

Enhance programme learning and evaluation findings: Questionnaire Analysis

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Enhance



Summary

ENHANCE IS REACHING A PARTICULARLY VULNERABLE POPULATION:

88% are classed as having a frailty risk

97% have at least one long term condition.*



IMPROVING SOCIAL HEALTH

Satisfaction with social activities jumped by

19.4%

Participants reporting “good to excellent” satisfaction level jumped by

57.5%

Improvement in social health scores improved by

13.7%



IMPROVING MENTAL WELLBEING

Mental health functioning improved by

9.6%

Respondents reporting “poor” mental health reduced by

30%

Respondents “always” bothered by emotional problems reduced by

35%



IMPROVING GENERAL HEALTH

General Health Boost: Participants were 18% less likely to rate their health as “poor,” and 33% more rated their health as “good to excellent”.

Participants were a **quarter less likely to rate quality of life as “poor”** and 13% more likely to rate it as “good” to “excellent”

Reports of **severe fatigue decreased by 28%**



* PRISMA-7 was only completed by participants from year 2 onwards, so number of completions are lower.

The follow up PROMIS-GHS responses return an improved score across all items, which suggests for those who completed the questionnaire at least, their mental and physical health functioning improved across the duration of receiving support through Enhance (statistical tests indicate that change across all items are significant at the 0.01 level). Measures based on social health show the most significant improvement – suggesting Enhance is particularly effective at tackling isolation through increased social interaction. Though loneliness was not measured directly – both staff and beneficiaries reported this outcome through qualitative fieldwork.

Introduction and overview

This document reports on the findings of a two-phase evaluation questionnaire completed by Enhance participants that assessed frailty risk (PRISMA-7), health related quality of life (PROMIS), demographic profile (age, gender, ethnicity) and long term health conditions (see Box 1). Participants completed a baseline questionnaire soon after they were referred to Enhance, and a follow up at various time points, or once the service ended. It is based on 503 baseline and 248 follow ups, completed between June 2022 and May 2024. Data was cleaned, prepared and analysis was carried out with the assistance of statistical software SPSS.

Box One: Overview of Enhance measures

PROMIS-GHS: This measures self-reported health-related quality of life. 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.

PRISMA-7: Program of Research to Integrate Services for the Maintenance of Autonomy is an instrument used to identify frailty in older adults. It contains 7 questions which have a yes/no response. A score of 3 or more yes answers mean the person indicates an increased risk of frailty.

Survey Analysis

Age range

Table 1 provides an overview of the age range of 483 responses received. As can be seen, the majority of participants were aged 75 and over, at 63%, with 18.2% aged under 65 (a similar proportion to the main Enhance referrals, based on monitoring returns).

Table 1: Age range

Age range	Number	Percentage
Under 50	14	2.9
50-64	74	15.3
65-74	91	18.8
75-84	182	37.7
85 and offer	122	25.3
Totals		100

Gender

Respondents are more likely to be female than male (at 56.4%, compared to 43.6%). Based on the most recent monitoring returns, this is a similar proportion to all Enhance participants.

Table 2: Gender

Gender	Number	Percentage
Female	213	56.4
Male	276	43.6
Totals	399	100

Ethnicity

474 respondents provided information on their ethnicity, of which 88.4% described themselves as White UK (the number of participants in this category across the whole Enhance cohort between July 2022 and October 2024 is 1,748).

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 493 people who provided a response over three quarters (81.9%) described their health as either “fair” or “poor”. Only 3 described their health as “excellent”, 15.2% described it as “good” and 2.4% “very good”.

Change in general health recorded in the follow up survey

Of 248 valid responses provided in the follow up survey:

- Assessed general health increased from an average of 1.73 to 1.89 out of a possible 5 (an 8.5% increase)¹.
- Respondents were 18% less likely to rate their general health as “poor” (44.4 down to 36.3) and over a third more likely to rate it as “good” to “excellent” (from 15.7 to 21.7%).

Rating physical health overall

Based on 486 responses to the question ‘how would you rate your physical health’ 85% described their physical health as “poor” or “fair” Only three described their health as “excellent” and 61 as “good” (at 0.6 and 12.6% respectively).

Change in physical health recorded in the follow up survey

Of 242 valid responses to the follow up survey:

- The assessed physical health functioning score increased from an average of 1.63 to 1.74 out of a possible 5, a 6.7% increase².
- Respondents were 15.5% less likely to rate their physical health as “poor” (53.5 to 45.2%).

Ability to carry out every day physical activities

Of 492 respondents, 68.9% reported that they were only able to carry out every day physical activities either “a little” or “not at all”, with just over a fifth (21.3%) reporting “not at all”. Only 1.8% of Enhance respondents were able to “completely” carry out every day physical activities.

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

Of 248 valid responses to the follow up survey:

- Assessed ability to carry out every day physical activities had increased from an average of 2.11 to 2.27 out of a possible 5, an increase of 7.5%³.
- Respondents were 26% less likely to report “not at all” (from 27.4 to 20.2%).

1 Positive correlation is significant at the 0.01 level, n = 248, r = .683, Df = 246, (1 tailed, Pearson Correlation)

2 Significant positive correlation at the 0.01 level, n = 242, r = .688, Df 240, (1 tailed, Pearson Correlation)

3 Significant positive correlation at the 0.01 level, N = 248, r = .693, Df 246 (1 tailed, Pearson Correlation)

Rating of fatigue

Over a third (34.5%) of 484 respondents rated their fatigue as “severe” or “very severe”, with 18% rating it as “mild” or “none”. The most frequent response was “moderate”, which was reported by just under half (47.5%).

Change in fatigue ratings recorded in the follow up survey

Of 248 valid responses in the follow up survey:

- Respondents were less likely to report high fatigue levels (with the score rising from 2.76 to 2.96 out of a possible 5), an increase of 7%.⁴
- Rating of severe to very severe fatigue reduced 28% (34.4 to 24.8% from 56 to 47).

Rating pain

37.8% of 474 respondents rated their pain in the range of 7-10 over the last 7 days, with 8% rating it at 9 or more).⁵

Change in pain rating recorded in the follow up survey

Of 238 valid responses from those who completed a follow up survey the pain score improved, from an average of 2.52 to 2.65 (remember that a higher score indicates lower levels of pain).⁶

Rating of social health

Over four fifths (82.1%) of the 491 respondents reported their ability to carry out usual social activities as either “fair” or “poor”, with only 3.4% describing it as “very good” or “excellent”.

Change in social health recorded in the follow up survey

Of 247 valid responses to the follow up survey:

- The average score on ability to carry out social activities had increased from an average of 1.67 to 1.90 out of a possible 5, an increase of 13.7%.⁷
- Respondents were 28% less likely to rate usual as “poor” (49 to 35.1%) and 70% more likely to report “good” to “excellent” (13.3 to 22.6%).

Rating satisfaction with social activities and relationships

Over three quarters of the 493 respondents (79.5%) rated satisfaction with social activities and relationships as “fair” or “poor”, with nearly half (48.9%) rating it as “poor”. Only 4% rated satisfaction with social activities as “very good” or “excellent”.

Change in satisfaction recorded in the follow up survey

Of 248 valid responses to the follow up survey:

- The average score increased from 1.7 to 2.03 out of a possible 5. This showed the starkest increase across all variables, at 19.4%.⁸
- Respondents were 36% less likely to rate satisfaction as “poor” (52.8 to 33.7%) and 57.5% more likely to rate it as “good” to “excellent” (18.1 to 28.5%).

4 Significant positive correlation at the 0.01 level, N = 248, $r = .710$, Df 246 (1 tailed, Pearson's correlation)

5 The pain rating scores are recoded into 5 categories to calculate the global health score the full 10 score is considered here.

6 Significant positive correlation at the 0.01 level, N = 238, $r = .699$, Df 236 (1 tailed, Pearson's Correlation)

7 Significant positive correlation at the 0.01 level, N = 247 $r = .629$ Df 245 (1 tailed, Pearson's Correlation)

8 Significant positive correlation at the 0.01 level, N = 248 $r = .527$, Df 246 (1 tailed, Pearson's Correlation)

Experiencing emotional problems

Over four fifths (81.9%) of the 487 respondents reported that they were at least “sometimes” bothered by emotional problems such as feeling anxious, depressed, or irritable, with 41.7% experiencing this “often” or “always” (18.1% reported that were either “rarely” or “never” bothered).

Change in experiencing emotional problems recorded in the follow up survey

Of 248 valid responses to the follow up survey:

Respondents were less likely to report that they were bothered with emotional problems with the average score increasing from 2.69 to 2.93 out of a possible 5, an increase of 9%⁹.

Respondents were 35% less likely to report that they were “always” bothered by emotional problems (8.5 down to 5.5%).

Rating of mental health

Respondents were asked to rate their mental health, including mood and ability to think. Over three fifths of the 481 who provided a response (64%) rated their mental health as either “fair” or “poor”, with a quarter reporting it as “poor”. 10.4% rating their mental health as “very good” or “excellent”.

Change in mental health recorded in the follow up survey

Of 238 valid responses in the follow up survey:

- Respondents’ mental health score improved (with the average score increasing from 2.12 to 2.29 out of a possible 5, an increase of 8%)¹⁰.
- Respondents were 30% less likely to rate their mental health as “poor” (27.3 to 18.9%), and one fifth more likely to rate it as “good” or “excellent 31.6 to 37.9%).”

Rating quality of life

The quality of life measure had a lower response rate than the other items, at 401. 69.1% respondents reported that their quality of life was either “poor” or “fair”. Just over a quarter (25.4%) of Enhance participants assessed their quality of life as “good”. Only 5.5% of respondents described their quality of life as “very good” or “excellent”.

Change in quality of life recorded in the follow up survey

Of 190 valid responses to the follow up survey:

- Assessed quality of life increased from an average of 2.04 to 2.15 out of a possible 5, an increase of 5.4%¹¹.
- Respondents were a quarter less likely to rate quality of life as “poor” (28.9 down to 21.6%), and 13% more likely to rate it as “good” to “excellent” (28.9 to 32.7).

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). 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.

Based on 231 respondents who completed all 4 items for baseline and survey follow up, rated physical health functioning increased from an average total score of 8.92 to 9.49 – a 5.3% increase¹².

9 Significant positive correlation at the 0.01 level, N = 248 r = .606, Df 246 (1 tailed, Pearson’s Correlation)

10 Significant positive correlation at the 0.01 level, n = 238, r = .681, Df 236 (1 tailed, Pearson’s Correlation)

11 Significant positive correlation at the 0.01 level, n = 190, r = .594, Df 188 (1 tailed, Pearson’s Correlation)

12 Significant positive correlation at the 0.01 level, N = 231, r = .793, DF 229 (1 tailed, Pearson Correlation)

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.

Based on 179 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 8.84 to 9.64 (an increase of just under 10% - 9.6%)¹³.

Overview of Statistical Testing

Statistical significance and relevance

IBM SPSS was used for data analysis. A one-tailed test was employed for its higher power, based on the expectation of a positive outcome from Enhance support., The significance level used in this report ($p \leq 0.01$) indicates a 99% confidence that changes observed are not due to chance.

Pearson's r is used to assess the strength and direction of relationships between scores at baseline and follow-up across the PROMIS measures (reported as " $r =$ " for each PROMIS item). This statistic quantifies how consistently participants' scores in each area improved or declined over time. An r value close to +1 suggests a strong, positive relationship, meaning that as scores on one measure (such as improved social health) increased at follow-up, they did so consistently across participants. It's important to note that Pearson's r does not reflect the size of change in scores but rather the consistency of change, providing insight into which aspects of health saw the most uniform improvement or stability following Enhance programme support." Pearson's r showed medium to large associations across all PROMIS items.

Considerations for data interpretation

The sample size in this study is sufficient to identify statistically significant changes; however, it's important to note that small score changes may appear statistically significant due to sample size. Conversely, even modest changes (e.g., a 0.3-point increase on a 5-point PROMIS scale) can indicate meaningful improvements. This is especially so in vulnerable populations like those affected by frailty. This is because even modest improvements can lead to better quality of life or functionality in populations with limited baseline health or mobility compared to healthier populations where similar changes might be less noticeable.

Attribution of Observed Changes

It is important to note that the observed improvements cannot be attributed solely to the Enhance programme; other factors, including personal circumstances and external influences, may have contributed. However, significant changes across all PROMIS items provide reasonable confidence in the programme's positive impact.

Timing of Follow-Up Assessments

Based on longitudinal interviews and follow-ups conducted up to six months post-support, initial assessments primarily capture early impacts. Some participants reported sustained benefits from Enhance, such as financial stability and social connections, resulting in continued improvement up to six months after programme completion. Others experienced health-related setbacks that led to some decline, underscoring the variability in long-term impact.

13 Significant positive correlation is significant at the 0.01 level, $N = 179$, $r = .641$, $Df 177$ (1 tailed, Pearson Correlation)