Using behavioural insights to increase engagement with Early Help Services

March 2020

Scoping report

Social Engine is working with the Newcastle City Council to develop a programme to increase the uptake of Early Help services. This short scoping report sets out the approach to be taken during the remainder of the project and is based on an initial review of information, research with key stakeholders and reflecting discussion amongst the project team. Naturally, the aim is to be evidence based in our work; therefore, whilst this document sets out our next steps and indicative time plan, we anticipate that there will be some further refinement to the final project plan.

Project Team

Newcastle City Council: Stephen Foreman (Informatics Manager), Alison Priestly (Service Manager, Early Help & Family Support), Cathryn Elsy (Service Improvement Lead, Early Help), Sarah Kerrigan (Programme Manager, Children and Family Strategy Unit), Stacy Ford (Performance Analyst, Early Help).

Social Engine: Avis Johns (Project Director), Toby Blume (BI lead), Kieran Saggar (Research Manager), Marios Petropoulos (Analyst), Lucy Newman (Coordinator).

Overview of situation and ambition

In Newcastle the Children's Social Care initial response service (IRS) deals with enquiries raised by professionals, including the police, and members of the public who wish to raise concerns about children and families. This initial response team is sometimes called the 'front door' to Children's Social Care. Not all referrals to IRS require a statutory intervention or specialist support, for that reason NCC offers a range of services intended to assist families in the most appropriate way.

When a case is referred to the front door and a decision to recommend for Early Help is made, an Early Help representative attempts to call the family and make an initial assessment of need. At this point, there will be one of four outcomes for each case:

1. Concerns are raised that suggest the case does meet threshold and it will be referred back to social workers.

2. EH is offered and the family decline further support, in which case they will receive only universal services.
3. Where the family wish to accept the offer of Early Help the referrer will be contacted and asked to start an EHAP (Early Help Assessment Plan).
4. Where the family wish to accept the offer of Early Help, an EHAP is started by the Early Help team (either at the front door or the Community Family Hub).

What is Early Help?

Early Help is a way of describing the extra support families can receive to help deal with challenges they may be facing.

Early Help brings together workers who will support the whole family to try to make things improve for everyone. It can include support with parenting, employment, anti-social behaviour, school attendance and emotional wellbeing. Critically, it is a voluntary support service – meaning that parents need to consent to take part and cannot be required to do so. It would generally be offered as a way of providing timely support to 'nip an issue in the bud' and/or in those circumstances when the issue does not warrant involvement from the social work team. Often, families will access Early Help as a result of a discussion with a staff member at their children's school or they may contact one of the local community family hubs. Generally, the process of securing support will include an initial exploration of the issue facing the family and potentially the formation of a team around the family (TAF) bringing the requisite skills to assist. A lead worker will assume the responsibility for coordination and communication with the family. There are three community family hub localities in Newcastle – Central, East and West.

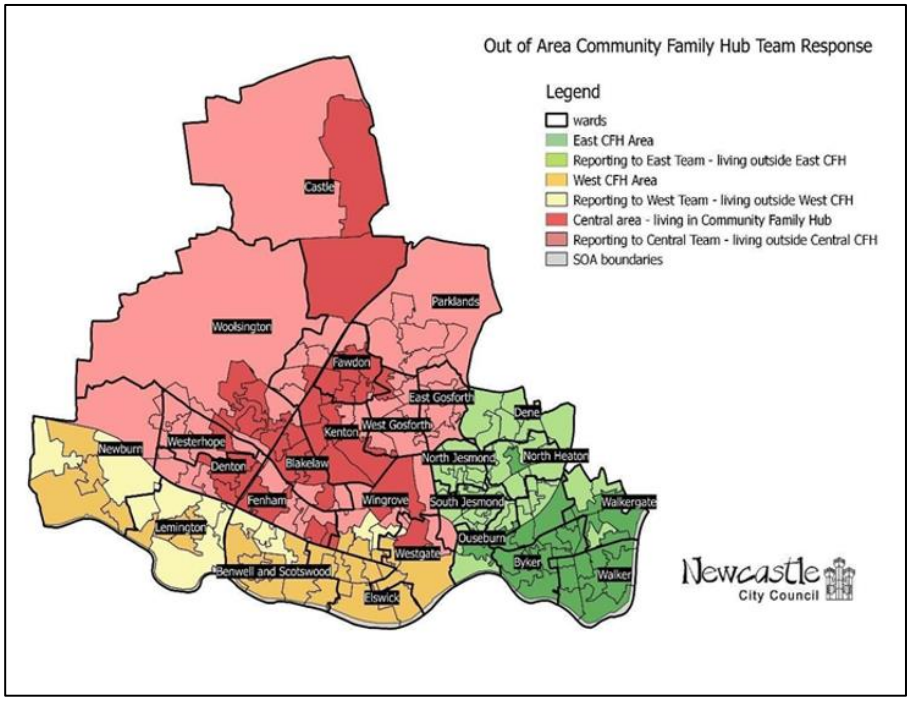
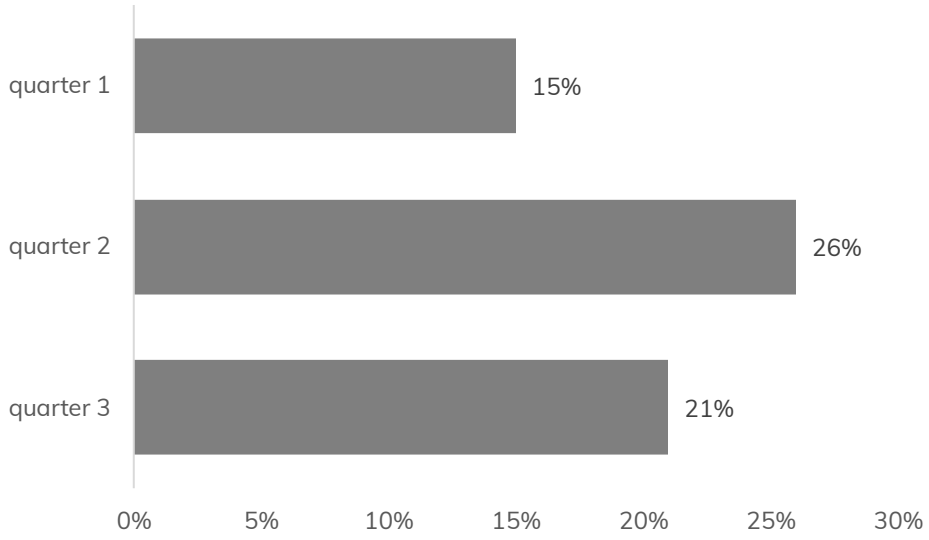


Figure 1: Map of Early Help localities in Newcastle

Each quarter approximately 1,000 children and young people are recommended for Early Help. Once assessed and offered Early Help support, between 15%-26% of those recommended for support decline the opportunity to participate.



The consequences of families declining the offer for Early Help are seen in a range of ways. For the children and families there can be significant negative impacts. Issues such as debt problems, addiction, behaviour challenges and mental ill health can become more complex and damaging to the individual, family and wider communiy. Put simply, people's health and wellbeing is put at greater risk. Further, data reveals that where problems do continue to escalate in this way there is an increased financial impact for what is more extensive Social Care support delivered at a later stage. During the course of a year the cost to Social Care is estimated at over £750k in delivering later stage support with statutory interventions for families.

Of the families that accept the offer and where Early Help assessment and plans are complete, just 5% of familes need any further contact with children's social care services within the year, and only 12% return over a 6 year period. Thus the benefits of engaging with Early Help services are evident.

The council hope to understand more about what motivates people to accept or decline the Early Help offer and critically, what approaches can be used to influence families to accept the offer of support. NCC want to use behavioural insights to develop and test a clear approach to increase the number of families who engage with the Early Help offer.

As part of the scoping stage our project team has considered a number of factors in order to focus and refine our proposed approach, these include:

- Review of correspondence and other information used to communicate the Early Help offer to families.
- Insight from semi-structured interviews with 6 key stakeholders identified by the project team.

- Initial analysis of Children's Social Care service data on Early Help referrals and take-up.
- Internal documents and reports on the take up of Early Help services, provided the by the Children, Education and Skills Directorate.
- We were also able to draw on research literature that had been reviewed previously.

Understanding the nature of the problem

Initial evidence and insight gathering conducted to inform the project scoping and trial and intervention design included reviewing a range of materials and information, as well as analysing data and holding discussions with the project team and conducting interviews with key stakeholders.

Data analysis

Approach to Analysis

We analysed quantitative data supplied to us by NCC. The data included details of Early Help (EH) recommended cases processed by the initial response team (IRS) within Children's Social Services.

Understanding why some families turn down the EH offer is important to understand, in order to inform our intervention to encourage more families to agree to EH support.

Therefore, our analysis was guided by the following research question:

What factors are associated with rates of declining the offer of EH?

To tackle this research question, we performed a series of covariate analyses and chi-square tests to investigate variations in the decline rates of EH based on the following factors:

- Contact source
- Seasonality (months and quarters)
- Deprivation.

Definition of terms

1. Early Help recommended cases

Cases which are deemed by the Children's Social Care Service as potentially benefiting from Early Help support but not meeting the threshold for social work intervention.

2. Decline rate

Decline rate represents the percentage of families which turned down the EH offer.

3. Contact source

We define as contact source the originating agency, or the referrer, such as the police and schools, which contacted Children's Social Care to raise a concern about a child.

4. Risk factors

In statistical terms, a risk factor is a factor that increases risk or susceptibility to something. For our purposes, a risk factor represents a factor which is associated with increased rates of declining the offer of EH.

Headline Findings

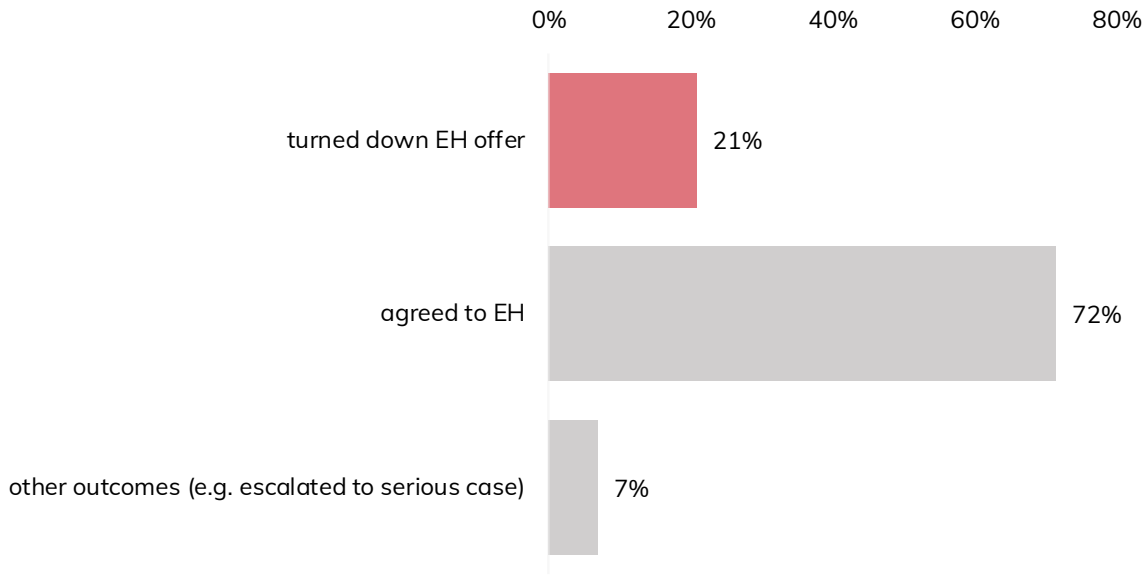
- 1 in 5 families turn down the EH offer
- 1 in 4 families of children whose safeguarding concern was raised by the police turn down the EH offer
- 1 in 3 families of children living in less deprived areas whose safeguarding concern was raised by the police turn down the EH offer

Detailed findings

During the period (1st Apr 19 to 31st Dec 19) 3,261 cases were recommended for EH, 427 of these instances were duplicates – where more than one recommendation was made for the same child. This means that the initial response team within Children's Social Care made 3,261 recommendations relating to 2,789 children for Early Help support.

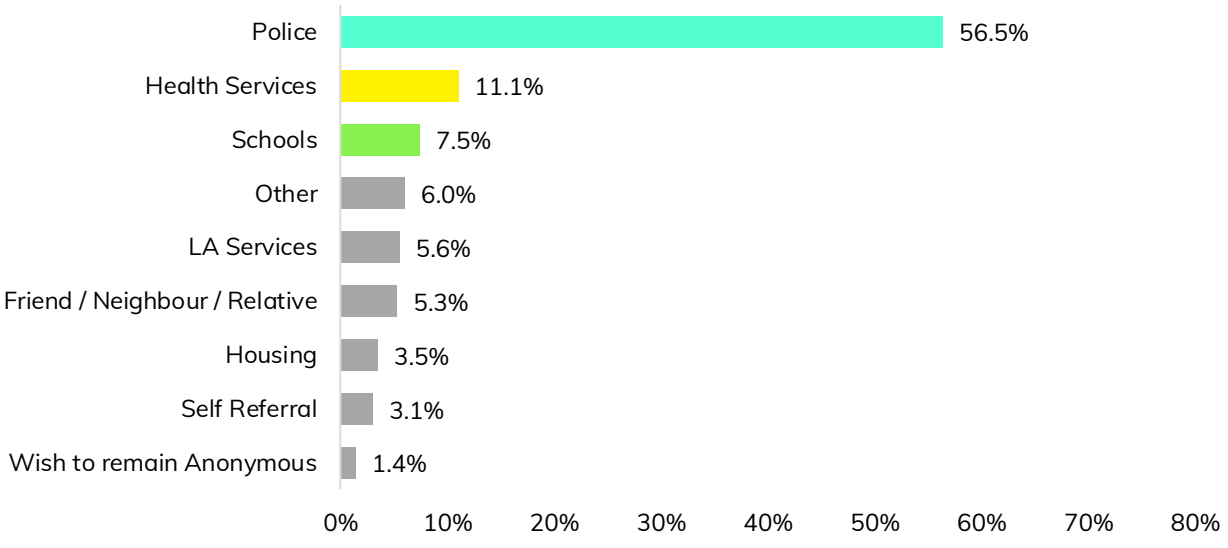
Of the 3,261 recommendations for Early Help support:

- 21% *(n= 678)* turned down the Early Help offer;
- 72% *(n= 2347)* agreed to proceed with additional Early Help support.



Contact Source

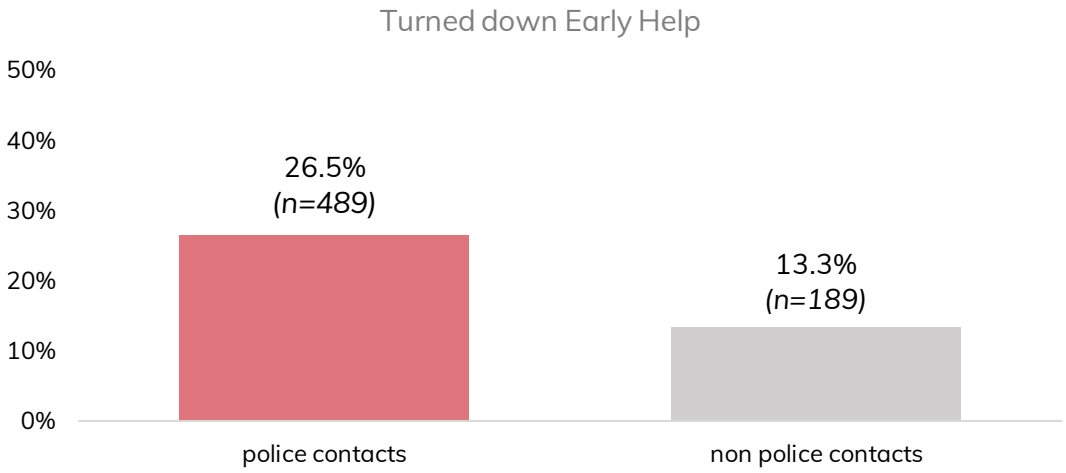
Based on 3,261 Early Help recommended cases, we found that more than half (56.5%) of them originated from the Police , followed by Health Services (11.1%) and Schools (7.5%).



Decline rates of EH by contact source

- Around 1 in 4 contacts (26.5%) that originate from the Police turn down the offer of EH.
- When we exclude Police contacts, the proportion of all the remaining contacts (i.e. all those from non-police sources) that turn down the EH offer is just 13.3% - which is almost half of the decline rate (26.5%) of police contacts.

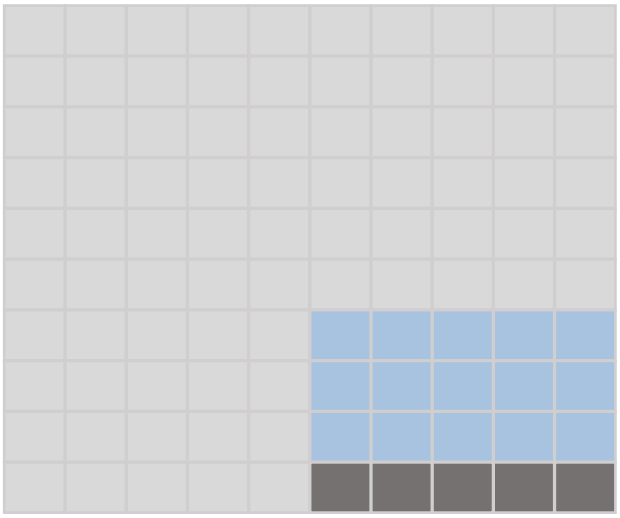
- Based on chi-square tests, we conclude that when compared to all other contacts, those contacts that originate from the Police are twice as likely to turn down the Early Help offer, and this association is statistically significant, meaning that there is less than a 5% chance that the result is solely due to random chance.
- Therefore, contact source, in particular the police, is a risk factor because it increases the risk of declining Early Help by twofold.



A more detailed breakdown of the decline rates based on contact source is outlined in the table below.

contact source	EH cases	declined	decline %
Police	1842	489	26%
Non-police sources (all)	1419	189	13%
Health Services	362	43	12%
Schools	243	18	7%
Other	197	21	11%
LA Services	181	20	11%
Friend / Relative	174	31	18%
Housing	115	24	21%
Self-Referral	100	21	21%
Anonymous	47	11	23%

Because approximately one half of the EH recommended cases originate from police (56%) contacts and the other half comes from non-police sources (44%), this allows us to compare the percentage contribution of each half – police contacts against non-police contacts – in the decline rates of EH recommended cases.



Out of every 100 EH recommended cases, 20 turn down the EH offer.

Of those 20 that turn down the EH offer,

15 are police contacts

only 5 are non-police contacts

EH decline rates by deprivation

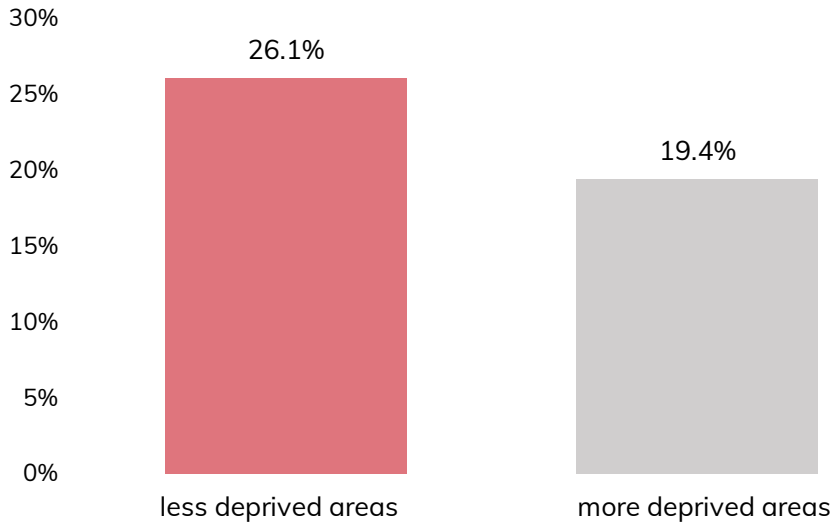
We explored whether deprivation - measured in the dataset by index score of multiple deprivation (IMD) – is a factor driving variation in decline rates of EH. IMD is a score that represents the degree to which an area is deprived based on multiple of domains, including income, health and employment. The lower the IMD score, the more deprived is the area.

When we look at how decline rates vary according to level of deprivation, we found a statistically significant variation between families in less deprived areas and those from the most deprived areas. We found that EH recommended cases concerning children from less deprived neighbourhoods are associated with an increased decline rate of the EH offer.

We grouped areas within the bottom third (least deprived areas) and those in the top third (most deprived areas) according to the Index of Multiple Deprivation[1] to determine how deprivation affected the take up of EH support.

We found that around 1 in 4 (26%) EH recommended cases that come from less deprived geographic areas turn down the EH offer, compared to about 1 in 5 (19.4%) in more deprived areas. Chi-square test showed that this difference is statistically significant ($p < .001$, *risk= 1.3*, *odds ratio = 1.5*).

[1] Areas in decile 1 fall within the most deprived 10% and areas in decile 10 fall within the least deprived 10%.



Combined influence of contact source and deprivation

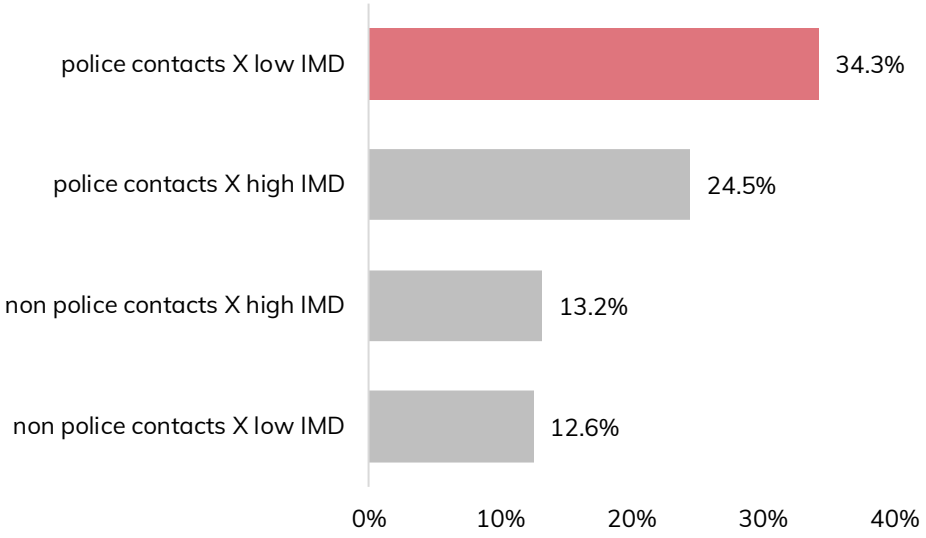
In order to gain a better understanding of the two risk factors – i.e. police contact source and level of deprivation – we explored their combined effects. This shows us how they both work together to affect EH decline rates.

We found that low deprivation is associated with an increased decline of EH offer, however this situation only applies to contacts that originate from the police. For non-police contacts, low deprivation is not a risk factor for increased decline rates.

This conclusion was derived after observing two patterns in the data:

1. Within the police contacts we see differences in the decline rates across the two categories of deprivation: 34.3% of police contacts that come from less deprived areas turn down the EH offer, compared to 24.5% of police contacts that come from more deprived areas.

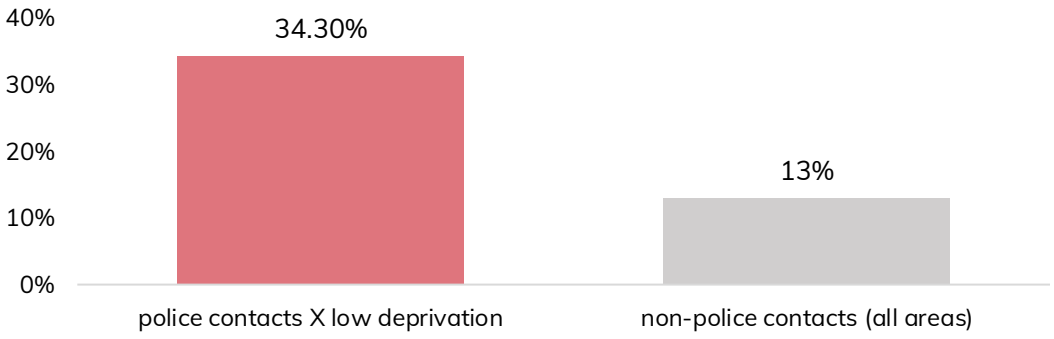
2. Within non-police contacts, there are no differences in the decline rates of EH offer across different levels of deprivation – the decline rate stays roughly the same at 12-13%.



The even more pronounced difference in the decline rates between police contacts from less deprived areas (decline rate: 34.3%) and non-police contacts (decline rate: 13%), evidences the fact that:

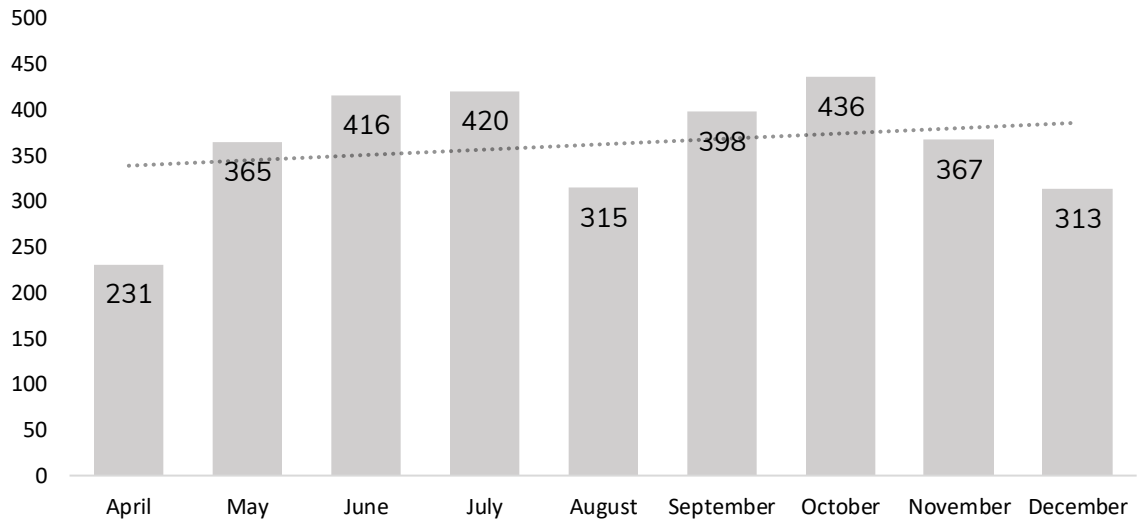
EH recommended cases that originate from police contacts and come from less deprived areas are 2.6 times more likely *(p < .001, risk= 2.6, odds ratio = 3.4)* to decline the EH offer, compared to EH recommended cases that originate from non-police sources.

In practical terms, this means that 1 in 3 families living in less deprived areas who were referred by the police turn down the EH offer.

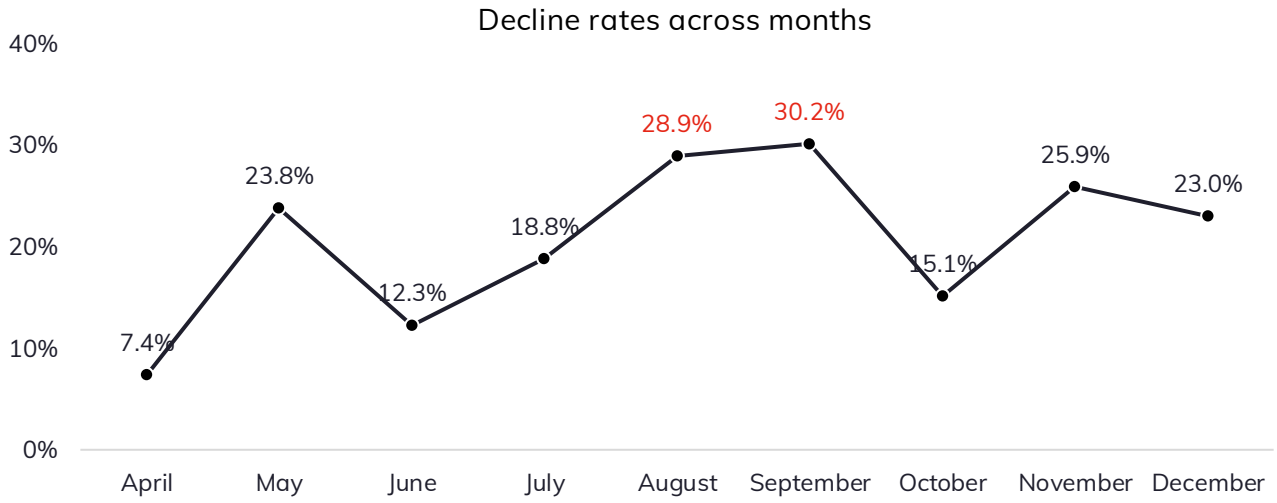


Seasonality

Previous research suggests that time of the year can influence decision outcomes in children's social services. When looking at the volumes of EH recommended cases across months, we did not find any significant variation - with the exception that April had the lowest volume of EH recommended cases.

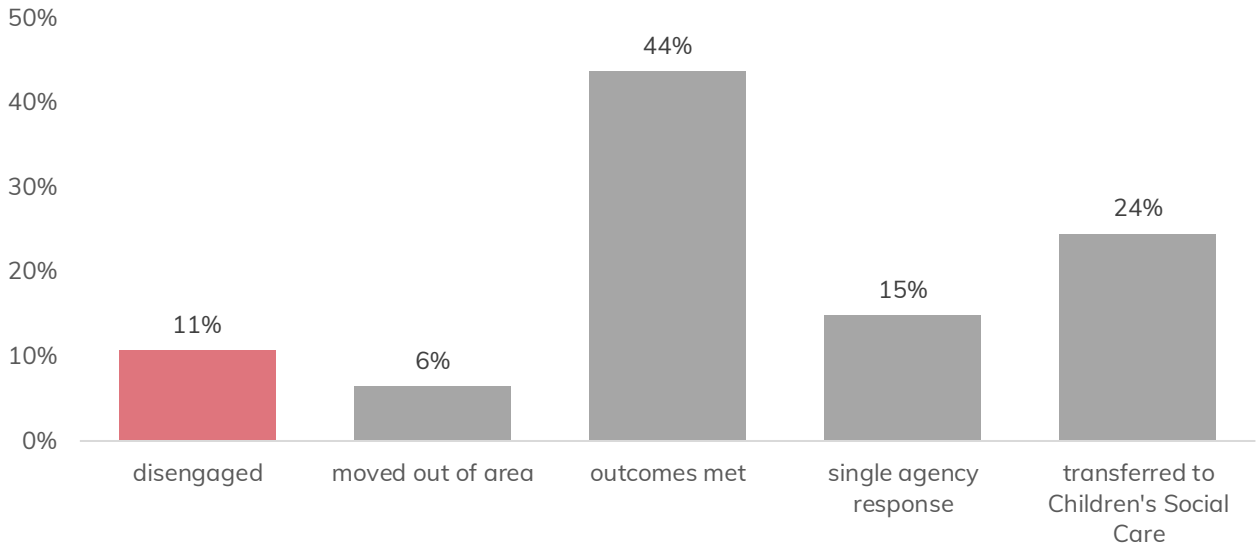


Whilst the actual volume of EH recommended cases does not fluctuate considerably across months, decline rates do. Months having the highest decline rates of EH are August (28.9%) and September (30.2), while months having the lowest decline rates are April (7.4%), June (12.3%) and October (15.1%).



Disengagement

NCC are also keen to increase engagement of families that are already participating in an ongoing EH support plan in order to reduce drop out. During the period Jan 2019 to Dec 2019 1539 EH cases were closed. Of the 1539 children, 164 (11%) decided to disengage (drop-out) from ongoing EH support.



Literature Review

The Department for Education conducted research[2] looking into the factors that are associated with decision outcomes in children's social services (e.g. the progression of a safeguarding concern into a referral).

Seven factors were identified as correlating with decisions that children's social services make in relation to safeguarding cases. These were:

1) Day of the week
   - As the week progresses, referrals are less likely to proceed to further action.
   - Referrals received over the weekend are less likely to proceed to further action.
2) Social worker caseload
   - The greater the social worker's caseload, the fewer the number of referrals that progressed into further action.
3) Referral source
   - Referrals that come from an internal source and schools are most likely to proceed to further action.
   - Referrals originating from family members are least likely to proceed to further action.
   - There is some evidence to suggest that "referrals from police can be in a form that is more difficult to digest".
4) Referral method
   - Email and written methods of referrals are least likely to progress to further action.

[2] Decision-Making in Children's Social Care – Quantitative Data Analysis Research report, Department for Education (June 2017)

- Referrals received from telephone calls are more likely to progress to further action.

5) Ethnicity
   - Referrals of children from non-white ethnic backgrounds are more likely to escalate to serious cases.

6) Deprivation
   - When comparing deprivation based on health outcomes with deprivation based on income, there are mixed results.
   - Referrals of children who live in areas with lower neighbourhood health levels are more likely to escalate to a serious case.
   - Referrals of children who live in geographic areas with greater income deprivation are less likely to result in further action.

7) Social worker experience
   - Greater professional experience of the social worker who is managing a case reduces the likelihood that a referral will escalate to a serious case.

Findings from Stakeholder Interviews

To help shape our initial thinking we conducted six interviews with key stakeholders who have first-hand experience with Early Help. Interviewees included, service providers, the Initial Response Team and police.

The semi-structured interviews explored the current Early Help offer and sought to understand more about the attitudes, behaviours and overall experiences of those connected with the referral or delivery of EH support.

Interviewees were keen to share their understanding of the current Early Help offer with a number highlighting a range of factors that influence how Early Help is perceived and delivered.

Three key themes emerged from these interviews:

1) Collaboration amongst services and localities is essential to the Early Help offer.

When thinking about the current Early Help offer to families most stakeholders felt that collaboration and partnership was important to ensure that families were 'signposted' to the right services. Some felt that being aware of, and talking to families about Early Help was "everybody's responsibility." Stakeholders felt there is a need to be clearer and transparent about what roles services play in supporting families and collaboration needs to be "robust" to ensure appropriate referrals are made so services can work "side by side".

> *"Working together is key to the safeguarding response but that has its difficulties and challenges and can be problematic… more people need to understand how decisions are made to advise and help people coming through. It is a step-by-step process but*

that can be hard as there are lots of thing to understand"

It was felt that greater communication between services, such as Early Help and local police, was needed to allow for better information sharing to support families most at risk. Police felt there was a 'grey area' of communications across services as no regular contact was made once a referral had been submitted which felt like a "missed opportunity" to share crucial information as enforcement "are only involved right at the beginning and right at the end" of the referral process.

"*We see some of these kids on the street everyday. We know who they are and the problems they face and what they are getting up too. If we had better communication with EH we could probably support their work and give them more direct information on the family.*"

Stakeholders mentioned that one of the most effective ways of communicating with families was when Early Help was recommended by a professional or practitioner who already has a relationship with the family, such as a teacher or nurse. Although some training is given to a number of professionals, better and more thorough information sharing across services was need to give professionals "more confidence" to act.

"*I don't think we really have any idea of what happens during assessment and what EH actually do.*"

In particular, stakeholders felt schools don't have the "right skills or time to make referrals and speak to families" which led to some schools using private safeguarding advisors' which removed direct communication with Early Help and resulted in inappropriate referrals.

2) There is a need to more effectively communicate Early Help.

Stakeholders felt that Early Help was not a widely recognised (either in name or provisions) which meant it could sometimes be "misunderstood" within communities.

"*The fear that a social worker is coming to take your child is still quite prevalent. We try and introduce them [families] to Early Help and to what it really is – support. But Early Help is not a term people recognise*"

It was felt that families perceived Early Help to be "intrusive" and people are suspicious of the work that Early Help do, while other families don't want to be told "how to parent"; other parents may have a fear of being judged or having authorities "poking their nose in." However, stakeholders found that once the purpose of Early Help has been communicated, families are much more receptive to the support.

"*Parents don't want to engage and it leads to issues of consent. They might have had a bad experience with authorities and think it's going to be the same but once families have engaged with us, they realise that's not what it's about*"

Another practitioner added that the EH assessment process is not felt to be family friendly. For some workers the initial meeting might be seen as a paper-based, check

box exercise, rather than as a tool to engage and explore more about what help can be offered;

> *"If someone came to my house and I was going to voluntarily get involved with something and the person pulled out a wad of paper I would feel daunted!"*

Stakeholders felt that the way Early Help is communicated might not always be easily distinguishable. For example, the Early Help letter sent directly to homes is the same format as many other council letters, meaning the message may get lost or ignored, particularly by families who face wider social challenges or are particularly vulnerable.

Additionally, the language used on Early Help leaflets and other materials was not considered to be "approachable" and "doesn't provide much clarity" about Early Help. It was felt that Early Help could do more to 'sell' and 'advertise' its services and inform families of how support plans fit individual needs.

> *"We sometimes need to think more like a business model and be "customer facing" and "sell" our services… I don't think our tone or language is firm enough."*

This includes advertising and the website[3] which was described as "not very inclusive" and "generic" could do more to "target" certain families and demonstrate the "wide range of services on offer for different kinds of families".

> *"On our leaflet for example it has a picture of a young mum and baby – but we are much more than that. We offer advice for teenagers, drug and alcohol services, financial services etc."*

A number of stakeholders felt the tone of communications produced by the local council needed to be more approachable and supportive, making it clear that it is okay for parents to ask for help.

> *"It is okay to ask for help. Getting help with parenting is not a failure. That should be universal understanding. It's good to do something for yourself."*

Throughout the interviews it was suggested that clearer messaging, with more direct advice and guidance should be given by the local authority so both families and local partners are clear on what Early Help is and how it can benefit families and the wider community.

3) Local visibility and long-term support enhances engagement with families.

Working in partnership and collaborating with the community family hubs and Early Help services was seen as a way to "embed" Early Help in the community. Some

[3] See: https://www.newcastle.gov.uk/services/care-and-support/children/getting-help-children-and-families/early-help-families

stakeholders felt that it was important to move away from a 'centralised' system as families from different parts of Newcastle have vastly different experiences:

"People think there is a stigma attached to Early Help and that authorities are going to take their children away - If Early Help was built in to the community and local services worked together we could support the family, engage more widely and change that perception meaning more families receive Early Help."

"We should communicate more and be more transparent. It would help families too – they get frustrated telling people and different services the same thing hundreds of times"

It was also felt that support plans don't "bend or flex" enough and can become a "little stale" and "repetitive" meaning families often drop out. A number of stakeholders felt that services should expand their reach and offer a wider range of activities to increase visibility and keep families engaged.

"[Services] should be more creative and refresh their offers every 6 months or so to make sure families stay interested and can see the benefits of Early Help. The more families come, the more Early Help will be normalised, and [will be] seen as a beneficial service rather than stigmatised."

It was also felt that working directly with families and seeing them as "experts of their own experience" would ensure continual engagement with Early Help as support plans are individually tailored to family's needs. Some stakeholders felt that symbolically "signing families off" was problematic as it is a "tick box exercise" and parents think its fine to no longer engage in services. However, it was felt that if Early Help was to be truly perceived to be a "community initiative" then the long-term and continual support should be put in place and the narrative of "quick solutions" to "fix" families should be altered.

These interviews provide a useful insight into perceptions from a range of stakeholders involved in the process. Key highlights include the role of families in engaging with Early Help offers, how the provisions are communicated and the role of Early Help within the community. From a behavioural insights perspective, these underline the need to consider, the 'value' attached to the offer, its resonance and salience with stakeholders and families and indeed how a strengths-based and more integrated model can assist with both uptake and ongoing engagement.

Conclusions and implications for project scope

Based on the initial scoping work carried out to date, our analysis of the evidence and insight gathered have led us to make the following conclusions:

- The rate with which the offer of EH support is turned down vary significantly according to: the referrrer (contact source), level of deprivation and time of the year (seasonality).

- There is evidence from research literature – but it has not been possible to determine with the data received from NCC to date – that the communication channel used to offer EH support is also a factor in whether families accept or reject it.
- Contacts that originate from the police are responsible for the majority of recommendations for EH – disproportionately more than we might expect to see.
- Recommendations for EH that come from a police referral are far more likely to be declined, whereas recommendations from schools are much more likely to be accepted (only 7% declined).
- The combination of deprivation and police referral is a signifcant factor in the likelihood of EH support being accepted – with families referred by police in areas of greater affluence being far more likely to decline support.
- There is a perception among social care practitioners that DSLs – particularly in schools but also more widely – are receiving inaccurate or misleading information and guidance around where and when to make referrals to CSC.
- There appears to be limited shared understanding and clarity of what EH is among practitioners across services. This is particularly evident among the police who appear to have limited understanding of what EH support offer entails, its benefits and how to communicate it effectively to families.
- The police appear to have have a process which limits the opportunities to engage with families effectively. Child Concern Notifications are seen as the only tool available to the police and it is consequently used indiscriminately. There are also issues arising from the quality of data within CCNs which inhibits effective service provision.

Three working hypotheses have emerged from this initial analysis, along with two secondary issues, which we propose to explore further through the project.

Emerging hypotheses:

1. The use of CCNs as a blanket tool for police referrals results in inappropriate or inaccurate offers of EH support.
2. The way in which EH is offered to and perceived by some families is inhibiting the take up of support.
3. A lack of clarity and misunderstanding of the EH offer among pracitioners and referrers is inhibiting effective referral and take up.

Secondary issues to explore:

Previous experience of EH and Children's Social Care services more generally may be an influencing factor in the acceptance of EH support among families.

Deprivation appears to be a factor in the likelihood of accepting EH support, with families in less deprived areas being more likely to decline EH offer but the reasons for this are currently unclear.

Summary of approach

Behavioural insights practice enables us to understand that a range of factors influence our attitudes and behaviours. To assist with this project we wish to gain an understanding of the psychology and influences on behaviours which influence families' decisions to access Early Help.

Whilst our preferred approach would include outreach and direct engagement with a range of stakeholders, the outbreak of COVID-19 has required us to consider how best to secure good insight whilst necessarily reducing the risk of illness. Our plans and research methods (particularly those in the insight gathering phase) have therefore been deliberately designed to allow us to gather insight either digitally/remotely, operating within the constraints of the current lockdown, or face-to-face should the restrictions be eased. Naturally, we would keep activities under review and seek to alter, or mitigate, as the situation develops.

We propose to gain first hand insight by exploring the motivations of families which accept Early Help support through a range of methods, for example:

- Secondary analysis of NCC data relating to: prior experience of EH support and deprivation.
- Interviews with key stakeholders, including speaking directly to families who have accepted, as well as those who have declined, EH support.
- A review of current communication messaging and channels used to present EH support to families and information for practitioners and referrers to understand EH and recommending it.
- Observational review of practice – potentially this could include sampling some of the telephone referrals, video capture of service offer, video of triage meetings, content from body-worn cameras.

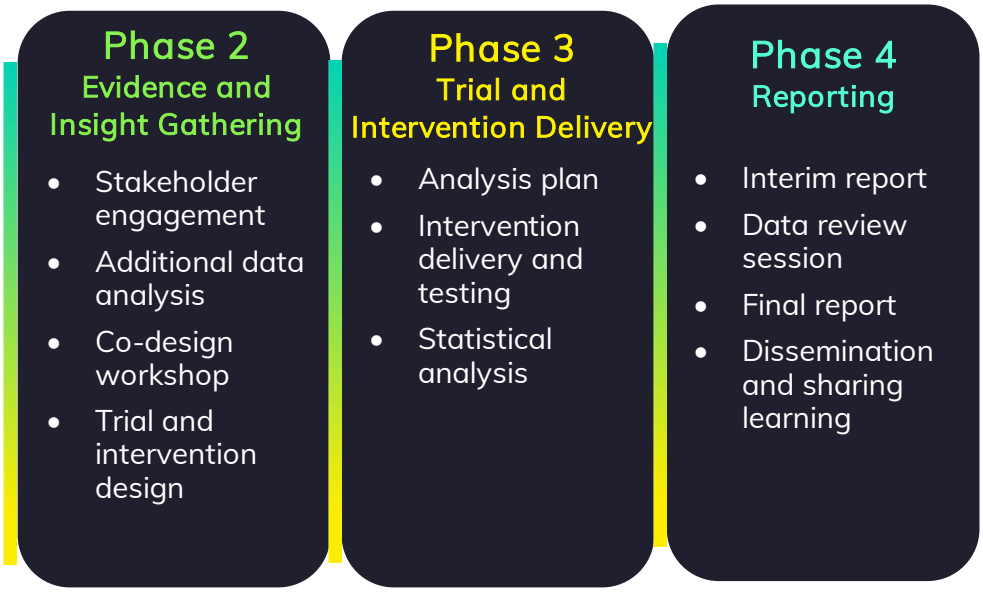
Once we understand the motivations behind why families decline the Early Help offer and what elements need to be challenged to increase uptake, we will seek to co-create an approach to address this with the team at NCC.

We will consider the various influences on behaviour and the potential approaches to improve the situation, bringing to bear an understanding of how dual processing within the brain can lead to actions or attitudes. Potential routes include:

- Peer pressure – and the use of social or cultural norms
- Messenger – the use of influencers in messaging approaches or channels
- Intrinsic and extrinsic incentives – and how they might be applied
- Defaults/heuristics – understanding how habits and beliefs can shape behaviour.
- Salience – looking at ways to secure 'cut through' with messaging and approaches.

Proposed methodology

Our approach to the project identifies four distinct stages (including the project scoping in phase 1, now complete). An iterative design methodology will ensure that each stage is informed by the previous. Our approach to the project design and delivery is based on co-production and working collaboratively with the NCC Early Help team in order to meet your expectations, support organisational learning and help build the Council's capacity and capability.



Following the completion of the scoping phase we will undertake further evidence and insight gathering in order to develop and refine the trial and intervention design.

1. Stakeholder engagement. We will conduct a series of interviews and, if it is feasible to do so, focus groups with key stakeholders in order to gain further insight into the motivations and psychological drivers underlying the behaviours among our target audience. This will help us to test and refine the underlying assumptions in our intervention ideas.

2. Further data analysis. Our initial review has highlighted a number of potentially significant factors relating to the take up or decline of Early Help. In this next phase we would propose to explore these in further detail, where possible overlaying other data sets in order to gain a clearer picture about use of the service. Particular areas we are keen to explore include whether decline rates are influenced by prior engagement with the service and any correlations related to deprivation or affluence.

3. Behavioural indicators. In developing a greater understanding of our target audiences, we have identified an emerging set of current and desired behaviours, which we will refine and build on as the project progresses.

4. Behavioural insights training. If practical, our team will deliver this lively, participatory workshop to members of the project team alongside the co-design workshop. Should COVID-19 mean that a face to face session is not appropriate we will adapt the approach to ensure that participants can secure their knowledge about the theory and application of behavioural insights via a digital platform.

5. Co-design workshop. We will work collaboratively with the NCC project team and key stakeholders in a co-design session to develop our experimental research method and interventions. We will explore the current behaviours and underlying motivations among our target audience, based on the insight gathered from our stakeholder engagement, set expectations and measurable goals of our intervention, as well as identify opportunities to influence behaviour change. The final part of the session will use a co-design process to develop a range of intervention ideas. The output of this workshop will be an agreed design of our intervention trial which will be tailored to address the psychological and behavioural drivers that contribute families declining the Early Help offer. If possible, we intend to host this workshop in person, however, a decision on the format is most appropriately deferred until we have greater clarity on the impact of COVID-19. Should it be appropriate to host this digitally our experienced facilitators will prepare a session which is both participatory, creative and informative for participants and the project as a whole.

Co-design and intervention development

Having developed a clear and evidence-informed understanding of our target audience and knowledge of their likely motivations and influences on behaviour, the next phase of the project will be to develop creative ideas and messaging that can be mobilised through a targeted intervention. This stage will see us consider what approaches that are most likely to resonate with target audiences.

Using a co-design process the project team will work collaboratively to develop intervention ideas.

Using a range of tools including the Cost/Value exchange matrix[4], we will explore various approaches to encourage behaviour change. Alongside nudges we would explore the potential to use 'shoves', 'hugs' and 'smacks' as part of our marketing mix. Together we will develop a range of new, creative approaches designed to deliver impact.

Our creative team will develop an overarching approach, develop key messaging and suggest suitable delivery channels. Drawing on our extensive experience of social marketing we will develop concepts for discussion based on the insight generated from the insight-gathering phase of the project.

[4] See: https://strategic-social-marketing.vpweb.co.uk/Key-Models.html

There is growing recognition of the value of engagement activities that adopt a behavioural analysis to promoting behaviour change, particularly in positively improving public health.

Three principles in particular can be seen as useful to this project, these are:

- Reframing and personalising the issue - making the issue relevant to target audiences.
- Rooting the behaviours/ inspiring change - defining the actions needed and modelling or facilitating these.
- Supporting change - extending the reach via services, networks and signposting.

Whilst we must always be alert to avoiding stereotypes or confirmation bias by incorrectly attributing actions or behaviours to a particular demographic, our insight phase will allow us to gain a rich understanding from which we can bring to life some of the characteristics of our target audience in order to inform relevant interventions.

Delivering our interventions

The earliest phase will have allowed us to pin point the primary location(s) for testing our intervention. Shaped by insight and co-design we will deliver interventions designed to resonate with the target audiences. Whilst the specifics of this audience cannot be predetermined, it is our intention to call upon the range of behavioural motivators, marketing and social psychological factors which will make the intervention most likely to have a positive impact.

Statistical power calculations and impact evaluation

Having reviewed your data and conducted our initial scoping, we have been able to consider sample sizes and undertake statistical power calculations and the feasibility of randomising our sample in order to test our intervention with an RCT. We performed sample size calculations to ensure our trial has sufficient statistical power to detect the effects of our intervention, as well as enable robust statistical inferences.

Our sample size calculations have been carried out in G*Power using two-tailed tests. For our calculations, we have followed the scientific consensus and used 0.9 statistical power level and the Type I error rate was set at 0.05. Group sizes are assumed to be the same, - i.e. treatment group n1 = N/2.

1. Baseline Assumptions (for police-only contacts)

- During the period 01 April 2019 to 31 Dec 2019, there were 1842 Early Help recommended cases that originated from the police.
- Average per month = 205 EH recommended cases originating from the police

- Of the 1842 EH recommended cases, 489 (27%) turned down the Early Help offer.
- Assume that the turn down rate (27%) stays constant in our control group.
- Treatment effect scenarios presented by low, medium and high effect sizes:
  - Low treatment outcome (3-percentage point reduction) set at 24% turn down rate;
  - medium treatment effect (6-percentage point reduction) set at 21%;
  - and high treatment effect (9-percentage point reduction) set at 18%.

Sample Size Calculations		
Effect Size	Required Sample	Estimated trial length
Low (24% turn down)	7228	3 years
Medium (21% turn down)	1732	36 weeks (9 months)
High (18% turn down)	734	14 weeks (3.5 months)

2. Baseline Assumptions (for all contacts)

- During the period 01 April 2019 to 31 Dec 2019, there were 3261 Early Help recommended cases.
- Average per month = 362 EH recommended cases
- Of the 3261 EH recommended cases, 678 (21%) turned down the Early Help offer.
- Assume that the turn down rate (21%) stays constant in our control group.
- Treatment effect scenarios presented by low, medium and high effect sizes:
  - Low treatment outcome (2-percentage point reduction) set at 19% turn down rate;
  - medium treatment effect (4-percentage point reduction) set at 17%;
  - and high treatment effect (6-percentage point reduction) set at 15%.

Sample Size Calculations		
Effect Size	Required Sample	length of trial
Low (19% turn down)	13700	3 years
Medium (17% turn down)	3291	9 months
High (15% turn down)	1402	4 months

Our conclusions from these sample size calculations, coupled with the insight from the scoping phase are:

a) We should focus our intervention on families where the initial contact source was the police
b) The anticipated time the trial would need to run for is 6 months, however we should be open to the possibility of extending that by a further 3 months if required.

To complement the available quantitative data, we propose to conduct some qualitative measures to help evaluate and verify the findings. Gathering qualitative data on perception measures and behavioural metrics will enable us to build a picture of actual and perceived change over time and understand how attitudes may have changed as a result of our intervention.

The precise approach to evaluation will be developed as part of the iterative project design; in order to ensure the method takes account of the actual intervention design and delivery plans. However, we anticipate that this will include a combination of output and outcome measures, combining quantitative and qualitative data.

Indicative timetable

Insight gathering and stakeholder engagement will be used to test our emerging hypotheses and the results, once analysed, will inform the co-design of our intervention(s). We anticipate a period of approximately six months will be required to test our intervention(s) but this will greatly depend on the iterative intervention design process and it may be necessary to extend this by a further three months.

The following timetable is indicative and likely to change as the project develops. As COVID-19 guidance is updated we suggest regular reviews of progress in order to ensure activities can be conducted in the most appropriate and timely way. Where possible activities will be conducted remotely.

- Research and Engagement Plan and research design – April 2020
- Insight gathering and stakeholder engagement – May 2020
- Analysis of evidence and insight – May-June 2020
- Co-design and Intervention development June – July 2020
- Intervention delivery – Sept 2020 – February 2021[5]
- Evaluation, analysis and reporting – March – May 2021.

[5] It may be necessary to extend the trial delivery time by a further three months