# Appendix One: Enhance Evaluation Questionnaire Analysis 

## 1. Introduction and overview

This document reports on the findings of the two-phase evaluation questionnaire completed by Enhance clients. Two validated tools were used to measure the difference Enhance had made to: physical and mental health and wellbeing; experience of person centred coordinated care. The questionnaire also collected information on three demographic categories, age, gender and ethnicity. The questionnaire was administered by delivery partners and was completed mainly face-to-face. Enhance clients were asked to complete a baseline questionnaire soon after they were referred to Enhance, and a follow up at around 2 months, or once the service ended. 42\% of clients completed a before (baseline), and 18\% a follow up questionnaire. In this appendix, Enhance clients who completed at least one questionnaire are referred to as 'respondents'. The two measures are:

## PROMIS-GHS ${ }^{1}$

This measures self-reported health-related quality of life and was administered at baseline and follow up. It consists of ten questions designed to measure self-reported physical and mental health, with two additional questions measuring overall health and social health. There are four PROMIS-GHS questions that produce a Global Physical Health score and four that produce a Global Mental Health score (both with a maximum score of 20). Higher scores reflect a better level of functioning. This report focuses on the scores collected at baseline, to provide an overview of Enhance respondents. Scores at baseline and follow up surveys are analysed to measure change over time.

## P3C-EQ ${ }^{2}$

This measures a person's experience of person centred coordinated care - this was taken as a snapshot and asked at follow up only. This tool includes 10 questions and measures the extent to which people who have accessed care services perceive it to be person centred (a maximum score of 30 , with a higher score indicating a more positive experience). This analysis also produces scores for validated sub-scales of questions which measure person centredness (maximum of 24) and care coordination (maximum score of 15). This report considers responses to individual questions, as well as the validated sub-scales. It is important to note that P3C was originally designed to measure a health-related intervention, of which all participants completed a care plan. On reflection, and following discussion with Professor Helen Lloyd, who was involved in creating the measure, future use of P3C should be tailored to ensure question wording is more explicitly linked to a third sector led offer.

Working with Leeds City Council on behalf of the Leeds Health and Care Partnership, Ipsos MORI recently administered a postal survey containing PROMIS-GHS and PC3-EQ questions to capture a snapshot of the Leeds population. This focused on the experience of three populations, including those living with frailty. For the purposes of analysis, Enhance respondents are treated as meeting the criteria based on PRISMA-7 screening questions and having some level of frailty. We have therefore compared this initial analysis across both measures to the 'living with frailty' cohort identified through the Ipsos MORI analysis ${ }^{3}$

This document analyses 173 baseline and $74^{4}$ follow up surveys - which were completed between June 2022 and January 2023. It considers individual and aggregated responses for both

[^0]measures, alongside a consideration of identified differences based on demographic subgroups (in some cases the numbers may be too small to report). Data was cleaned, prepared and analysis was carried out with the assistance of SPSS software. A more detailed discussion of the statistical tests carried out can be found below. Where possible cross analysis is carried out to identify any differences across demographic characteristics, though in some cases the numbers are too small.

## A few observations

When compared to the Leeds population survey 'living with frailty' cohort - the Enhance respondents score lower on PROMIS across all bar one category - and show lower overall physical and mental health functioning. This is indicative of Enhance reaching a particularly vulnerable population.

The follow up PROMIS-GHS responses return an improved score across all items, which suggests for this cohort at least, their mental and physical health functioning has improved across the duration of receiving support through the Enhance programme (initial statistic test indicates that change across all items is statistically significant at the 0.01 level).

Whilst only 28 respondents were aged under 64, they tended to report lower physical and mental health. Whilst we are unable to make generalisations at this stage this is something to explore through fieldwork and through future surveys, if there are enough younger respondents.

Many delivery partners reported either that the health of some Enhance clients was progressive and had deteriorated during the support, and/or that they felt the follow up surveys were sometimes completed too soon to show the full benefits of the support.

Enhance respondents scored notably higher across most items on the person centred care measure P3C-EQ, and across the person centred and care coordination subscale - which may be indicative of the service received directly through Enhance. The most positive scores were achieved around feeling perceived as a whole person and confidence in managing own health and wellbeing, with lower scores for needing to repeat information.

## 2. Survey Analysis

## Demographic characteristics

## Age range

Table 1 provides an overview of the age range of 168 responses received. Nearly two thirds of respondents are over 75 (at $57.8 \%$ ). The most numerous age group is between $74-84$, which makes up over a third of total respondents.

Table 1: Age range

| Age range | Number | Percentage |
| :--- | :--- | :--- |
| Under 50 | 3 | 1.8 |
| $50-64$ | 25 | 14.9 |
| $65-74$ | 40 | 23.8 |
| $75-84$ | 60 | 35.7 |
| 85 and offer | 40 | 23.8 |
| Totals | 168 | 100 |

## Gender

As can be seen in Table 2, respondents are more likely to be female than male (at $55 \%$ and $45 \%$ respectively).

Table 2: Gender

| Gender | Number | Percentage |
| :--- | :--- | :--- |
| Female | 94 | 55 |
| Male | 77 | 45 |
| Totals | 171 | 100 |

## Age range and gender

The proportion of men and women over the age of 75 was broadly the same ( $41.33 \%$ versus $39.36 \%$ respectively). Men were more likely overall to be in the younger old age group, with $22 \%$ being aged 64 or under, compared to $11.8 \%$ of women being from this age group.

## Ethnicity

162 respondents provided information on their ethnicity, of which 135 (83.3\%) described themselves as White UK and 27 (15.6\%) as being from a Black, Asian and Minority Ethnic background. A full breakdown can be found in Table 3.

Table 3: Ethnicity

| Ethnic group | Number |
| :--- | :--- |
| White English/Scottish/Welsh/Northern Irish/UK | 135 |
| White Irish | 1 |
| Black African/Caribbean | 7 |
| Other white background/mixed | 8 |
| Asian Indian/Pakistani | 11 |
| Totals | 162 |

## Health-related quality of life (PROMIS)

This section reports on responses to the PROMIS-GHS measure - beginning with an overview of responses to each question, followed by the global physical and mental health scores. A reminder that for each response a lower average (mean) score indicates a lower level of functioning.

Table 4: PROMIS-GHS summary of questions

## Overall health and wellbeing questions

In general, how would you rate your health?
How well do you carry out your social activities and roles?

## Physical health questions

In general, how would you rate your physical health?
To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries or moving a chair? In the past 7 days, how would you rate your fatigue on average?
Overall, in the past 7 days, how would you rate your pain?

## Mental health questions

In general, how would you rate your satisfaction with your social activities and relationships?
In the past 7 days, how often have you been bothered by emotional problems such as feeling anxious, depressed, or irritable?
In general, how would you rate your mental health, including your mood and your ability to think?
In general, how would you rate your quality of life?

## Health in general

Of the 169 people who provided a response, over three quarters ( $78 \%$ ) described their health as either 'fair' or 'poor' (an average score of 1.84 out of 5 ) - which is a higher proportion than the Leeds frailty population (at $68 \%$, with an average score of 2). Furthermore, Enhance respondents were a quarter more likely to describe their general health as 'poor', when compared to the Leeds frailty population (at 40.8\% compared to $30 \%$ ). No Enhance respondent described their health as 'excellent', 18.9\%\% described it as 'good' and 3\% 'very good' (Figure 1).

Figure 1: Rated general health (percentage)


Respondents aged between 65-74 were more likely to report their general health as poor (at $50 \%$ ), compared to those aged between $75-64$ and $85+$ (at $38 \%$ and $32.5 \%$ respectively).

Women were a quarter more likely to report their general health as 'poor', compared to men, at $46.2 \%$ compared to $34.2 \%$. $25 \%$ of women reported their health as 'fair', compared to $41.2 \%$ of men.

Figure 2: reported general health by gender (numbers)


## Change in general health recorded in the follow up survey

Of 69 valid responses provided in the follow up survey, assessed general health increased from an average of 1.86 to 2.03 out of a possible $5^{5}$.

## Rating physical health overall

Based on 164 responses to the question 'how would you rate your physical health' $84 \%$ (with an average score of 1.68 out of 5 ) described their physical health as 'poor' or 'fair' (this compares to $74 \%$ of the frailty group in the Leeds population survey). Only one person described their health as 'excellent' and 24 as 'good' (at $0.6 \%$ and $14.6 \%$ respectively).

Figure 3: Rating of physical health (percentage)


There is no real difference in score based on age group or ethnic group, with $50 \%$ of men and women reporting that their physical health was 'poor'.

## Change in physical health recorded in the follow up survey

Of 69 valid responses in the follow up survey, the assessed physical health functioning score increased from an average of 1.71 to 1.80 out of a possible $5^{6}$.

## Ability to carry out every day physical activities

Most of the 171 respondents, at $67.3 \%$, reported that they were only able to carry out every day physical activities either 'a little' or 'not at all', with nearly a quarter (24\%) reporting 'not at all'. This latter figure is significantly higher than the frailty cohort in the Leeds population survey where $5 \%$ responded 'not at all', with $41 \%$ reporting either 'a little' or 'not at all'. Only $1.8 \%$ of Enhance respondents reported they were able to 'completely' carry out every day physical activities (the average score was 2.19 out of 5).

[^1]Figure 4: Ability to carry out every day physical activities (percentage)


When we consider scores by gender, women are slightly more likely to report their ability to carry out every day activities as 'a little' or 'not at all' - at $68 \%$, compared to $66.2 \%$ for men. There was no identified difference by ethnicity.

## Change in ability to carry out every day activities recorded in the follow up survey

Of 71 valid responses in the follow up survey, assessed ability to carry out every day physical activities had increased from an average of 2.04 to 2.35 out of a possible $5^{7}$.

## Rating of fatigue

Nearly a third (31.9\%) of respondents rated their fatigue as 'severe' or 'very severe' (this compares to $25 \%$ of the frailty cohort in the Leeds population survey), with $14.4 \%$ rating it as 'mild' or 'none'. The most frequent response was 'moderate', which was reported by over half ( $53.6 \%$ ). The average overall score was 2.75 out of 5 .

Women were more likely than men to rate their fatigue as 'severe' or 'very severe', at 35.2\% compared to $24.8 \%$ of men, with nearly $61.3 \%$ of men rating their fatigue as 'moderate', compared to $57.3 \%$ of women. The Leeds population survey also found that women were more likely to describe themselves as fatigued, compared to men (across all categories). We found no difference based on ethnic group. People aged under 75 were over a third more likely to report their fatigue is 'severe' or 'very severe' at $40 \%$ compared to $25 \%$ of people over 75.

[^2]Figure 5: Rating of fatigue by age


## Change in fatigue ratings recorded in the follow up survey

Of 70 valid responses in the follow up survey, people were less likely to report high fatigue levels (with the score rising from 2.87 to 3.09 out of a possible 5). ${ }^{8}$

## Rating pain

$41.2 \%$ of respondents rated their pain in the range of $7-10$ over the last 7 days, with $12.3 \%$ rating it at 9 or more (the overall average score was 5.34 out of a possible 10). ${ }^{9}$

Figure 6: Rating of pain on scale of 1-10 (percentage)


[^3]Nearly a quarter ( $23 \%$ ) of respondents aged over 85 rated their pain in the past 7 days between 7 and 10 , this compares to $42.9 \%$ of the 28 respondents aged under 64 .

Women were a third more likely than men to rate their pain between 7 and 10 (at $48.3 \%$, the score for men was $32.4 \%$ ).

Figure 7: Rating of pain by gender


## Change in pain rating recorded in the follow up survey

Of 68 valid responses from those who completed a follow up survey, rating of pain decreased from an average of 5.51 to 4.93 out of a possible $10^{10}$.

## Rating of social health

A high number of respondents (82.9\%) rated their ability to carry out usual social activities as 'fair' or 'poor', with $44.7 \%$ rating it as 'poor' - the average score was 1.77 out of 5 . Only $3 \%$ rated their ability to carry out social abilities as 'very good' or 'excellent' ( $14.1 \%$ rated it as 'good). As with other items, these figures are significantly higher than for those living with frailty in the Leeds population survey, where $57 \%$ rated this item as 'fair' or 'poor' ( $20 \%$ as 'poor').

[^4]Figure 8: Ability to carry out social activities (percentage)


There was not much difference between men and women, though men were slightly more likely to report that their ability to carry out usual social activities was 'fair' or 'poor' (at 84.4\%, compared to $81.7 \%$ of women). There was no real difference by ethnic group.

The oldest and youngest age groups were more likely to rate this item as 'fair' to 'poor' (at 89\% for those under 65 and those over 85). This was closely followed by those between 65-74 (85\%) with those aged 75-84 at 73.3\%.

## Change in social health recorded in the follow up survey

Of 69 valid responses in the follow up survey, the average score on ability to carry out social activities had increased from an average of 1.74 to 2.00 out of a possible $5^{11}$.

## Rating satisfaction with social activities and relationships

In response to the question 'how would you rate your satisfaction with social activities and relationships?' nearly four fifths ( $79.4 \%$ ) of the 170 respondents reported this as either 'fair' or 'poor', with only $4.1 \%$ describing it as 'very good' or 'excellent' ( $16.5 \%$ reported that it was 'good'). The overall average score out of 5 is 1.81 . The score for the Enhance respondents was far lower than that reported by the frailty group in the Leeds population survey (with $51 \%$ rating this item as 'fair' or 'poor'). There was no real difference by ethnic group.

Considering age, again - those aged under 64 returned the lowest score, with $89.3 \%$ rating their satisfaction with social activities and relationship as 'poor' or 'fair'. Those aged between 75-84 were the least likely to report this, though $70 \%$ still rated this as 'poor' or 'fair' ( $82 \%$ of those aged 85 or over and 65-74 rated this as 'poor' or 'fair').

When gender is considered, women were slightly less likely to rate their satisfaction with social activities and relationships as poor, compared to men (at $43 \%$, compared to $46 \%$ of men).

[^5]Figure 9: Satisfaction with social activities and relationships (percentage)


## Change in satisfaction recorded in the follow up survey

Of 70 valid responses in the follow up survey, satisfaction with social activities and relationships the mean score increased from 1.80 to 2.09 out of a possible $5^{12}$.

## Experiencing emotional problems

Over three quarters of the 169 respondents reported that they were at least 'sometimes' bothered by emotional problems such as feeling anxious, depressed, or irritable, with $46.7 \%$ experiencing this 'often' or 'always' (a fifth reported that were either 'rarely' or 'never' bothered) - the average score out of 5 was 2.64. This was again higher than the Leeds frailty cohort, where $26 \%$ reported feeling bothered by emotional problems 'often' or 'always'.

Figure 10: Bothered by emotional problems (percentage)


Emotional
problems
$\square$ Always
Often
Sometimes
Rarely
Never

[^6]Men were less likely to report being bothered by emotional problems than women, with 23.4\% reporting that they were 'rarely' or 'never' bothered, compared to $17.9 \%$ of women. On the other hand, $43.9 \%$ of men said they were 'often' or 'always' bothered by emotional problems, compared to $50 \%$ of women. This difference is reflected in the Leeds population survey, where $18 \%$ of women reported that they were 'often' or 'always' bothered, compared to $14 \%$ of men.

## Change in experiencing emotional problems recorded in the follow up survey

Of 70 valid responses in the follow up survey, respondents were less likely to report that they were bothered with emotional problems with the average score increasing from 2.76 to 3.04 out of a possible $5^{13}$.

## Rating of mental health

Respondents were asked to rate their mental health, including mood and ability to think. Over half of respondents (55.5\%) rated their mental health as either 'fair' or 'poor', which again was higher than the frailty cohort reported through the Leeds population survey. A third of respondents rated their mental health as 'good' (at 33.5\%), with $11 \%$ rating their mental health as 'very good' or 'excellent' (this compares to $28 \%$ of the frailty population in the Leeds population study). The average score was 2.38 out of a possible 5 .

Figure 11: Mental health rating, including mood and ability to think


Women were slightly more likely than men to rate their mental health as 'fair' or 'poor', at $56.2 \%$, compared to $54.7 \%$ for men. No difference was identified by ethnic group.

Looking across age groups those under 64 were most likely to rate their mental health as 'fair' or 'poor', at $78.6 \%$. This compares to $68.6 \%$ of those aged $65-74,53 \%$ of those aged $75-85$ and $43.6 \%$ of those over 85 (to note - the Leeds population study found that adults over 65 were the most likely to report their mental health as 'good').

[^7]
## Change in mental health recorded in the follow up survey

Of 68 valid responses in the follow up survey, respondents scored a mental health higher rating with the average score increasing from 2.37 to 2.65 out of a possible $5^{14}$.

## Rating quality of life

The quality of life measure had a lower response rate than the other items, at 151. Nearly three quarters of respondents reported that their quality of life was either 'poor' or 'fair' ( $71.5 \%$ ) - with an average score of 2.05 out of a possible 5 . This was a lower score than the Leeds population survey frailty cohort, $52 \%$ recorded this item as 'poor' or 'fair', with an average score of 2.53. A quarter of Enhance participants assessed their quality of life as 'good'. Only $3.3 \%$ of respondents described their quality of life as 'very good' or 'excellent' (with only one rating it as 'excellent').

Figure 12: Reported quality of life


Women were slightly less likely than men to describe their quality of life as 'fair' or 'poor' (at 70\% compared to $73.2 \%$ ).

Of the 26 respondents aged under 65 nearly all ( $92.3 \%$ ) rated their quality of life as either 'fair' or 'poor', this compares to $74.2 \%$ of those aged $65-74,59 \%$ of those aged $75-84$ and $73 \%$ of those aged 85 or over.

## Change in quality of life recorded in the follow up survey

Of 62 valid responses in the follow up survey, assessed quality of life increased from an average of 2.06 to 2.24 out of a possible $5^{15}$.

## PROMIS-GHS - Physical Health raw scores

There are four PROMIS-GHS questions designed to produce a Global Physical Health score (each question scores a 5 for excellent and 1 for poor - with a maximum total raw score of 20).

[^8]Respondents need to have answered all four questions for a score to be generated (where this is not the case - the respondent is excluded). Higher scores reflect a better level of functioning.

For Enhance respondents, of 159 valid responses the average score was 9.4 (with a median score of 9). The most frequent score was 9 (for $13.3 \%$ of respondents). Just over a quarter $(27.7 \%)$ of respondents scored 7 or under (a total of 4 respondents scored 15 or above, with 1 scoring the maximum number of 20 ). The total score is lower than the living with frailty cohort for the Leeds population survey (at a median of 10.23), suggesting Enhance respondents at baseline had a lower level of physical functioning.

Women overall had a lower score, with over three quarters recording a score of 10 or less, compared to $59.4 \%$ for men (based on responses to individual items, this was expected).

## Follow up raw physical health score

Based on 68 respondents who completed all 4 items for baseline and survey follow up, rated physical health functioning increased from an average total score of 9.43 to 10.15 - a $7.6 \%$ increase (the median score increased from 9 to 10 ) ${ }^{16}$. The number of higher scores (14+) remains relatively small - constituting $11.8 \%$ for respondents at follow up, but this compares to a score of $6 \%$ for this cohort at baseline. This feels like a promising upward direction of travel, particularly considering the identified level of frailty of Enhance clients.

Considering gender, physical health raw scores and reported improvement was broadly similar, though women showed more improvement from baseline to follow up (with the score increasing by $10.7 \%$, compared to $5.2 \%$ for men).

When White UK and Black, Asian and Minority Ethnic group scores were compared, the latter showed markedly less improvement at follow up. Both groups had a broadly similar score at baseline, with both scoring 9.4, yet at follow up scores for the White UK group rose to an average of 10.24, whereas Black, Asian and Minority Ethnic respondents recorded a score of 9.6.
However, a significant caveat here is that only 9 of the latter group completed a baseline and follow up survey, meaning this has likely occurred by chance. It is referred to here as something to potentially observe.

## PROMIS-GHS - Mental Health raw scores

Four PROMIS-GHS questions are used to measure Global Mental Health and generate a raw summed score. Higher scores reflect a better level of functioning, with a maximum of 20 points possible. As with the raw mental health score, only participants who respond to all 4 questions are included in the analysis.

Of 150 valid responses, Enhance respondents scored an average of 8.9, with a median score of 9 (so the mean is slightly lower than the global physical health score). Again, this score is lower than the Leeds population survey living with frailty group, which returned a median score of 10.42. Seven Enhance respondents scored 15 or more (with 18 being the highest score reached by one respondent). The most frequent reported score was 8 (at 14\%). This suggests the Enhance cohort have a lower level of mental health functioning, compared to the Leeds population survey frailty group.

## Follow up raw mental health score

Based on 61 respondents who completed all 4 items for baseline and survey follow up questions, respondents had a more pronounced higher average total score for mental health functioning when compared to physical health functioning, increasing from 9 to $10.7^{17}$. As with the physical

[^9]health scores - this improvement is assessed as promising, with the proportion of higher scores (over 14) increasing from $4.9 \%$ at baseline nearly fourfold, to $16.4 \%$ at follow up.

Women recorded a lower score at both baseline and follow up (an average of 8.63 and 9.3 respectively, compared to a baseline score of 9.3 and follow up of 11.1 for men. Though this analysis cannot offer specific reasons for the different baseline scores - the surveys show an increased score for both, though the reported improvement is starker for men, who achieved a $20 \%$ increased score, compared to a $7.7 \%$ increase for women.

With regard to age, Enhance has potentially had a more pronounced impact of younger older people. A binary variable was developed to explore scores for those aged under and over 75. Those under 75 returned a lower mental health functioning score, at an average of 7.85 , compared to 9.6 for those over 75 . Follow up scores showed an improvement across both age groups, increasing to 9.6 (a $22.9 \%$ increase) for those aged under 75 and 11.2 (16.7\% increase) for those aged over 75. An analysis by ethnicity was not carried out, as Black, Asian and Minority Ethnic groups only make up 7 responses.

## Delivering Person Centred Coordinated Care (P3C-EQ) ${ }^{18}$

## Overview

The person centred coordinated care measure contains 10 items (a total of 13 questions - as one is broken down into 4 which explores care plans - which is averaged when calculating the final score). This measure was used to find out the extent to which Enhance respondents assessed that they had received person centred care. The question was asked in the follow-up questionnaire after the client had received Enhance services. Response options to each question are allocated a value score which are then summed to provide a total person centred care score. Validated sub-sets of questions have also been summed to produce separate subscale scores (person centred and care coordination subscales.

It is important to note that responses can not necessarily be attributed to the Enhance programme, but as respondents received support through this programme, it provides some reflection on how that has been perceived when considering person centred care more generally.

Table 5: P3C-EQ items

## P3C-EQ-QA questions

Did you discuss what was most important for you in managing your own health and wellbeing?
Were you involved as much as you wanted to be in discussions about your care?
Were you considered as a 'whole person' rather than just a disease/condition in relation to your care?
Were there times when you had to repeat information that should have been in your care records?
Is your healthcare joined up in a way that works for you?
Have you had enough support from the healthcare staff to help you manage your own health and wellbeing?
To what extent do you receive useful information at the time you need it to help you manage your health and wellbeing?
How confident are you that you can manage your own health and wellbeing?
Do you have a single professional (or several professionals) who takes responsibility for coordinating your care across the services that you use?

[^10]Care plan (calculated from the average of the questions listed below):

- Do you have a care plan (or a single plan of care) that takes into account all your health and wellbeing needs?
- Is this care plan (or plan of care) available to you?
- To what extent have you found your care plan (or plan of care) useful for you to manage your health and wellbeing?
- To what extent do all the professionals involved in your care appear to be following the same care plan (or plan of care)?


## Care services used in the last month

Of 63 responses, people saw an average of 2.5 care services in the last month, with seven reporting they had seen 4 or more services ( $11.1 \%$ ). 46 respondents reported being supported by the voluntary sector, which will likely include the Enhance provider, 38 were supported by a nurse. Of the 17 who reported visiting a hospital, $29 \%$ had done so as an in-patient. Whilst mental health functioning, as measured through PROMIS was assessed as low - only 9 respondents reported accessing mental health services over the last month.

A quarter of respondents reported that they had received no care services. It is not clear if this is due to respondents completing the survey after the Enhance support ended, or if there was some ambiguity about what constituted a 'care service' - this will be further explored through qualitative interviews with delivery partners and participants.

Table 6: Care services used in the past month (from 63 responses)

| Service | Number |
| :--- | :--- |
| GP services | 25 |
| Social services | 7 |
| Nurse | 38 |
| Voluntary sector | 46 |
| Hospital <br> inpatient/outpatient | 17 (5 as in-patient) |
| Agency support | 13 |
| Allied health | 7 |
| Mental health | 9 |

## Person centred subscale scores

The person centred subscale score is based on responses to 8 PC3-EQ questions ( $1,2,3,4,5,8,9,10$ ), a maximum score of 24 points can be achieved. Of 57 valid responses, Enhance respondents scored an average of 15.3 (a median score of 15). The average score was similar for men and women, As with the total PC3-EQ score, Enhance respondents scored much higher than the frailty cohort of the Leeds population survey (which returned a median score of 11.75).

Figure 13: Person centred subscale scores


## Care coordination subscale scores

The care coordination subscale score is based on responses to five $(5,6,7,8,9){ }^{19}$ of the P3C-EQ questions. It uses the same scoring principle as the total score for person centred coordinated care, with a maximum score of 15 points. The score, based on 53 valid responses, was an average of 7.1 (median 7). As with the other P3C-EQ measures - this is much higher than the Leeds frailty population score (median score of 4.82). There is a wide spread of scores, with 16 scoring 4 or less and 13 scoring 10 or more (the highest score, recorded for two respondents, was 14). Though the numbers are small, and it should not be compared to the population level survey administered by Leeds - it is indicative of a positive experience with Enhance, which will be further explored when we speak to Enhance clients.

Reflecting on further discussions with Helen Lloyd, who was involved in creating P3C, and giving regard to the fact that beneficiaries did not necessarily have a care plan (in the original P3C cohort, all beneficiaries were expected to have a care plan - which is why those who responded ' $n$ ' received a ' 0 ' score), it is necessarily to give caution that the care coordination score will likely be slightly lower than we might expect. If P3C is used in the future, it is recommended that this question wording is changed to reflect any actual plan that is developed, with additional wording to make clear what this means ${ }^{20}$.

[^11]Figure 14: Care coordination subscale scores


## Person centred coordinated care questions

This section considers each of the ten individual P3C-EQ questions that are used to calculate the person centred coordinated care score (important to note that the Leeds population survey only asked these questions to people who reported receiving care in the last year).

Discussing what is important in managing health and wellbeing
Respondents were asked to rate whether they discussed what was most important to them when managing their health and wellbeing. Of 61 valid responses, the average score out of a possible 3 was 1.88 (with a median score of 2 ) - the Leeds frailty population returned an average score 1.35. 29.5\% of Enhance respondents returned a maximum score of 3 - see Figure 15). There was no significant difference across age groups.

Figure 15: Discussing what is important in managing health and wellbeing


## Involved in decision making about care

Of 61 valid responses, Enhance respondents scored an average of 2 out of 3 when asked if they were involved as much as they wanted to be in decisions about their care, which is again higher than the Leeds population survey 'living with frailty' group (giving regard to the aforementioned caution). Three quarters of respondents felt that they were 'always' or 'more often than not' involved, just only 2 reporting that they were 'never' involved.

Figure 16: Involved in decision making about care


## Being considered as a whole person

Whilst based on 59 scores, answers to the question about whether Enhance respondents perceived that they were considered as a whole person show a promising experience, for this cohort at least, with a mean score of 2.59 out of a possible 3 and $69.5 \%$ achieving the maximum score (the mean score for the Leeds frailty cohort was 1.75 ). Only 1 respondent reported that they were 'never' considered as a whole person (4 people said they were considered 'to a certain extent').

Figure 17: being considered a whole person


## Needing to repeat information

The question "were there times when you had to repeat information that should have been in your care records?" returned a lower score than other items, returning an average score of 1.59 across the 59 valid responses. This was a lower level than that reported by the living with frailty cohort in the Leeds population survey - which achieved a mean score of 1.69 - a reminder that higher scores indicate a lower likelihood of needing to repeat information). A third of respondents reported that they had to repeat information either 'always' or 'more often or not.' It is worth noting that one in ten did not feel this question was relevant - which means they scored 0 . As we are unable to unpick the reasons for this, we cannot comment on the reasons for relative frequency of this response.

Figure 18: Needing to repeat information


## Joined up healthcare

60 people provided a response to whether they felt their healthcare was joined up in a way that worked for them, achieving a mean score of 1.92 (as with the need to repeat information - this achieved a lower score than the frailty cohort of the Leeds population survey). $68.3 \%$ reported that they felt their healthcare was joined up at either 'always' or 'more often than not, with $20 \%$ agreeing that it was 'to some extent'.

Figure 19: Healthcare feels joined up


## Engaging with professionals

Of 61 responses to the question "Do you have a single professional (or several professionals) who takes responsibility for coordinating your care across the services that you use?" over a third of respondents ( $38.3 \%$ ) - said that they did not know. This suggests some level of confusion from respondents about who they are working with, this may also account for the relatively high number of respondents who said they had to repeat information at least sometimes.

## Care plans

Of 57 responses only 15 reported that they had a care plan, with a further $42 \%$ of respondents reporting that they did not know whether they had a care plan, which is perhaps a concerning finding. Of the 15 who reported having a care plan, less than half reported that they always found it useful $(40 \%, n-6)$, though none reported that the care plan was not useful. Due to the low response rate, this item should be treated with caution and, based on feedback, it may be that there was some confusion around what was meant by the term 'care plan' in the context of Enhance.

## Managing own health and wellbeing .

Of the 61 Enhance respondents who provided a valid response, only $6.5 \%$ reported that they 'do not need support'. $46 \%$ reported that they either 'always' or 'often' have enough support to help them manage their health and wellbeing. Two respondents reported that they had no support. $42.6 \%$ report that they 'sometimes' had enough support - which may suggest a slight gap in this area. The mean score was 1.68 out of 3 , which is higher than the Leeds population mean score for the living with frailty group, at 1.3.

Figure 20: Support to manage own wellbeing


[^12]
## Receiving useful information

Of 60 responses, over a quarter ( $28.3 \%$ ) reported that they 'always' receive enough information, the most frequent response was that useful information was provided 'often' (at 36.7\%). Two respondents reported that this question was 'not relevant'. Over a quarter of participants (28.3\%) overall said they either 'do not receive', or only 'sometimes' receive useful information, which compares to just over half of the Leeds living with frailty population (again - the low numbers mean direct comparisons should be treated with caution). The overall mean score was 1.8 out of a possible 3.

Figure 21: receiving useful information


$\quad$| Receive useful |
| :--- |
| information |

$\square$ I always receive enough
information
I do not receive any
information
$\square$ I often receive enough
information
I receive too much
information
I sometimes receive enough
information
Not relevant

## Confidence managing own health and wellbeing

Of 70 responses confidence in managing own health and wellbeing achieved an average score of 1.8 out of 3 , with $65.7 \%$ reporting that they felt 'somewhat' or 'very' confident managing their own health and wellbeing (generating a slightly higher score than the Leeds living with frailty cohort, at 1.75).

Figure 21: Confidence in managing own health and wellbeing (3 is very confident)


## Methodological overview

The statistical tests reported are drawn from the results of completion of the PROMIS assessment tool across two timepoints (at the start of the Enhance intervention, and either at the end, or following a period of involvement - which varied across the delivery partners). The analysis is based on assessed change from a sample of 74 people who completed the survey at both timepoints.

As most of the responses reach less than 70, some caution should be exercised - as we have lower levels of confidence that this sample is comparable to the wider population (i.e., when compared to all adults living with frailty across Leeds).

Based on carrying out tests of normality across the data (Kolmogorov-Smirnov and Shapiro-Wilk), the assumption of normality is not met (which is likely due to the small sample size). This meant that non parametric tests were carried out (Spearman rho). Cohen d was used to calculate effect size, with all data showing a large or medium association. A one-tailed test was used as it has higher power than a two-tailed test, and we have a strong reason to expect an effect in a positive direction (e.g., the mean score will increase following the Enhance intervention).

Data was analysed using IBM SPSS and the level of statistical significance chosen for this report is $p \leq .01$, that is, a statistically significant change is indicated by a probability value that is less than or equal to 0.01 . In other words, we are 99 per cent confident that the changes reported here are not due to statistical error.


[^0]:    ${ }^{1}$ Patient-Reported Outcomes Measurement Information System PROMIS scoring system
    ${ }^{2}$ Person Centred Coordinated Care Experiences Questionnaire: P3CEQ
    ${ }^{3}$ PRISMA (Programme of Research on Integration of Services for the Maintenance of Autonomy) https://www.cgakit.com/fr-1-prisma-7 This is based on an assessment by the Enhance programme team, giving regard to the programme eligibility criteria- respondents were not asked to complete a PRISMA-7 screening tool - so this should be treated with caution
    ${ }^{4} 64$ completed the P3C follow up. One participant completed a follow up questionnaire only.

[^1]:    ${ }^{5}$ Correlation is significant at the 0.01 level, $n=69, r=.644$ (1 tailed, Pearson Correlation)
    ${ }^{6}$ Significant at the 0.01 level, $n=69, r=.671$ (1 tailed, Pearson Correlation)

[^2]:    ${ }^{7}$ Significant at the 0.01 level, $N=71, r=.706$ (1 tailed, Pearson Correlation)

[^3]:    ${ }^{8}$ Significant at the 0.01 level, $\mathrm{N}=70, r=.706$ (1 tailed, Pearson's correlation)
    ${ }^{9}$ The pain rating scores are recoded into 5 categories to calculate the global health score the full 10 score is considered here.

[^4]:    ${ }^{10}$ Significant at the 0.01 level, $N=68, r=.589$ (1 tailed, Pearson's Correlation)

[^5]:    ${ }^{11}$ Significant at the 0.01 level, $N=69, r=.622$ (1 tailed, Pearson's Correlation)

[^6]:    ${ }^{12}$ Significant at the 0.01 level, $\mathrm{N}=70, \mathrm{r}=.481$ (1 tailed, Pearson's Correlation)

[^7]:    ${ }^{13}$ Significant at the 0.01 level, $N=70, r=.628$ (1 tailed, Pearson's Correlation)

[^8]:    ${ }^{14}$ Significant at the 0.01 level, $n=68, r=.633$ (1 tailed, Pearson's Correlation)
    ${ }^{15}$ Significant at the 0.01 level, $n=62 r=.440$ (1 tailed, Pearson's Correlation)

[^9]:    ${ }^{16}$ Significant at the 0.01 level, $N=68, r=.776$ (1 tailed, Pearson Correlation)
    ${ }^{17}$ Correlation is significant at the 0.01 level, $N=61, r=.615$ (1 tailed, Pearson Correlation)

[^10]:    18 Person Centred Coordinated Care Experiences Questionnaire: P3C-EQ

[^11]:    ${ }^{19}$ Average score from four care plan questions Q7a, Q7b, Q7c, Q7d
    ${ }^{20}$ This approach has been approved by the designer of P3C, in recognition that different language will be familiar to clients who are accessing third sector led support. It has been suggested that adapted wording is shared with the P3C team, so that they can share this with similar non health related organisations in the future.

[^12]:    Support to manage
    health and wellbeing
    I always have enough support
    I do not need support
    I often have enough support
    I've had no support
    l've sometimes had enough
    support
    Not relevant

