Summary of findings:

Social prescribing link workers compared to usual care for people with multimorbidity

Patient or population: people with multimorbidity

Setting: Primary Care

Intervention: social prescribing link workers

Comparison: usual care

Outcomes	Impact	№ of participants (studies)	Certainty of the evidence (GRADE)
Health related quality of life (RCTs) assessed with: SF-12 HRQoL measure follow-up: range 6 months to 9 months	Two RCTs reported no difference in the physical health component of the SF-12. One of these trials showed a postive impact on the mental health component of the SF-12 ($2.3 \text{ vs} - 0.2 \text{ p} = 0.008$.), but the other showed no difference.	894 (2 RCTs)	⊕⊕⊖ Low ^{a,b}
Health related quality of life (CBAs) assessed with: EQ-5D and SF-12 HRQoL measures follow-up: range 3 months to 9 months	One CBA reported no difference in the MCS or PCS of the SF-12. The same trial reported a small change in the EQ-5D-3L in favour of the control group (-0.09 (-0.14 to -0.03) p=<0.001). The second CBA found no difference in the EQ-5D-5L.	1292 (2 observational studies)	⊕⊖⊖⊖ Very low ^c
Mental Health (RCTs) assessed with: Mental Health as assessed by the hospital anxiety depression scale follow-up: mean 4 months	One RCT found an improvement in the anxiety component of the HADS (-1.9 (-3.0 to -0.7)a p=0.002) , but not the depression component (-0.9 (-1.9 to 0.2) p=0.116)	152 (1 RCT)	⊕⊕⊖⊖ Low ^{d,e}
Mental Health (CBAs) assessed with: Mental health as assessed by a screening tool for mental illness follow-up: range 3 months to 9 months	One CBA reported no difference in the geriatric depression scale. Two CBAs found no difference in the HADS anxiety or depression scales.	1772 (3 observational studies)	⊕⊖⊖ Very low ^{f,g}
Social support and contacts (RCTs) follow-up: range 4 months to 24 months	One RCT of a two year intervention for people aged over 75 found no difference in Tunstalls social cotact score. One RCT of a one month intervention found no difference in Dukes Social Support Scale.	714 (2 RCTs)	⊕⊕⊖ Low ^{h,j}
Social contacts and supports (CBAs) follow-up: mean 8 months	One CBA looked at social support as measured by the Medical outcomes survey: social support scale and found no difference.	392 (1 observational study)	⊕⊖⊖⊖ Very lowi
Self rated health (RCTs) follow-up: range 4 months to 24 months	Two RCTs examined self rated health. One using a simple scale reported a greater % improved in the intervention (20%) than control group (11%). The other used the WONCA-COOP functional health scale that includes a measure of overall health and found an improvement favouring the intervention group (-0.4 (-0.7 to -0.1) p=0.003).	734 (2 RCTs)	⊕⊕⊖⊖ Low ^{k,J}

Summary of findings:

Social prescribing link workers compared to usual care for people with multimorbidity

Patient or population: people with multimorbidity

Setting: Primary Care

Intervention: social prescribing link workers

Comparison: usual care

Outcomes	Impact	№ of participants (studies)	Certainty of the evidence (GRADE)
Self rated health (CBAs) assessed with: Likert scale from 1 (poorest health) to 5 (best health) follow-up: mean 8 months	One CBA examined self rated health and found no difference between groups. (0.127 (-0.221, 0.9475) p=not reported)	480 (1 observational study)	⊕⊖⊖ Very low ^m
Physical Activities (RCTs) assessed with: Any measurement of daily activities or exercise follow-up: range 4 months to 24 months	One RCT of 152 adults found an improvement in daily activities (Daily Activities -0.5 (-0.6 to -0.2) p=0.001) but no effect on physical fitness (-0.3 (-0.6 to 0.05) p=0.98). The other of a 2 year intervention in adults over 75 found no difference in activities of daily living.	712 (2 RCTs)	Very low ^{n,o,p}
Physical activities (CBAs) assessed with: Any measure of daily activities or exercise follow-up: mean 8.5 months	One CBA found no difference in self reported exercise. The other found a decrease in daily activities in the intervention group (-0.897 (-1.729 to -0.065) p=0.035).	1380 (2 observational studies)	⊕⊖⊖⊖ Very low ^{q,r,s}
Hospitalisations (RCTs) assessed with: Number of hospital admissions and number of days hospitalised follow-up: range 9 months to 12 months	Two RCTs reported a decrease in hospitalisations in the intervention group. One found a reduction in days in hospital (300 days vs 471 days; absolute event rate reduction,65%) at nine months. The other reported a reducton in hospitalisations and hospital days in the intervention group-68 total hospitalizations (278 hospital days) versus 98 (414 hospital days) in the control group. Neither reached statistical significance.	4053 (3 RCTs)	Low _i ,n
	A third RCT found no difference between groups for hospitalisations (adjusted IRR 0.97 (0.77, 1.24). All trials were US based.		
Primary Care Utilisation (RCTs) follow-up: range 4 months to 24 months	Two UK RCTs found no difference between groups for contacts with the primary care team and one US RCT found an increase in ambulatory care costsfor the intervention group but not attendances.	3873 (3 RCTs)	⊕⊕⊖⊖ Low ^{v,w}
Primary Care Utilisation (CBAs) follow-up: mean 8 months	The authors reported a reduction in the number of primary care visits in the intervention group and an increase in the control group, but because of baseline imbalances in the groups it was difficult to attribute this change to the intervention.	480 (1 observational study)	⊕⊖⊖⊖ Very low ^{x,y}

Summary of findings:

Social prescribing link workers compared to usual care for people with multimorbidity

Patient or population: people with multimorbidity

Setting: Primary Care

Intervention: social prescribing link workers

Comparison: usual care

Outcomes	Impact	№ of participants (studies)	Certainty of the evidence (GRADE)
----------	--------	--------------------------------	-----------------------------------

^{*}The risk in the intervention group (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CI: confidence interval

GRADE Working Group grades of evidence

High certainty: we are very confident that the true effect lies close to that of the estimate of the effect.

Moderate certainty: we are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.

Low certainty: our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect.

Very low certainty: we have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect.

Explanations

- a. The two RCTs examined a similar intervention but found different results for the MCS of the SF-12
- b. The two RCTs were conducted in a single health care setting and may not transfer to other healthcare settings
- c. One RCT looked at a deprived population over nine months, the other looked at an older, less deprived population over three months
- d. The population was less deprived than in other studies and the usual target populations for link worker interventions and the intervention was only one month long
- e. The confidence interval for anxiety included a change that was clinically insignificant.
- f. Risk of bias was high in one CBA due to missing data, baseline differences and in all due to blinding
- g. One CBA looked at an older less deprived population over three months, while the other two included a more deprived younger population over eight to nine months
- h. One study looked at a two year intervention in over 75s which would not be typical of link worker interventions. The other study looked at a less deprived population than usually targeted for link worker interventions
- i. One study did not provide confidence intervals and the other had a small sample size.
- j. The CBA looked at a less deprived population than usually targeted for link worker interventions.
- k. One study looked at participants aged over 75 with an intervention duration of 2 years, whereas the other was in a younger, less deprived population and intervention was 4 months.
- I. Studies used different measures, one being a subscale of the WONCA/COOP Functional Health questionnaire. One RCT had a small sample size of 152.

- m. There were baseline differences between the intervention and control groups. There was a significant loss to follow up of almost 70%.
- n. Studies used slightly different measures and had different findings
- o. One study looked at a two year intervention and another at a one month intervention. Populations differed with one being adults over 75, older than the typical social prescribing population targeted and the other less deprived.
- p. One study did not report any confidence interval so cannot assess imprecision
- q. One CBA had baseline differences between the intervention and control group and significant loss to follow up of almost 70%.
- r. Studies used different measures and had slightly different results.
- s. One study did not provide confidence intervals so imprecision could not be assessed.
- t. The three RCTs were conducted in a US healthcare setting and may not transfer to other settings. The intervention was also longer and more intense than other social prescribing interventions.
- u. Neither study found a statistically significant reductions in hospitalisations or days in hospital but there was a trend towards significance. The third study did not find a difference.
- v. One RCT looked at a two year intervention for the over 75s. The other looked at a younger less deprived population than usually targeted for social prescribing interventions. The third at a predominantly Black US population.
- w. Neither UK RCT reported confidence intervals or results of statistical analysis making it difficult to comment on precision.
- x. The CBA had baseline imbalances between groups and almost 70% loss to follow up
- y. The baseline attendance rates between the two groups were very different and findings likely reflect regression to the mean.