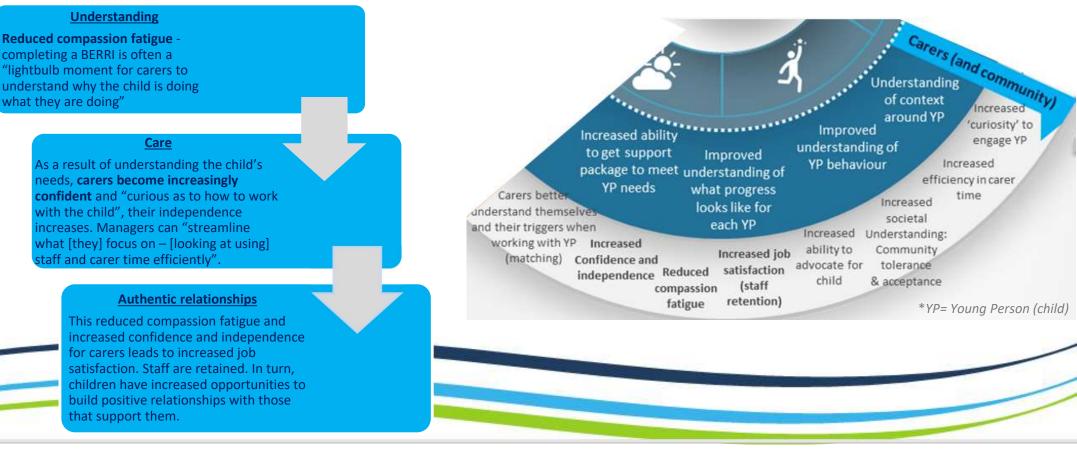
\*YP= Young Person (child)

Looking in detail at the outcomes for those who engage with our children day to day – carers and the community that sits around the child:

As a result of **increased understanding of our children's needs**, understanding the underlying emotional, mental health and physical needs of our children, and the behaviour that sits around these, carers and the child's community are better able to engage the children and advocate for them. Our children experience more attuned caregiving; carers can hold our children steady even in the most difficult of times.

BERRI also creates outcomes for carers in the following areas: (all quotes come from workshops with BERRI users)

Some services make this "BERRI understanding" two-fold: 1. using it with children to understand their needs, and 2. using BERRI with carers so as to match the 'right' carers to the 'right' children. Carers better understand themselves and their triggers..."what's your life story, what might get a reaction from you..."



### Case Study from a social care manager: Trey

Using BERRI to build a bespoke package of support so that Trey could move from a secure unit into the community and become a mechanic...

"We used BERRI with a very complex teenager who had been living in a secure hospital for several years following multiple placement breakdowns during their childhood, where the prognosis was looking bleak.

We were looking for a residential placement that would allow him to leave hospital, so we wrote a profile based on the social worker and psychiatrist's descriptions. The descriptions were bleak and highlighted lots of risks and diagnoses. Over a hundred providers said they were unable to meet his needs. BERRI had the most powerful impact in enabling us to turn that around. The social worker and hospital staff completed a BERRI, and we put the results on the portal. This time multiple providers offered placements and we were able to build a bespoke package of care to meet the young person's needs. We worked with the provider to creatively meet his needs.

Trey is now living safely in the community and undertaking college courses in mechanics, with positive prospects for an independent adult life".



6.

BERRI Theory of Change: a summary

"[BERRI] helps us create the emotional scaffolding that makes family placements possible".

Workshop participan

The diagram (below) takes the six arenas that frame the child's tapestry of need (as detailed on pages 3-5 and 7) and lists the outcomes that flow for our children in each arena when needs are met...

### Adverse childhood experiences

BERRI helps our children address their lived experiences so they can carry their story more easily rather than their history dictating their present and future.



less risk of perceived failure or rejection.

Activities Approaches Responses

### **Case Study from a fostering agency : Emily and Michael**

One of our foster carers, Emily, kept calling us about Michael, one of her foster children, she was a very experienced foster carer, but she had become very anxious and frustrated, she was spilling out everywhere and a lot of staff spent a lot of time trying to help her.

Emily had been a foster carer for 10-year-old Michael for the past 18 months; he had been very compliant and eager to please, but his behaviour had suddenly changed, he had started taking food at night, he was struggling, and we just couldn't understand why. That made both us and Emily feel deskilled.

Looking at the change on BERRI enabled us to pinpoint Michael's life events – he had recently seen his birth Mum and sibling, and this had deeply unsettled him. Emily now understood the needs behind the Michael's behaviour. We could suddenly see the wood from the trees. This meant we could give insight, strategies and tools to Emily to help her to understand what was going on and so she could support Michael. Along with the social worker and therapist we were able to influence the support around Michael when he spent time with his Mum, and this settled him.

Without BERRI, the placement would have fallen through, and we would have likely lost Emily as a wonderful foster carer.

Staff (at the fostering agency), wanted to help, but we found that anxiety and hopelessness can spread easily. The reports (BERRI produces) are something tangible for the team. Seeing progress on BERRI stops us feeling hopeless and helps us to feel confident about our ability to support our foster children. BERRI also helped us have a better training offer for the team in the long term.



Calculating the impact

"(From a director of children's services) there are benefits for the whole system at all levels. [BERRI] encompasses both strategic and operational use. For us we see benefits in planning, delivering and reviewing what we do for children".

Workshop participant

### Approach

Through workshops, interviews and discussions with BERRI management, stakeholders have been identified and their perspective on outcomes achieved for BERRI monitored children has been evaluated.

Illustrative values have been produced based on reasonable assumptions. These have been tested with BERRI to ascertain that the assumptions do not appear unreasonable in the known circumstances.

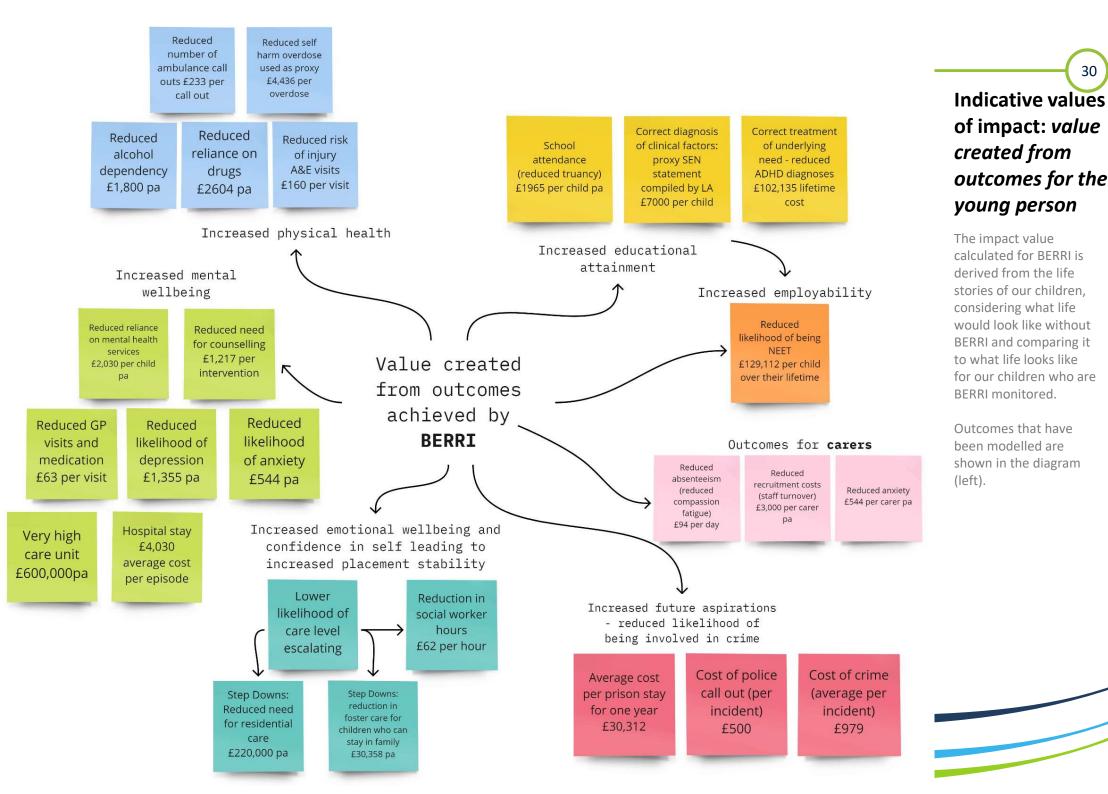
We have not valued every outcome, nor every benefit of every outcome so the figures produced here are "*at least*" the value.

### **Reasonableness of assumptions**

Workshop evidence regarding the stories of BERRI children demonstrates that the outcomes evaluated in the model are happening in their lives. It is therefore, reasonable to include these outcomes in the model. Assumptions have not been tested as to the frequency of incidences as against specific data sets for the cohort being helped. As stated above, assumptions have been reviewed with BERRI and do not appear unreasonable in the known circumstances.







Using BERRI saves at least... £193,994 per young person

Average present value of impact per young person

Post deadweight and alternative attribution

(see calculations overleaf)





This calculation is based on the following assumptions:

- BERRI service costs are typically £200 per child for 4 years = £800
- To these BERRI costs, additional psychology and consultancy costs (and a small cost of project leadership on the Local Authority side) should be added totalling on average £250 per child for 4 years = £1,000
- For social workers and carers BERRI believe it is cost neutral as the BERRI reports save at least as much time as they take. Therefore, no additional cost is added here.
- Total BERRI costs per child over 4 years = £1,800
- On the assumption that there are no additional costs for the Local Authority, or other providers through applying BERRI in this way, and accepting that evaluated gains are calculated over 6 years from monitoring children with BERRI for 4 years, the return is *at least* £108 per £1 spent.
- There is around an 80 fold return on investment for Local Authorities alone of *at least* £78 per £1 spent
  - This is calculated as £14.1m saving to the Local Authority (see overleaf) from 100 BERRI monitored children (being £141k per child) compared to the BERRI cost to the Local Authority of £1,800 per child

### **BERRI: Calculating the impact**

Using stories of BERRI monitored children, and attributing values to some of the outcomes that they experience in their lives through using BERRI (because BERRI understands their needs and so appropriate support can be implemented), an impact value for BERRI is determined.

A cohort of **100 children** was considered, looking at an 'average' child (rather than outliers). The average age of the child was set at 12yrs. Through working successfully with a child, an assumed duration of impact was set at 6 years (for most outcomes) taking the child to their 18<sup>th</sup> birthday (all values are discounted to present value using the discount rate from the government green book).

Outcomes for carers working with these children were also considered, the number of carers included is **220**. Impact is calculated for 3 years for carers to take into account high staff turnover in the sector (particularly residential care staff).

Headline figures derived from the model are listed in the diagrams.

### Alternative attribution is set at 60%.

It is considered that BERRI will be pivotal in creating impact in a young person's life. However, many other services are also engaged to support the young person.

The value of BERRI is in how people use it to implement support that meets a child's needs. There is a change in outcomes for children who are BERRI monitored and through using BERRI overtime, it becomes more integrated into best practice and thus more value is obtained from it. NB. Carers are included in these calculations and BERRI has a big impact on their lives.

60% is therefore a prudent assumption

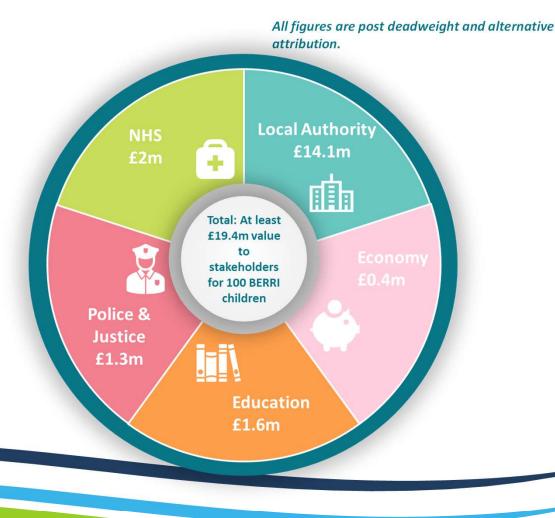
The cohort of **100 children** was split as follows:

- 70% residential care (70 children)
- 20% foster care (20 children)
- 5% secure unit (5 children)
- 5% Child in Need (5 children)

The total value to stakeholders **for 100 BERRI monitored children** is *at least* £19.4m.

This is broken down by stakeholder as follows (further detail of impact for each stakeholder is provided in the table overleaf):

Note that the colours in the diagram relate to the outcomes values listed on page 25.

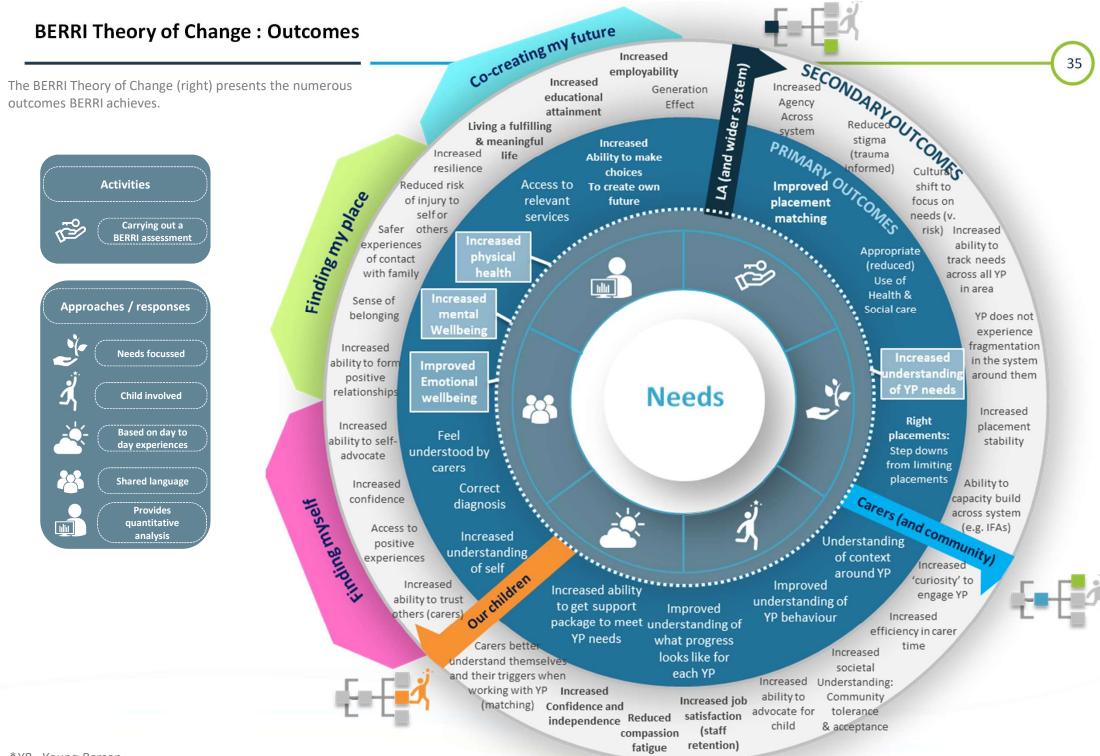


	Total: £22m value to stakeholders for 100 REPRI menitored children. <i>Eigunes are nest denduciable and alternative attribution</i>					
NHS £2m	<ul> <li>Total: £22m value to stakeholders for 100 BERRI monitored children Figures are post deadweight and alternative attribution</li> <li>Physical health: <ul> <li>A&amp;E visits due to injury from e.g. dysregulated behaviour or self harm, overdoseare reduced in a BERRI monitored child. An example was given of a young person with 17 A&amp;E admissions in a year which was reduced to 1 in an 18 month period because demands on the child were reduced and support was more nurturing following the BERRI assessment. Evaluated at £38,792 for 100 children. Nb. This figure reflects prudent assumptions that in some cases due to the setting, children will still need to attend A&amp;E as a matter of good practice e.g. in a residential care home</li> <li>Without meeting a young person's needs, workshop examples referred to a higher likelihood of drug and alcohol issues when a child's needs are not met. This likelihood is reduced for BERRI monitored children. Evaluated at £32,032 for 100 children.</li> </ul> </li> <li>Mental health: <ul> <li>Variety of elements from counselling, mental health services, anxiety, depression services, short hospital stay for a self-harm related incident, GP visits (used as a proxy for wider mental health issues that don't otherwise meet the required thresholds) for e.g. (workshop examples) self harm: cutting, tying, suicide, overdose. 1 in 4 BERRI children self harm upon an initial assessment, this figure is reduced over time. Evaluated at £509,703</li> <li>For a very small number of children, a stay in a very high care unit is avoided through BERRI assessments, this is evaluated at £1.3m</li> </ul> </li> </ul>					
Local Authority £14.1m	<ul> <li>Local Authority savings are seen in correct diagnosis of conditions e.g. correct ADHD diagnosis – reduced number of diagnoses overall in the cohort and targeted care driving efficiencies in diagnosis and treatment due to accurate BERRI assessment evaluated at £141,527 for 100 children</li> <li>Reduced number of social worker hours due to correct support package and shared language across the system for a BERRI monitored child. Evaluated at £775,643</li> <li>Step downs from residential care to fostering, or fostering to Child in Need, evaluated at £13m. Workshop and interview examples given of 25-30% of children in residential care who could be stepped down if their needs were better understood and supported (BERRI monitored children). Of 17 children in Haringey, 11 could be stepped down.</li> </ul>					
Police and Justice £1.3m	<ul> <li>Reduced involvement with the CJS is modelled with some gains incurred before the child reaches 18 yrs and others seen once the child is older; it is considered that through meeting a young person's needs, this impact will last throughout their lives</li> <li>Workshop examples referred to avoidance of crime in later life through meeting underlying needs of young person. Likewise workshop participants spoke of how BERRI monitored children are less vulnerable and so are less likely to be exploited / gang affiliation / County Lines / victim of domestic violence in later life. Police call outs, reduced number of court appearances and reduced involvement with the Youth Offending Team have been used to evaluate the reduced involvement with the criminal justice system of a BERRI monitored child £963,041</li> <li>Avoided prison terms and time spent on probation is evaluated at £298,383 across the cohort</li> </ul>					
Education £1.6m	<ul> <li>A BERRI monitored child is able to co-create their future. Examples were given in the workshop of children who went on to train as e.g. a chef and find employment who would otherwise have lived in a secure unit for the rest of their lives. BERRI was able to reframe their needs and find the right placement for them. This in turn increased their future employability. Reduction in NEET evaluated at £1.5m</li> <li>BERRI monitored children experience increased placement stability and this translates into increased educational attainment: Persistent truancy is reduced, evaluated at £53,000</li> </ul>					
Economy £0.4m	• For carers: increased understanding of a child they support means increased job satisfaction, reduced compassion fatigue and reduced PTSD. There is reduced anxiety and need for physical / mental health support. Staff turnover in residential care homes is very high (around 1/3 staff turnover pa) and this is reduced when carers better understand the children they support. Recruitment costs and reliance on agency workers is reduced. There is a reduced loss of experienced resource throughout the (residential care) system as a whole. Likewise, there is an increased ability amongst foster carers to take on regular placements. Reduced absenteeism amongst carers is evaluated at £356,897 (note this impact is only calculated over a 3 yr period to reflect the high staff turnover across the system).					

# Appendix A Detailed Theory of Change

"BERRI helps to upskill carers in tiny, incremental, regular ways, so they see the children as traumatised and not naughty. It helps the support plans and the care plans to be focused on what the underlying need is".

Workshop participant



\*YP= Young Person

Appendix B Costs

B

"I see pennies dropping when we talk about what need [a child's] behavior is communicating [after filling out a BERRI".

Workshop participan

ost type	£	Unit	Cost detail	Note	Source
YP: Criminal Justice Syste	m: reducing an individual'	sinvolvement			
_			Cost Per Place: the average cost of providing a		
			prison place for the year. It is the Direct resource		
	44640		expenditure or Overall resource expenditure		
			divided by Baseline Certified Normal		MOJ costs per place and costs per prisoner by individual prison. HM Prison & Probation Service Annua
ison cost		per place	Accommodation	2019/2020 cost	Report and Accounts 2019-20 Management Information Addendum. Published 20 October 2020
scount rate	3.5%		not used		
count by no. of years	3		not used		
				The general assumption in the model is that all costs occur at a midpoint (between	
				the age of 12 and 18 yrs and sometimes older). Prison cost however, occurs roughly	
				3 years from the midpoint (very roughly, around age 18). The prison cost has	
				therefore been discounted by 3 years to bring it back to the midpoint value (akin to	
scounted prison cost	40115		not used	the other costs used in the model)	
			Anti-social behaviour		
olice call out with further	500		further action necessary		Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
tion		per incident	(cost of dealing with incident)	2002/03 cost updated	Manchester and Birmingham City Council). CR1.0
			2017 is latest cost National probation service		
obation and community	7018		@ 3,905 per offender + community rehabilitation		Page 10
habilitation		cost per offender pa	companies @ 3,113 per offender		https://researchbriefings.files.parliament.uk/documents/CDP-2018-0162/CDP-2018-0162.pdf
ourt appearances and	0700				Page 17
lice time	8700	average per offence	court appearances and police time	Costs taken from James' story in NPC report (see source)	https://www.thinknpc.org/wp-content/uploads/2018/07/BarclaysWealth1.pdf
					Page 17
uth offending team	1400	average per offence	youth offending team involvement	Costs taken from James' story in NPC report (see source)	https://www.thinknpc.org/wp-content/uploads/2018/07/BarclaysWealth1.pdf

b. YP: Increased educationa	l attainment				
			Persistent truancy (missing at least five weeks of		
	1965		school per year) - Social Services, per individual	This is made up of: provision of alternative eduation per individual per effective	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
Truancy		per individual p.a.	per effective year	year of 919, health of 68, crime of 552, social services of 427.	Manchester and Birmingham City Council). E&S 1.0
SEN statement compiled		Ĩ			
by LA	7000	per individual			https://www.thinknpc.org/wp-content/uploads/2018/07/BarclaysWealth1.pdf
				Total cost of illness for ADHD has been derived from the healthcare, education and	
				employment values. The total annual cost of illness projected for an individual born	https://www.centreformentalhealth.org.uk/sites/default/files/2018-11/costs_of_ADHD.pdf
	102135.89	average lifetime cost pe		in 2013 has been estimated to be £102,135.89 over the course of 50 years with an	
ADHD		child		annual discount rate of 2.5%	page 21
c. <u>YP</u> : Increased					
employability					
					Clifford, J., Arora, R. and Raouf, S. (2021). 2020/21 Update to The Hyde Group: The Value of a Social

		129112			Clifford, J., Arora, R. and Raouf, S. (2021). 2020/21 Update to The Hyde Group: The Value of a Social
		129112			Tenancy: A socio-economic evaluation based on Hyde's housing portfolio. London. Sonnet Impact &
r	NEET		lifetime cost per person	VoST - see calculation	Advisory.

## Further detail : costs used in evaluating the impact of BERRI 2 of 3

d. <u>YP:</u> Health : physical					
Drugs use and abuse	2604		Avoided cost: Average cost of structured community drug treatment	National cost of drug issues is derived from the Manchester Unit Cost Database ("MUCD") and is the estimated annual cost of structured community drug treatment per person engaged in effective treatment	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20
Alcohol dependency	1800		Avoided cost: Cost of alcohol dependency per dependent person	The cost of alcoholism is derived from the MUCDand is the estimated annual cost to the NHS of alcohol dependency per year per dependent person	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 HE1.0
Alcohordependency	160				munda, F., Con, J., Morris, D. und Greenmagn, N. (2015). Mundicited one Cost Batabase vier nexts
A&E visits		A&E visit	Cost for A&E attendance of any type	only model for physical health so as to avoid any risk of double counting, although could occur in relation to mental health	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater Manchester and Birmingham City Council). HE 4.0
Overdose		average cost per overdose	1x Ambulance call out + 1x A&E visit + 1x inpatient stay	in the absence of data from NHS cost calculators / unit cost databases / PSSRU, this cost is calculated as 1x Ambulance call out + 1x A&E visit + 1x inpatient stay.	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater Manchester and Birmingham City Council). Combination of other costs listed here.
ambulance call out	233			only model for physical health so as to avoid any risk of double counting, although could occur in relation to mental health	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater Manchester and Birmingham City Council). HE 3.0

#### e. YP: Health : mental

e. IF. Health . mental					
					Jones, Karen C. and Burns, Amanda (2021) Unit Costs of Health and Social Care 2021. Unit
	1217				Costs of Health and Social Care . Personal Social Services Research Unit, Kent, UK, 185 pp. 80
	1217	• •	counselling for children with mental or		ISBN 978-1-911353-14-0.
Counselling		intervention	emotional difficulties		
					Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 HE 11.1
NHS mental health	2030	average cost of service	Average cost of service provision for adults		
services		provision	suffering from any type of mental health disorder		
					Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 HE 20.2 &
					HE21
	63		This is the combined cost of a consultation with	only model for mental health so as to avoid any risk of double counting, although	1121
GP visit				could occur in relation to physical health	
			Average cost of service provision for adults	This is NHS and LA costs, separate costs :	
	544		suffering from anxiety disorders, per person per	NHS - 516	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
Anxiety		F - F - F - 7	year - fiscal and economic costs	LA - 28	Manchester and Birmingham City Council). HE 11.4
			Average cost of service provision for adults	This is NHS and LA costs, separate costs :	
	1355		suffering from depression, per person per year -	NHS - 1219	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
Depression		per person per year	fiscal and economic costs	LA - 135	Manchester and Birmingham City Council). HE 11.3
	4043		hospital inpatients, average cost per episode,	only model for mental health so as to avoid any risk of double counting, although	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
Hospital stay		average cost per episode		could occur in relation to physical health	Manchester and Birmingham City Council). HE 7.0.1
		are upe toot per episoue			
	600000			for those YP suffering from recurrent self harm, psychosis or personality disorder in	
Very high care units		pa		patient residential care would amount to £1,000 per day (or £600,000 pa)	BERRI evidence

30	)
	· .

	or the children in this coh	ort : Increased placeme	nt stability / 'right' placement (including step down	sl	
,			, , , , , , , , , , , , , , , , , , ,		
Reduction in social worker	62	per hour		VoST - see calculation assuming 1yr in temporary accommodation @ £199 per week, with one off LA costs incurred of £1,259	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 H04.1 - 4.4 Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 H03.0.2,3.0.4,3.0.5
Care home	253855.7	per resident per annum	Total Local Authority expenditure (minus capital) weekly rate multiplied by service use by client of	Mean costs for children looked-after in own-provision children's homes are based on the underlying data of the DfE Section 251 outturn data for 2019/20. The cost for a child for a week in an own-provision residential care home was £4,865. This was calculated by dividing total current expenditure for local authority (LA) provision children's care homes (£255,719,695) by the number of LA provision care days (own provision and other local authority provision) for children in residential care (residential care homes: R1; children in secure units: K1; children in homes and hostels: K2; residential schools: S1) (397,303).4 This gives a cost of £695 per day or £4,865 per week, and £5,045 when inflated using the PSS pay and prices inflator. Capital charges for buildings and land have been excluded to give a cost per resident week of £4,865. Local authorities reporting costs of less than £400 per week (6 local authorities).	Jones, Karen C. and Burns, Amanda (2021) Unit Costs of Health and Social Care 2021. Unit Costs of Health and Social Care . Personal Social Services Research Unit, Kent, UK, 185 pp.72
Foster care	33760.46	per child per annum		Boarding out allowances, administration and the costs of social worker and other support staff who support foster carers	Costs of Health and Social Care . Personal Social Services Research Unit, Kent, UK, 185 pp. 73 ISBN 978-1-911353-14-0. Department for Education (2020) Section 251 documents, Department for Education,2019-2020 London https://www.gov.uk/government/collections/section-251-materials [accessed 29 October 2021]. Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 H03.0.2, 3.0.4,3.0.5
	3402	per chilo per annum	service use by cheft of 52.18 weeks pa	support start who support roster carers	HU3.02,3.0,4,3.0.5 Clifford, J., Arora, R. and Raouf, S. (2021). 2020/21 Update to The Hyde Group: The Value of a Social Tenancy: A socio-economic evaluation based on Hyde's housing portfolio. London. Sonnet Impact &
child on protection register		per individual p.a.	average cost of CiN intervention	VoST - see calculation	Advisory.

#### g.carer (and other professionals) outcomes

			being GVA of 23,217 divided by number of		
Absenteeism	94	Average cost per day	working days in year of 248	Applied to those in employment	https://www.ons.gov.uk/economy/grossvalueaddedgva
				BERRI evidence, 3k per person in a recruitment drive2 month salary per	
	3000			employee1520% of salary in recruitment costs (c£18k salary)this would increase	
Recruitment		per person		to £5000 recruitment costs for a social worker.	Care Perspectives
			Average cost of service provision for adults	This is NHS and LA costs, separate costs :	
	544		suffering from anxiety disorders, per person per	NHS - 516	Markus, F., Cox, J., Morris, D. and Greenhalgh, R. (2015). Manchester Unit Cost Database v20 (Greater
Anxiety		per person per year	year - fiscal and economic costs	LA - 28	Manchester and Birmingham City Council). HE 11.4
					HE21
	63		This is the combined cost of a consultation with		
GP visit		per visit	the GP (£31) and a prescription (£32)		

## Appendix C Assumptions used in BERRI evaluation

"For staff who want to help, anxiety and hopelessness can spread easily. Seeing progress on BERRI stops us feeling hopeless and helps us keep children and feel confident about our ability to support them".

Workshop participant

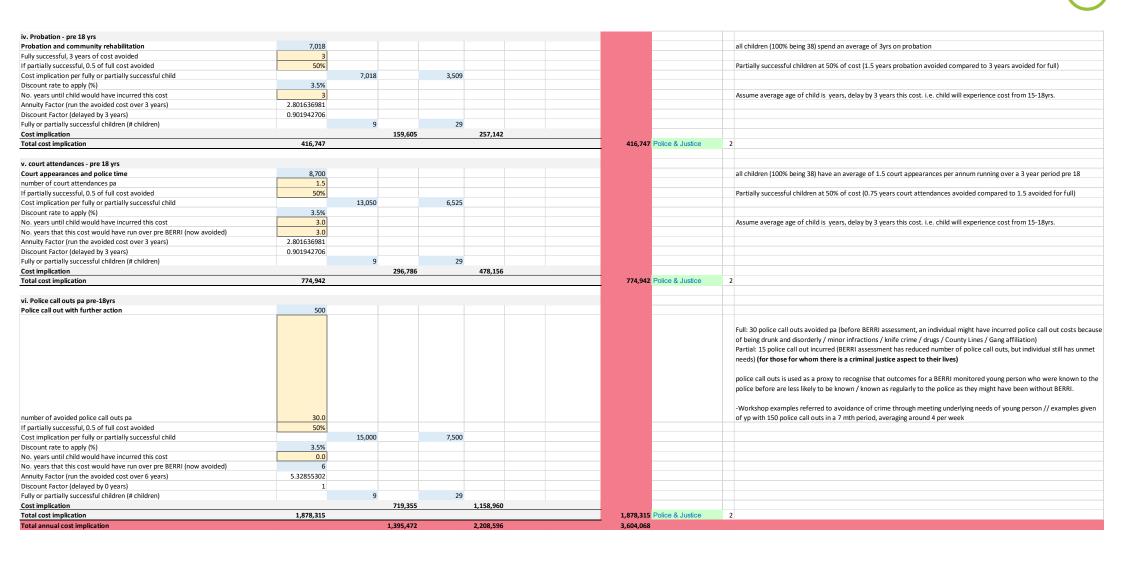
### a. Reducing an individual's involvement in the criminal justice system continued...

'average' BERRI child										
Number in cohort	100									
Average age of child	12									
no criminal justice aspect	62%					62	number of people			see cohort splits reasoning and evidence sources
										of the children who would have had criminal involvement, but who are now BERRI monitored and receive support to meet
										their mental health needs, BERRI (+ support) can halve the children who would otherwise have had a criminal element to
therefore, criminal justice aspect to their lives	38%						number of people			their lives
						- 1	check v total			
						# children	# children			
		of which, apply	Full success	Partial		fully	partially			
Counterfactual		gain to this %	%	success %	check	successful	successful	check	Note	
		, The second sec								
% w/ CJS aspect to their lives	38%									
	30%		201	740/	0.0	-		0	Consumerated 44 holis	d // FOR/ Children would as he mine them 10 for 1 m
i. Prison for 1 year - applied to 18+yrs		50%		74%	0.0	5	14			d // 50% Children would go to prison at age 18 for 1yr
ii. 4 years of Youth Offending Team - pre 18yrs		50%		74%	0.0	5	14			, 14 halved // 50% Children would have 4 years of Youth Offending Team
iii. 3 Years Youth Offending Team - pre 18 yrs		50%	23%	77%	0.0	4	15	0		, 15 halved // (the other) 50% (being 19) Children would have 3 years of Youth Offending Team
									Across their lives (Pag	
										c.org/wp-content/uploads/2018/07/BarclaysWealth1.pdf
iv. Probation - pre 18 yrs		100%	24%	76%	0.0	9	29	0		ng 38) spend an average of 3yrs on probation
v. court attendances - pre 18 yrs		100%	24%	76%	0.0	9	29	0	across their lives all ch	hildren (100% being 38) attend court on average 1.5 times pa
vi. Police call outs pa pre-18yrs		100%	24%	76%	0.0	9	29	0	across their lives all ch	nildren (100% being 38) make an average of 30 police call outs pa
a. YP: Criminal Justice System: reducing an individual's involvement										
					Partially			atalahaldan asalasia		
	Calculations	successful	Fully successful	partially successful	successful		Total value	stakenolder analysis	stakeholder	note
i. Prison for 1 year - applied to 18+yrs										
Prison cost	44,640	2								
If fully successful, take 100% of cost, if partial success take 0.5 of cost	50%			22,320						Partially successful children at 50% of cost (half prison term avoided compared to fully successful - no prison term)
Discount rate to apply (%)	3.5%									
Years until average age of the child is 18yrs (no. years until child would have incurred										
this cost)	6									delay this cost until the child reaches on average 18 years (as this gain will be seen post 18 years)
Discount Factor (delayed by 6 years)	0.813500644									
Fully or partially successful children (# children)		5		14						
Cost implication			181,573		254,203	1				
Total cost implication	435,776							435,776	Police & Justice	2
ii. 4 years of Youth Offending Team - pre 18yrs										
Youth offending team	1,400									
Fully successful, 4 years of cost avoided	4									
If partially successful, 0.5 of full cost avoided	50%									Partially successful children at 50% of cost (2 years YOT avoided compared to 4 years avoided for full)
Cost implication per fully or partially successful child		1.400		700						
Discount rate to apply (%)	3.5%	,								
No. years until child would have incurred this cost	2.576									Assume average age of child is 12 years, delay by 2 years this cost. i.e. child will experience cost from 14-18yrs.
Annuity Factor (run the avoided cost over 4 years)	3.673079209									
Discount Factor (delayed by 2 years)	0.9335107					-				
Fully or partially successful children (# children)	0.5555107	5		14						
Cost implication		J	24,002	14	33,603					
Total cost implication	57,605		24,002		55,005	•		E7 605	Police & Justice	2
	57,005							57,005		2
iii. 3 Years Youth Offending Team - pre 18 yrs										
Youth offending team	1,400									
	1									
Fully successful, 3 years of cost avoided	3									De dielle enverse fait bildere ab 500/ of each (4.5 and 2007 and 11.5 and 12.5 and 13.5 and 1
If partially successful, 0.5 of full cost avoided	50%									Partially successful children at 50% of cost (1.5 years YOT avoided compared to 3 years avoided for full)
Cost implication per fully or partially successful child		1,400		700						
Discount rate to apply (%)	3.5%									
No. years until child would have incurred this cost	3									Assume average age of child is years, delay by 3 years this cost. i.e. child will experience cost from 15-18yrs.
Annuity Factor (run the avoided cost over 3 years)	2.801636981									
Discount Factor (delayed by 3 years)	0.901942706									
Fully or partially successful children (# children)		4		15						
Cost implication			14,151		26,533	1				
Total cost implication	40,683							40,683	Police & Justice	2

#### All figures shown here are pre deadweight (at 5%) and alternative attribution (at 60%)

42

#### a. Reducing an individual's involvement in the criminal justice system





All figures shown here are pre deadweight (at 5%) and alternative attribution (at 60%)

43

### b. Increased educational attainment

b. YP: Increased educational attainment										
	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations	Total value	stakeholder analysis	stakeholder	note
Truancy	1,965	50%	5 983	25%	491			151,824	Education	Workshop examples talked of:         - increased placement stability through BERRI so that child could remain in school         - increased educational attainment: through "higher aspirations" regarding future as a result of BERRI assessment         - assumptions from discussion with BERRI and practitioners - this takes into account a high proportion of LAC who are out of education at the start of their residential care journey         - edgeof care absenteeism is around 1 in 3 whereas persistent absenteeism in residential care is around 11% which is no worse than in the general population.
SEN statement compiled by LA	7,000	10%	5 700	5%	350			108 170	Local Authority	<ul> <li>BERRI assessment enables correct diagnosis as provides assessment of underlying need and so symptoms are not misinterpreted as clinical factors. Underlying need can be met. Examples were given of fight and flight mode presenting as ADHD. Children being medicated for depression when actually this was not the underlying need.</li> <li>56% of LAC have SEN compared to 25% in the general population.</li> <li>These children lag behind their peers (they get half the educational attainment compared to the general population)</li> <li>LAC are 9 times more likely to have an ECHP 1 in 3 need SEND support in education</li> <li>This means that the volume of SEN statements will not change as a result of BERRI. However, a BERRI assessment enables correct diagnosis and follow up support and so: a very small reduction in SEN statements has been modelled as a proxy to represent the more 'accurate', and right care for each child meaning a more efficient service for the LA SEN team overall.</li> </ul>
· · · ·	7,000	10%				_				4
Total annual cost implication	1		1,683	, 	841			-	check	
Lifetime cost								-		
ADHD	102,136	10%	10.214	5%	5,107			296.194	Local Authority	4 see above reasoning for SEN statement
Total ADHD lifetime cost implication			10,214		5,107				check	
•										
£ Saving if partially successful intervention						841	per person (ADH	D not included here	e as lifetime cost)	
£ Saving if fully successful intervention								D not included here		
no educational aspect	66%						number of peopl			<ul> <li>- 1 in 3 LAC need extra educational support</li> <li>- 6% of care leavers go into further education</li> </ul>
Full success rate (of those affected)	24%	4					number of peopl			
Partial success rate (of those affected)	10%	2				10	number of peopl	e		
check	0%					-				
Duration of impact (years)	6									assume run over remainder of child school years (to 18) nb ADHD is a lifetime cost which is included separately
Discount rate to apply (%)	3.5%									
Annuity factor						5.329				
total annual cost implication discounted							25999	3		
ADHD lifetime cost implication total							29619	4		
Total saving							556,188			

### c. Increased employability

44	
	- 47

c. YP: Increased employability										
	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations	Total value	stakeholder analysis	stakeholder	note
Lifetime cost										
NEET	129,112	100%	129,112	50%	64,556			4,518,918	Education	<ul> <li>Full: Through monitoring the child with BERRI, the child is able to co-create their future. Examples were given in the workshop of children who went on to train as e.g. beauticians and find employment who would otherwise have lived in a secure unit for the rest of their lives. BERRI was able to reframe their needs and find the right placement for them. This in turn increased their future employability.</li> <li>Partial: set at half of full</li> <li>Full: Through BERRI assessments, a young person's life is more stable and this translates into increased educational</li> <li>S attainment; examples in the workshop were given of children who were able to go into training who would otherwise have</li> </ul>
Total NEET lifetime cost implication	,		129,112		64,556			4,518,917.94		
£ Saving if partially successful intervention						64,556	per person			
£ Saving if fully successful intervention						129,112	per person			
no employment aspect	50%	of children				50	number of people			
Full success rate (of those affected)	20%	of children				20	number of people			
Partial success rate (of those affected)	30%	of children				30	number of people			
check	0%									
Total saving - NEET lifetime cost implication total							4,518,918	-	check	



### d. Physical health

	١
45	1

#### d. YP: Health : physical

	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations	Total value	stakeholder analysis		stakeholder	note
Drugs use and abuse	2,604	26%	677	13%	339			54,115	NHS		1 Without meeting YP needs, likelihood of drug and alcohol issues is high. Through meeting needs via BERRI assessment, this
Alcohol dependency	1,800	26%	468	13%	234			37,406	NHS		1 Without meeting YP needs, likelihood of drug and alcohol issues is high. Through meeting needs via BERRI assessment, this
A&E visits	160										only model for physical health so as to avoid any risk of double counting, although could occur in relation to mental health
avoided number of A&E visits		10	1,600	3	480			110,834	NHS		<ul> <li>visits are reduced</li> <li>BERRI example of YP 17 A&amp;E admissions, reduced to 1 in 18 months because demands were lowered and the repsonse / support was more nurtturing as a result of BERRI set at 10 visits avoided (reduce the 17 in this example to make the number a more representative 'average' - this is also because in residential care YP may present more frequently as have to prove that the situation has been dealt with, edge of care children will go to A&amp;E e.g. for a nasty cold or unexplained bruises on their leg. GPs don't easily register LAC and so A&amp;E visits are likely ot be inflated - due to reduced gp visits).</li> <li>1 - e.g. in Haringey there are A&amp;E visits due to self harm, suicide, overdose</li> </ul>
											dysregulated behaviour and inability to cope with emotions due to life experiences may cause depressive episodes. BERRI
Overdose	4,436	20%	887	10%	444			70,912	NHS		1 helps identify emotional needs and risk indicators so as to avoid this risk.
ambulance call out	233										only model for physical health so as to avoid any risk of double counting, although could occur in relation to mental health
											as for A&E visits
avoided number of Ambulance call outs		1	233	3	699			49,662	NHS		1 - BERRI evidence that ambulance call outs are a 'cry for help', an impulsive and behavioural call for attention
Total annual cost implication			3,865		2,195			-	check		
£ Saving if partially successful intervention							per person				
£ Saving if fully successful intervention						3,865	per person				
no physical health aspect	80%					80	number of people	2			BERRI study of 16 people demonstrating these physical / mental health issues at intake, only 1 did at the outgoing assessment
Full success rate (of those affected)	10%					10	number of people	2			BERRI discussions - could reduce physical health needs bty 20% if better meet needs
Partial success rate (of those affected)	10%					10	number of people	2			
check	0%					-					
Duration of impact (years)	6										
Discount rate to apply (%)	3.5%										
Annuity factor						5.329					
Total saving							322,929	)			



All figures shown here are pre deadweight (at 5%) and alternative attribution (at 60%)

### e. Mental health

e. YP: Health : mental									
	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations Total value	stake holder analysis	stakeholder	note
									Examples in the workshop referred to "reduced or no need for mental health services" as a result of the YP's underlying
Counselling	1,217	50%	609	20%	243		136,182 NH	IS	1 needs beign met through a BERRI assessment and BERRI monitoring - 1 in 4 people nationally will experience a mental nealth problem each year*.
									- The threshold for NHS mental health interventions is very high and therefore success rates modelled here are lower to
									take into account that fewer people would have met the threshold for this service (And thus, through working with BERRI,
									fewer young people will not need this service who otherwise would have incurred this nhs cost).
									full: Considering that 25% of people who have mental health issues have access to treatment.** For this cohort, the
									national average (1 in 4 have a mental health issue each year) can reasonably uplifted to 90-100% of this cohort, through
									working with BERRI a quarter of these people will avoid mental health treatment 25%partial: set at half of full - 12.5%.
NHS mental health services	2,030	25%	508	12.5%	254		128,451 N	JC	<ol> <li>BERRI evidence: 2/3 of children are placed out of area if this is cross-billed by local nhs teams then it is payable as double</li> </ol>
GP visit	63	£	500	12.570	234		120,431 [1]	0	only model for mental health so as to avoid any risk of double counting, although could occur in relation to physical health
	05						-		successful to take into account reduced % of more specific mental health items for others in the cohort.
									<ul> <li>e.g. in Haringey there are gp visits due to self harm, suicide, overdose</li> </ul>
									<ul> <li>out of 14,100 BERRI children, 1 in 4 self harm (cutting, tying, overdose), a similar number have talked about or taken action</li> </ul>
									for suicide.
avoided number of GP visits		1	63		189		62,104 NH	10	1 - nb see A&E visits above (Gps sometimes unable to register LAC)
	544	25%	1		54		30,437 NH		1 see above
Anxiety	1,355				136				1 see above
Depression	4,043	£	555	10%	150		75,812 NH	15	1 SEE a DOVE only model for mental health so as to avoid any risk of double counting, although could occur in relation to physical health
Hospital stay avoided number of hospital stays	4,045	1	4.043	0.5	2.022		1,023,309	10	1 hospital stay for mental health related issues - reduced need
avoided number of nospital stays	_	1	4,043	0.5	2,022		1,023,309 NF	15	YP suffering from recurrent self harm, psychosis or personality disorders would spend time in a very high care in patient unit.
									This is a very small percentage of children (Around 2.5%), but they are very costly. In a BERRI cohort, around half could be
Manu hish same units	600.000	2.5%	45.000	1.3%	7.500		2 700 504 1	10	prevented from escalated to this level and with the other half, the length (and severity) of stay could be mitigated.
Very high care units Total annual cost implication	600,000	2.5%	15,000		7,500		3,796,594 NH - ch		1 - very small %s are used here to take into account that this saving applies to a smaller percentage of YP
Total annual cost implication			20,097		10,598		- เก	eck	
£ Saving if partially successful intervention						10,398 per person			
£ Saving if fully successful intervention						20,697 per person			
no mental health aspect	25%					25 number of peo	ple		1 in 4 have a mental health issue nationally, BERRI evidence has 75% of LAC with a mental health need
Full success rate (of those affected)	20%					20 number of peo	ple		after BERRI flags up a need for support, on average see some success with around half of YP and significant improvement with
									because there are not the resources available to offer the appropriate support package
									- it also takes into account that some YP may have lower MH needs than others
									- BERRI evidence that 50% have a diagnosable, treatable MH condition but only 1 in 8 get access to treatment
									- BERRI means that children require fewer appointments and / or they remain at a lower MH level need overall
									- nb mental health needs become 10 times more expensive to meet in adulthood, meeting M needs for children reduces the
Partial success rate (of those affected)	55%					55 number of peo	ole		cost significantly overall/
check	0%					-			
Duration of impact (years)	6								
Discount rate to apply (%)	3.5%								
Annuity factor						5.329			
Total saving						5,252,88	39		

## <u>f. Local authority outcomes : increased placement stability / 'right' placement (including step downs)</u>

f. Local Authority outcomes for the children in this cohort : Increased placement stability / 'right' placement (including step downs)										
	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations	Total value	stakeholder analysis	stakeholder	note
Reduction in social worker hours	62	2	_							
number of social worker hours avoided in 52 week period		104	6,448	52	3,224			2,216,124	Local Authority	Full - assume 2 hour per week avoided per child in this cohort. Partial : set at half of full (1hr per week) 4 nb additional 1hr pa for child for social worker to fill out a BERRI
Total annual cost implication		1	6,448		3,224			-	Check	
£ Saving if partially successful intervention £ Saving if fully successful intervention						,	per person per person			
no Local authority outcomes	3.0%						number of people			
Full success rate (of those affected)	32% 65%						number of people			
Partial success rate (of those affected) check	0%					-	number of people			
Duration of impact (years)	e	5								
Discount rate to apply (%)	3.5%	6								
Annuity factor						5.329				
total annual cost implication discounted							2,216,124			
Stepdown lifetime cost implication total							37,306,853	37,306,853	Local Authority	4 see STEP DOWNS tab
Total saving							39,522,976	-	check	



### <u>f. Local authority outcomes : increased placement stability / 'right' placement (including step downs)</u>

#### **Step Downs**

'average' BERRI child								
		Residential care	Foster care	Child in Need	Secure unit	Check	Note	evidence
								nb secure unit step downs are not calculated
								here because applicable to such a small
Start position (# of children)		70	20	5	5	0%	checked against cohort total	number of children
							Movements e.g. out of Foster, up to resi // out of	
Move up (1 level) (# of children)		0	1	2			CiN, up to Foster	
Stay (# of children)	55%	38.5	11	3			no movement between levels	
								residential care could be stepped down, here take (rounded) mid-point of 40% of children
Move -1 (# of children)	40%	28	8	0			e.g. out of resi, down to foster // out of foster, down	for all step downs
Move -2 (# of children)	5%	3.5	0	0			e.g. out of resi, down to CiN	
Check		0	0	0				
		Residential care	Foster care	Child in Need	Secure unit	Check	Note	
End position (# of children)		39.5	41	14.5	5	0	checked against cohort total	
								<ul> <li>step down from resi is a saving of</li> <li>120,000pa up to 16yrs, then a little cheaper</li> <li>at 80,000 as some YP are in supported</li> <li>accommodation</li> <li>150,000pa saving for foster care step down</li> </ul>
Cost per case £		253856	33760	3402			taken from Costs tab	based on 3 differeInt local authorities, - no
resi -> foster £ value // Foster -> CiN £value								
(individual case)		220095	30358					
<b>`</b>								
Start (total cost pa by setting) £		17769899	675209.2	17010			Total cost pre-Berri (p.a. for cohort)	
End (total cost pa by setting) £		10027300.15	1384178.86	49329			Total cost post-Berri (p.a. for cohort)	
Total start cost pa (all settings) £		18462118.2					Sum pre-Berri (p.a.)	
Total end cost pa (all settings) £		11460808.01					Sum post-Berri (p.a.)	
Total Saving pa (all settings) £		7001310.19					Pre minus post	
Discount rate		3.5%					taken from dash	
Average age of child in this cohort		12					taken from dash	
Age when child leaves these care settings		18						
Duration of impact (years)		6						
Annuity factor		5.329						
PV of annual saving for 6 years £		37306853					PV of annual saving for 6 years (assume age 12 and	leave care at age 18)

## g. Carer (and other professionals) outcomes

### 49

#### g.carer (and other professionals) outcomes

	Cost	assumptions if fully successful	Fully successful	assumptions if partially successful	Partially successful	Calculations	Total value	stakeholder analysis	stakeholder	note
Absenteeism	94									Average sick days in a year (2020) is 3.6 days lost per worker in the UK. - a study carried out by the institute of Employment Studies (IES) found increased prevalence of presenteeism among those
										with poor mental health and financial worries.*
										'- The Vitality Report: Britain's Healthiest Workplace, notes a 9.9% increase in productive time lost for those with poor sleep
										and financial worries.**
										- It is reasonable to assume that carers of BERRI monitored young people will have these concerns
										'- workshop evidence stated this was the case
										'- workshop participants spoke of how carers could be better matched to children through BERRI and how it enabled them
										to think strategically and be more efficient with carers. "foster carers stopped spilling out everywhere with anxiety".
										- staff turnover is a big issue: around 1/3 of residential staff might be turned over in a year, a 3 bed house might have 20
Average number of sick days prevented per									_	staff with 8 changing pa.(50% turnover is seen as bad)
employee in this group pa		22	2068	11	1034			1,019,706	Economy	3 - BERRI means reduced staff turnover, and fewer foster carers leaving
										recruitment costs (see above re staff turnover) There would also be additional costs in terms of additional agency fees to
Recruitment	3,000	33%			495				Local Authority	4 cover placements, or activity holidays for the YP
Anxiety	544	20%	109	10%	54			53,648	NHS	1 PTSD
GP visit	63									
										a reduced loss of experienced resource throughout the system as a whole. There is an increased ability amongst foster
										carers to take on regular placements. There is reduced anxiety and need for physical / mental health support. There is
		_								reduced risk of injury to carers (from the children they support). Reduced isolation from the community, reduced ability to
avoided number of GP visits		3	189		63			87,369		1 care for their own family (GP visits used as a proxy for these issues)
Total annual cost implication			3,356		1,646			-	check	
£ Saving if partially successful intervention						1,646 p	er person			
£ Saving if fully successful intervention						3,356 p	er person			
Number of carers in this cohort of children	220									see cohort splits tab: Foster carers might be at 0.5 carers per child, whereas residential care staff may be at 30 employees for 6 children, a 3 bed children's home mig
no impact on carers	5%						number of people			
Full success rate (of those affected)	65%						umber of people			
Partial success rate (of those affected)	30%					66 n	umber of people			
check	0%					-				
Duration of impact (years)	3									
Duration of impact (years)	3									
Discount rate to apply (%)	3.5%									
Annuity factor						2.002				
AITIULV IACLOI										
						2.802				

# Appendix D Example evidence

"Without BERRI our children would be experiencing even more disruptions, more placements breaking down, because we can't understand what's happening for them, we can't really drill down to it, which has an impact on foster carers, who then burn out, feel deskilled, and ultimately leave fostering as a career because it's just too hard".





Commissioning Alliance Ealing Council Percival House 14-16 Uxbridge Road Ealing W5 2HL

#### 22/02/2020

Innovate UK

**Ref BERRI** 

To whom it may concern,

Having used the BERRI in 4 authorities now, I have been able to establish the significant value that this brings to children's services in several key areas. As a result of our most recent project in London, our team has begun to effectively change working practice, which previously was very focussed on a drive to manage behaviour rather than understand; transact rather than build relationships; refer on rather than take responsibility; prescribe packages of activity rather than take the time to understand what improves an individual child's life.

I have now led four trials within local authorities using the BERRI screening system to better understand children's needs and offer them placements which will enable them to thrive and flourish. The first reduced the percentage of the LAC population placed into high cost, residential services from 16% to 1.5% in a 9-month period. Each young person was successfully moved into a fostering placement where additional services were purchased, specifically designed to address their immediate needs. There was not a single placement breakdown in the 18 fostering placements made. This was replicated across the next two authorities with very similar results.

The most recent study completed for a London Council by the Commissioning Alliance identified the significant value that the BERRI system produced. We screened 40 of the highest cost placements across the local authority. The screening gave us an evidence base and identified 11 children placed in residential care who scored at levels that were being successfully managed in standard IFA/in house foster placements by our most effective providers. Potential cost savings of £22,000 per week or £1,144,000 per annum were identified.

The BERRI was also significant in supporting the social work teams and carers to understand and work with individual children's needs far more effectively. The BERRI helped ensure much better outcomes for children were identified and actioned. As a result, their needs can be directly placed into workable, achievable, individual goals to produce outstanding outcomes. As needs are met, outcomes improve. Good outcomes come from attention to purpose and needs being met effectively.

By using BERRI, we now have an evidence base that recognises that if the needs of children are not met, public services generate ever more 'failure demand' and spiralling costs. When resources are diverted to unproductive ends, costs are driven ever upwards, whilst children's problems go unresolved. A high number of children paced into care have no direct system to measure their needs effectively and often their needs get worse, creating unnecessary demand and spiralling costs. More worrying is the impact on vulnerable children.

Traditionally they are provided with what has been commissioned rather than what they need. However, as a direct result of us using the BERRI screening systems, we have been extremely effective in being able to shape services and commission based on need. The value that BERRI has bought to the boroughs who have used it, is simply amazing, but this is also reflected by the providers we have engaged who have reported that the carers and children they have placed have benefitted significantly from the understanding of children's individual needs and how to work effectively with these.

I therefore strongly support this grant bid for additional funding to grow and develop BERRI in partnership with the authorities involved within the Commissioning Alliance.



Evidence used to underpin the Theory of Change and the lifetime costs of BERRI monitored children – the impact evaluation of BERRI came from workshops, interviews, steering groups and research / practitioner experiences – as evidenced in this letter (an example of the type of evidence that underpins this work).

Matt Utley, Commissioning Manager, utleym@ealing.gov.uk



## Appendix E List of participants

F

"As a teenager I once set fire to some hairspray. If a child in care did that, they'd be labelled a fire-setter from then onwards. I think sometimes seeing behind those headlines to a picture of their needs reminds people they are manageable and supportable, an ordinary teenager who has had difficult life experiences, not a monster". Workshop participar

Participant	Role
Dr Miriam Silver	BERRI Consultant Clinical Psychologist (Children and Parenting)
Dr Lakshman Ganatra	Clinical Psychologist
Dr Liam Gilligan	Clinical Psychologist
Matt Utley	Commissioner and Subject Expert in Children's Social Care Placements
Jackie Neil	Caldecott Foundation
Sophie Barton	Budwood
Rosie Binfield	Aftercare North West
Dr Jaime Craig	Consultant Clinical Psychologist
Steve Greenall	Cornerstone
Nathan Whitley	Commissioner and Local Authority Director
Angela Elliot	Head of Strategy, Commissioning and Policy, Islington Borough Council

## DELIVERING IMPACT MATTERS

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