**Table 1: Target standard and achieved standard of the success criteria set for the ENHANCE pilot trial.**

|  |  |  |
| --- | --- | --- |
| Success Criteria | Target standard | Target achieved |
|  |  |  |
| General Practice Engagement & retention  General Practice Nurse (GPN) Training  Participant recruitment of those invited  Participant retention | Engage four practices to participate and stay in the trial through follow-up.  Deliver the training to at least one GPN per practice.  Recruit at least 50% of those invited to the study  Retain 75% of those that consent to the research evaluation. | Image result for tick symbol. Size: 161 x 160. Source: www.symbols.com  Four practices recruited and retained throughout  Image result for tick symbol. Size: 161 x 160. Source: www.symbols.com  Ten GPNs were trained  Image result for tick symbol. Size: 161 x 160. Source: www.symbols.com  68% of those invited were recruited  Image result for tick symbol. Size: 161 x 160. Source: www.symbols.com  82% and 78% returned their 6 week and 6 month questionnaires |
|  |  |  |

**Table 2: Patients’ self-reported view of the content of their long-term condition review from the phase 1 questionnaire (July 2015 – February 2016) (N=161, those asked about joint pain; N=134, those asked about mood)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control period | Intervention period | All time periods |
| Number of participants asked about joint pain in the review | N = 57 | N=104 | N = 161 |
| Being asked about joint pain was acceptable |  |  |  |
| Strongly agree | 30 (56) | 55 (54) | 85 (55) |
| Agree | 23 (43) | 43 (42) | 66 (42) |
| Uncertain | 1 (2) | 4 (4) | 5 (3) |
| Disagree | 0 (0) | 0 (0) | 0 (0) |
| Strongly disagree | 0 (0) | 0 (0) | 0 (0) |
| Being asked about joint pain was helpful |  |  |  |
| Strongly agree | 25 (46) | 48 (48) | 73 (47) |
| Agree | 23 (43) | 50 (50) | 73 (47) |
| Uncertain | 6 (11) | 3 (3) | 9 (6) |
| Disagree | 0 (0) | 0 (0) | 0 (0) |
| Strongly disagree | 0 (0) | 0 (0) | 0 (0) |
| Did the nurse offer you any of the following for joint pain? |  |  |  |
| Verbal advice | 37 (65) | 75 (72) | 112 (70) |
| Written information | 7 (12) | 30 (29) | 37 (23) |
| Referral to another service e.g. physiotherapy, occupational health, psychological therapy | 6 (11) | 12 (12) | 18 (11) |
| Advice on relevant medication | 12 (21) | 36 (35) | 48 (30) |
| Advice on seeking other relevant services e.g. Healthy Minds, NHS Choices | 4 (7) | 10 (10) | 14 (9) |
| A further appointment with a PN | 15 (26) | 21 (20) | 36 (22) |
| A further appointment with a GP | 12 (21) | 20 (19) | 32 (20) |
| Number of participants asked about their mood in the review | N=35 | N=99 | N = 134 |
| Being asked about mood was acceptable |  |  |  |
| Strongly agree | 20 (59) | 51 (54) | 71 (55) |
| Agree | 13 (38) | 40 (42) | 53 (41) |
| Uncertain | 1 (3) | 2 (2) | 3 (2) |
| Disagree | 0 (0) | 2 (2) | 2 (2) |
| Strongly disagree | 0 (0) | 0 (0) | 0 (0) |
| Being asked about mood was helpful |  |  |  |
| Strongly agree | 16 (47) | 42 (44) | 58 (45) |
| Agree | 14 (41) | 48 (51) | 62 (48) |
| Uncertain | 4 (12) | 2 (2) | 6 (5) |
| Disagree | 0 (0) | 3 (3) | 3 (2) |
| Strongly disagree | 0 (0) | 0 (0) | 0 (0) |
| Did the nurse offer you any of the following for your mood? |  |  |  |
| Verbal advice | 13 (37) | 42 (42) | 55 (41) |
| Written information | 3 (9) | 17 (17) | 20 (15) |
| Referral to another service e.g. physiotherapy, occupational health, psychological therapy | 5 (14) | 9 (9) | 14 (10) |
| Advice on relevant medication | 6 (17) | 10 (10) | 16 (12) |
| Advice on seeking other relevant services e.g.  Healthy Minds, NHS Choices | 4 (11) | 9 (9) | 13 (10) |
| A further appointment with a PN | 9 (26) | 9 (9) | 18 (13) |
| A further appointment with a GP | 6 (17) | 11 (11) | 17 (13) |

Figures are numbers and percentages; numbers may not add up to totals due to missing data. GP = General Practitioner, PN = Practice Nurse.

**Table 3: Case finding and management of joint pain, anxiety and depression in the ENHANCE long-term condition reviews (N=165\*; data from the ENHANCE EMIS template (September 2015 – February 2016))**

|  |  |
| --- | --- |
|  | Patients treated in the intervention period (N=165\*) |
| Case finding – Joint pain |  |
| Pain location |  |
| Hand | 61 (37) |
| Hip | 44 (27) |
| Knee | 80 (49) |
| Foot | 48 (29) |
| No joint pain | 45 (27) |
| Length of time with joint pain for those reporting joint pain in at least one joint; N= 120 |  |
| Less than 3-months | 7 (7) |
| More than 3-months | 95 (93) |
| Pain score |  |
| Mean (SD) for scores >0: Hand (0-10) | 5.0 (2.0); N=52 |
| Mean (SD) for scores >0:Hip (0-10) | 5.7 (2.5); N=44 |
| Mean (SD) for scores >0: Knee (0-10) | 6.0 (2.5); N=76 |
| Mean (SD) for scores >0: Foot (0-10) | 5.9 (3.0); N=43 |
| Practice nurse looked/felt or moved the joints for those reporting joint pain in at least one joint; N= 120 | 59 (49) |
| Initial management from positive case finding | N=120 |
| Verbal advice |  |
| Increasing activity/exercises | 76 (63) |
| Healthy eating/ weight loss | 67 (56) |
| Pain relief | 89 (74) |
| Written advice |  |
| OA advice | 60 (50) |
| Increasing activity/exercise | 40 (33) |
| Pain relief | 34 (28) |
| Healthy eating/ weight loss | 25 (21) |
| Follow-up |  |
| No follow-up | 103 (86) |
| Nurse follow-up advised | 1 (1) |
| Nurse follow-up booked | 0 (0) |
| GP follow-up advised | 10 (8) |
| GP follow-up booked | 6 (5) |
| Immediate advice from GP | 0 (0) |
| Additional referrals/signposting |  |
| Slimming World/Weight Watchers | 3 (3) |
| Physiotherapy | 1 (1) |
| Exercise on prescription | 0 (0) |
| Podiatry | 0 (0) |
| Occupational therapy | 2 (2) |
| Other support group | 4 (3) |
| Online resources | 1 (1) |
| Case finding – Depression & Anxiety |  |
| *Depression* |  |
| PHQ-2 screening questions:  Little interest or pleasure in doing things | 33 (20) |
| Feeling down, depressed or hopeless | 54 (33) |
| PHQ-9 mean (SD) (if used) in patients reporting positively to the depression screening questions (0-27) | 8.6 (6.5); N=49 |
| PHQ-9 (categories) (if used): |  |
| Minimal depression (0-4) | 16 (33) |
| Mild depression (5-9) | 14 (29) |

|  |  |
| --- | --- |
| Moderate depression (10-14) | 11 (22) |
| Moderately severe depression (15-19) | 4 (8) |
| Severe depression ( 20-27) | 4 (8) |
| *Anxiety* |  |
| GAD-2 screening questions:  Feeling nervous, anxious or on edge | 50 (30) |
| Not being able to stop or control worrying | 34 (21) |
| GAD-7 mean (SD) (if used) in patients reporting  positively to the anxiety screening questions (0-21) | 7.5 (5.7); N=45 |
| GAD-7 (categories) (if used) |  |
| Mild anxiety (0-5) | 21 (47) |
| Moderate anxiety (6-10) | 14 (31) |
| Moderately Severe anxiety (11-15) | 3 (7) |
| Severe anxiety (16-21) | 7 (16) |
| Initial management from positive case findingα | N=83 |
| Verbal advice |  |
| Increasing activity/exercises | 35 (42) |
| Healthy eating/ weight loss | 29 (35) |
| Sleeping habits | 20 (24) |
| Written advice |  |
| Increasing activity/exercises | 6 (7) |
| Managing mood | 23 (28) |
| Sleeping habits | 7 (8) |
| Follow-up |  |
| No follow-up | 70 (84) |
| Nurse follow-up advised | 1 (1) |
| Nurse follow-up booked | 0(0) |
| GP follow-up advised for anxiety/depression | 9 (11) |
| GP follow-up booked for anxiety/depression | 2 (2) |
| Immediate advice from GP | 1 (1) |
| Additional referrals/signposting |  |
| Exercise on prescription | 0 (0) |
| Slimming World/Weight Watchers | 1 (1) |
| Wellbeing/Improving Access to Psychological  Therapies (IAPT) | 0 (0) |
| MIND mental health charity | 3 (4) |
| Other support group | 3 (4) |
| Online resources | 2 (2) |

Figures are numbers and percentages unless otherwise stated; numbers may not add up to totals due to missing data. SD = standard deviation, GAD= Generalised Anxiety Disorder Assessment (21,23), PHQ = Patient Health Questionnaire (22,24), α = frequencies of the use of two verbal advice management strategies (alcohol and managing mood (including medication)) and one written advice strategy (healthy eating/weight loss) could not be determined due to an error in variable labelling on the EMIS template. \*167 EMIS templates were initiated, however two contained no valid data, so are excluded from the denominator.

**Table 4: Self-reported demographic and clinical characteristics from the phase 1 questionnaire of the ENHANCE pilot trial (July 2015 – February 2016) (N=318).**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control period  N=206 | Intervention period  N=112 | All patients responding at phase 1  N=318 |
| **Demographic** |  |  |  |
| Mean (SD): Age | 68 (9) | 68 (10) | 68 (9) |
| Female gender | 101 (50) | 49 (45) | 150 (48) |
| Living alone | 65 (32) | 32 (29) | 97 (31) |
| Index of multiple deprivation: Median (IQR) | 10872 (3911, 17311) | 5529 (2854, 12813) | 8776 (3409, 16387) |
| Current employment status |  |  |  |
| Full-time paid work (35 hours or more per  week) | 25 (13) | 14 (13) | 39 (13) |
| Part-time paid work (less than 35 hours per  Week) | 18 (9) | 8 (8) | 26 (9) |
| Not working due to poor health | 14 (7) | 6 (6) | 20 (7) |
| Looking after the home/dependents | 3 (2) | 3 (3) | 6 (2) |
| Retired | 137 (69) | 73 (68) | 210 (68) |
| Unemployed (and seeking work) | 0 (0) | 0 (0) | 0 (0) |
| Student | 0 (0) | 0 (0) | 0 (0) |
| Other | 3 (2) | 3 (3) | 6 (2) |
| **Health** |  |  |  |
| General health |  |  |  |
| Excellent | 7 (3) | 2 (2) | 9 (3) |
| Very good | 55 (27) | 26 (24) | 81 (26) |
| Good | 75 (37) | 42 (38) | 117 (37) |
| Fair | 47 (23) | 25 (23) | 72 (23) |
| Poor | 21 (10) | 15 (14) | 36 (11) |
| Median (IQR):EQ-5D-5L (-0.594 to 1) | 0.75 (0.63, 0.88) | 0.72 (0.55, 0.84) | 0.74 (0.59, 0.85) |
| **Health literacy** |  |  |  |
| Frequency of help needed to read hospital materials |  |  |  |
| Always | 15 (8) | 8 (7) | 23 (7) |
| Often | 6 (3) | 5 (5) | 11 (4) |
| Sometimes | 8 (4) | 5 (5) | 13 (4) |
| Occasionally | 16 (8) | 8 (7) | 24 (8) |
| Never | 156 (78) | 83 (76) | 239 (77) |
| Confidence in filling out medical forms independently |  |  |  |
| Always | 117 (58) | 63 (58) | 180 (58) |
| Often | 21 (10) | 10 (9) | 31 (10) |
| Sometimes | 21 (10) | 8 (7) | 29 (9) |
| Occasionally | 19 (9) | 15 (14) | 34 (11) |
| Never | 24 (12) | 13 (12) | 37 (12) |
| Difficulties in learning about your medical condition because of difficulty understanding written information |  |  |  |
| Always | 4 (2) | 5 (5) | 9 (3) |
| Often | 8 (4) | 4 (4) | 12 (4) |
| Sometimes | 23 (11) | 12 (11) | 35 (11) |
| Occasionally | 34 (17) | 20 (19) | 54 (18) |
| Never | 132 (66) | 66 (62) | 198 (64) |
| **Depression & Anxiety** |  |  |  |
| Median (IQR): GAD-7 (0-21) | 0 (0,4) | 0 (0, 5.5) | 0 (0, 5) |
| Median (IQR): PHQ-9 (0-27) | 2 (0,6) | 2 (0,8) | 2 (0, 6) |

|  |  |  |  |
| --- | --- | --- | --- |
| Categorised version of the PHQ-9 |  |  |  |
| PHQ-9: Minimal depression (0-4) | 120 (71) | 63 (65) | 183 (69) |
| PHQ-9: Mild depression (5-9) | 27 (16) | 18 (19) | 45 (17) |
| PHQ-9: Moderate depression (10-14) | 12 (7) | 6 (6) | 18 (7) |
| PHQ-9: Moderately severe depression (15-19) | 8 (5) | 6 (6) | 14 (5) |
| PHQ-9: Severe depression (20-27) | 2 (1) | 4 (4) | 6 (2) |
| Categorised version of the GAD-7 |  |  |  |
| GAD-7: Mild anxiety (0-5) | 137 (78) | 73 (75) | 210 (77) |
| GAD-7: Moderate anxiety (6-10) | 26 (15) | 10 (10) | 36 (13) |
| GAD-7: Moderately severe anxiety (11-15) | 7 (4) | 10 (10) | 17 (6) |
| GAD-7: Severe anxiety (16-21) | 5 (3) | 4 (4) | 9 (3) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Joint pain: based only on participants reporting pain in the hip, knee, hand or foot** | **N=117**  **(67%)** | **N=88**  **(84%)** | **N=205**  **(73%)** |
| Duration of joint pain# |  |  |  |
| Less than 3-months | 10 (9) | 6 (7) | 16 (8) |
| 3-months or longer | 107 (92) | 82 (93) | 189 (92) |
| Average pain intensity in the last 2-weeks |  |  |  |
| Median (IQR): Hip (0-10) | 4 (0, 7) | 3 (0,6) | 3 (0, 6) |
| Median (IQR): Knee (0-10) | 5 (1,7) | 5 (1,7) | 5 (1, 7) |
| Median (IQR): Hand (0-10) | 4 (0,6) | 3.5 (1,6) | 4 (1, 6) |
| Median (IQR): Foot (0-10) | 4 (0,7) | 3 (0,6) | 3 (0, 7) |
| Joint painα interfered with normal work or activities in the last 2-weeks |  |  |  |
| Not at all | 14 (12) | 17 (19) | 31 (15) |
| A little bit | 34 (30) | 23 (26) | 57 (28) |
| Moderately | 23 (20) | 21 (24) | 44 (22) |
| Quite a bit | 30 (26) | 21 (24) | 51 (25) |
| Extremely | 14 (12) | 6 (7) | 20 (10) |

Figures are numbers and percentages unless otherwise stated; numbers may not add up to totals due to missing data. SD = Standard deviation, IQR= Inter-quartile range, GAD-7 = Generalised Anxiety Disorder Assessment (23), PHQ-9 = 9-question Patient Health Questionnaire (24), EQ-5D-5L (EuroQol) (27), # = Joint pain defined as pain in the hip, knee, hand or foot