Family Mosaic: an introduction

Family Mosaic is one of the largest housing providers in London and the South East.

Our customers can rent or buy affordable homes from us, as well as access services to improve their health, wealth and wellbeing.

We serve more than 45,000 people and own over 25,000 homes. Our customers can access life-enhancing opportunities such as training and employment.

We partner with local communities and local community organisations so our customers can live in neighbourhoods where they want to live.

www.familymosaic.co.uk

Thank you: Baljinder Heer-Matiana (Senior Public Health Strategist, Camden and Islington), Henry Muss (Public Health Officer, Hackney), Paul Cheshire (Emeritus Professor of Economic Geography, LSE) and Stephen Gibbons (Professor of Economic Geography, LSE) for their advice, encouragement and support of the project, and their participation on our project board. And thanks to the health and wellbeing team and other involved Family Mosaic staff for their hard work and support throughout the project.
After three years, our Health Begins at Home pilot study has finished. Having analysed the data from the 433 people aged over 50 who completed the project, our key findings are that:

- our health and wellbeing interventions resulted in residents reducing their NHS usage, particularly planned hospital appointments;
- this was particularly the case for our most vulnerable residents, many of whom were socially isolated before the research;
- participating in the research had a positive impact on the health of participants, especially the most vulnerable;
- interventions and support are more effective coming from staff with specialist skills.

Extrapolating the findings from this research, we believe:

- if these interventions were provided to all our residents aged over 50, it could result in NHS usage savings of over £3 million a year;
- there could be over 100,000 people aged over 50 living in social housing with unmet health needs, who need intensive support, immediately.

As a social housing provider, we’re in a unique position to provide this support, because of our proximity to our residents, and our existing local connections. The research results are indicative of how we can leverage this role.

There are, however, areas for improvement. In particular, some residents became overly dependent on our staff for support with their health, for social interaction and for practical support. Our research has also shown that the support structure needs to change.

With this in mind, we are conducting two further strands of research: one focused on our residents aged over 50; the other on those receiving our floating support service. Both will centre around a health navigator, who will coach and support our residents to independently and effectively manage their health.

We will test whether there is a business case for this refined service model that works for us, for the NHS, and, most critically, for our residents. We will share our findings to demonstrate the impact social housing can have on health.
The **Health Begins at Home** research project began in 2013. We wanted to test the effectiveness of two types of interventions in improving the health and wellbeing of our tenants aged over 50.

The pilot was our first large-scale randomised control trial. We hoped to recruit 600 people to take part. We ended up with 547 people. Each had an initial health assessment, before being randomly assigned to one of the three research groups:

- **Group 1 (186 people):** the control group. As such, they received no additional support;
- **Group 2 (172 people):** they were signposted to health and wellbeing services by their neighbourhood manager;
- **Group 3 (174 people):** they received intensive personalised support from a dedicated health and wellbeing support worker, including being accompanied to relevant local services.

When we assessed people’s health, we discovered 15 people whose health needs were so great we could not risk them being placed into one of the groups. Instead, we put them into group 3B, where they received intensive personal care.

During the study, we identified another ten people whose health needs had deteriorated. They were also moved into group 3B. By the end of the study, we had 25 people in group 3B.

We conducted health assessments with all participants at the beginning of the project, after nine months and then after 18 months. Each followed the same structure, providing us with three directly comparable data sets.

For the final assessment, however, we were unable to conduct assessments with 109 of the original participants. This was primarily because of the difficulty we had in contacting participants, particularly those in the control group. They had not received any support during the study and consequently had lower levels of engagement with the project.

As a result, from the original 532 people who began the trial, we had final data on 433 people:

- 133 people from group 1;
- 128 people from group 2;
- 147 people from group 3;
- 25 people from group 3B.
Attrition rates were highest amongst group 1 – the control group – and lowest for group 3. This was expected because many in group 1 either decided not to participate in the research, or it was more difficult to make contact with them because of their lower levels of engagement. It is, however, interesting to note that there are differences even in the numbers of people who passed away.
### THE PARTICIPANTS: CHARACTERISTICS

**Figure 2: Research groups, by characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Family Mosaic tenants aged over 50s*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>64</td>
<td>65</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Male</td>
<td>37%</td>
<td>30%</td>
<td>33%</td>
<td>36%</td>
</tr>
<tr>
<td>Female</td>
<td>63%</td>
<td>67%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Non-BME</td>
<td>35%</td>
<td>28%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>BME</td>
<td>65%</td>
<td>72%</td>
<td>67%</td>
<td>63%</td>
</tr>
</tbody>
</table>

**All research groups**

- Number with one or more long-term health conditions: 93%

**Family Mosaic tenants aged over 50s**

- 71%

*Based on a scoping study of 360 residents*
**Analysing the datasets**

In our final analysis, we looked at two different datasets. We had one set of data for those participants who completed the study (those for whom we had a first and last assessment). We called this the *as treated* analysis.

We then looked at the dataset for all 532 original participants: we call this an *intention to treat* analysis. In this dataset, we used a method called multiple imputation to predict what the outcomes would have been for those participants for whom we didn’t have final assessment data.

The *intention to treat* analysis is seen as the more robust and reliable indication of the impact, as it helps to remove any bias that might have been introduced by those participants who left the study.

We therefore report the findings from the *intention to treat* analysis, and these have been sense checked against what we found in the *as treated* analysis.

**P values and significance**

Throughout this report, you’ll come across references to p values. Usually this will be written as (p=0.xxx).

These values are the probability of obtaining a result equal to or more extreme than what was actually observed.

Effectively, it tells us how strong the evidence is for our hypothesis to be true – i.e. that our interventions have made an impact on our participants.

In order to be reasonably confident that this is the case, we look for a p value ≤ 0.05.

We also refer to statistically significant or significant findings. These are the holy grail of statistical analysis. If we find a significant finding, this means we can be pretty confident in saying that this happened because of our interventions, rather than as a result of chance.
Overall, the change in outcomes for all participants over the 18 months was small in many areas. This was the case in the control group, as well as in the two intervention groups.

On measures such as self-reported health and wellbeing ratings, health behaviours such as smoking, drinking and completion of health tests, and self-reported activity and mobility levels, there were no significant differences between each group.

There were, however, some areas where we began to see some significant changes (see NHS usage tables, pages 10-11).

**Figure 3: Final findings: health and wellbeing measures**

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General health</strong> (average scores – maximum 5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>3.1</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Final</td>
<td>3.2</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Difference</td>
<td>+ 0.1</td>
<td>+ 0.1</td>
<td>+ 0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SWEMWBS</strong> (average scores – maximum 35)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>24.46</td>
<td>24.67</td>
<td>25.02</td>
</tr>
<tr>
<td>Final</td>
<td>24.40</td>
<td>23.67</td>
<td>25.23</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.06</td>
<td>- 0.1</td>
<td>+ 0.21</td>
</tr>
</tbody>
</table>

The Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) is a scale of seven positively worded items, with five response categories, that is used to assess a population’s mental wellbeing.
### OUR FINDINGS: HEALTH AND WELLBEING

#### ONS measure (average scores – maximum 40)

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>22.52</td>
<td>22.72</td>
<td>22.56</td>
</tr>
<tr>
<td>Final</td>
<td>21.43</td>
<td>21.16</td>
<td>21.94</td>
</tr>
<tr>
<td>Difference</td>
<td>-1.09</td>
<td>-1.56</td>
<td>-0.62</td>
</tr>
</tbody>
</table>

#### Loneliness (average scores, where 5 = not lonely)

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>3.59</td>
<td>3.59</td>
<td>3.56</td>
</tr>
<tr>
<td>Final</td>
<td>3.57</td>
<td>3.57</td>
<td>3.78</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.02</td>
<td>-0.02</td>
<td>+0.21</td>
</tr>
</tbody>
</table>

#### Mobility (average scores – where 10 = highly mobile)

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>6.98</td>
<td>6.61</td>
<td>7.36</td>
</tr>
<tr>
<td>Final</td>
<td>6.92</td>
<td>6.73</td>
<td>7.15</td>
</tr>
<tr>
<td>Difference</td>
<td>-0.06</td>
<td>+0.12</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

#### Activity (average scores, where 10 = highly active)

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>5.58</td>
<td>5.25</td>
<td>5.87</td>
</tr>
<tr>
<td>Final</td>
<td>5.74</td>
<td>5.44</td>
<td>6.06</td>
</tr>
<tr>
<td>Difference</td>
<td>+0.16</td>
<td>+0.19</td>
<td>+0.19</td>
</tr>
</tbody>
</table>

The ONS wellbeing measure is a measure of the national wellbeing.
When looking at NHS usage, the difference over time became more marked. The clearest impact was in planned hospital appointments. In group 3, the reduction in planned hospital appointments was significant (p=0.004) in comparison to group 1’s increase. This indicates the intensive health and wellbeing interventions had an overall impact on planned hospital usage.

**OUR FINDINGS: NHS USAGE**

Figure 4: Final findings: NHS usage

**Group 1**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Final</th>
<th>Cost difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>654</td>
<td>682</td>
<td>+ £1,288</td>
</tr>
<tr>
<td>Emergency GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>84</td>
<td>103</td>
<td>+ £874</td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned hospital appointments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>369</td>
<td>410</td>
<td>+ £4,551</td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;E attendances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>70</td>
<td>62</td>
<td>- £992</td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nights in hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>175</td>
<td>205</td>
<td>+ £8,250</td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Department of Health reference costs (2013-14)

- GP visit: £46
- Planned hospital appointment: £111
- A&E attendance: £124
- Night in hospital: £295
## OUR FINDINGS: NHS USAGE

### Group 2

<table>
<thead>
<tr>
<th>Service</th>
<th>Baseline</th>
<th>Final</th>
<th>Cost difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>726</td>
<td>760</td>
<td>+ £1,564</td>
</tr>
<tr>
<td>Emergency GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>42</td>
<td>94</td>
<td>+ £2,484</td>
</tr>
<tr>
<td>Planned hospital appointments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>446</td>
<td>430</td>
<td>- £1,076</td>
</tr>
<tr>
<td>A&amp;E attendances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>68</td>
<td>57</td>
<td>- £1,364</td>
</tr>
<tr>
<td>Nights in hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>205</td>
<td>136</td>
<td>- £18,925</td>
</tr>
</tbody>
</table>

### Group 3

<table>
<thead>
<tr>
<th>Service</th>
<th>Baseline</th>
<th>Final</th>
<th>Cost difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>693</td>
<td>617</td>
<td>- £3,496</td>
</tr>
<tr>
<td>Emergency GP visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>66</td>
<td>56</td>
<td>- £460</td>
</tr>
<tr>
<td>Planned hospital appointments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>554</td>
<td>338</td>
<td>- £23,976</td>
</tr>
<tr>
<td>A&amp;E attendances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>47</td>
<td>48</td>
<td>+ £124</td>
</tr>
<tr>
<td>Nights in hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>148</td>
<td>57</td>
<td>- £25,025</td>
</tr>
</tbody>
</table>
THE SIGNIFICANT FINDINGS

Group 3 reduced their planned hospital appointments significantly in comparison to the control group.

\[(p = 0.004)\]

Group 2 significantly reduced their nights spent in hospital compared to the control group.

\[(p = 0.022)\]

Group 3 reduced their emergency GP visits substantively in comparison with group 2.

\[(p = 0.055)\]

Group 2 significantly reduced the number of nights they spent in hospital \((p=0.022)\). Group 3 actually reduced their usage more than group 2: the reason this is not reflected in the significance statistic is likely because of the high variance (i.e. the data points were very spread out around the mean).

We can conclude, though, that both groups reduced the number of nights in hospital as a result of the interventions.

Finally, whilst not significant, group 3 reduced their emergency GP visits substantively \((p=0.055)\), in comparison to group 2, whose usage increased. It’s unclear why group 2’s usage increased: statistical tests did not identify this to be significantly different to the control group, meaning the increase may have happened by chance.

Regardless, the substantive findings against group 3 indicates that there most likely was an impact on emergency GP usage for group 3 as a result of the intensive health and wellbeing interventions.
**OUR FINDINGS: COST IMPLICATIONS**

**Figure 5: NHS usage, cost implications**

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in NHS usage costs</td>
<td>+ £13,971</td>
<td>- £17,751</td>
</tr>
<tr>
<td>Cost per person, per month</td>
<td>+ £12.52</td>
<td>- £17.20</td>
</tr>
</tbody>
</table>

Group 1 costs show us what would have happened without any intervention. To establish the real change in NHS usage for group 2 and group 3, we multiply this cost per person (£17.50) by the number of people in each of the two intervention groups.

- Additional cost benefit from interventions: $172 \times £12.52 = £21,900$
- Real NHS usage reduction: $-£30,670$
- NHS usage reduction per person, per month: £29.72
- Potential NHS usage reduction per person, per year: £356.63
- Potential NHS usage reduction if interventions were made for all 5,805 Family Mosaic tenants aged over 50: £2,070,253 per year
- Our sample group had a higher rate of long-term health conditions than all Family Mosaic tenants aged over 50 (93% v 71%). When we factor this in, we can estimate the potential NHS usage reduction per year: £1,580,516 per year
Costs and savings
Figure 5 (page 13) sets out the overall financial change in NHS usage, by group. In order to work out the real financial change in NHS usage, we add the increase in cost from group 1 to the reduction in costs for each of group 2 and group 3. This is because we have to assume this increase would have happened to group 2 and group 3 if we hadn’t intervened.

We’re also wary about using the word savings. The reduction in group 2 and group 3’s NHS usage shouldn’t be seen as a cost saving for the NHS. Appointment slots will still be used. Hospital beds will still be filled. The money, in effect, will still be spent.

There is no real financial saving here. Rather, the health and wellbeing interventions we made reduced demands on the NHS. We have attributed a headline cost figure to this reduction in demand, in order to highlight the positive nature of these interventions.

This, however, is not enough on its own. We also need to demonstrate that the service has delivered cost effectiveness as well.

If we disregard start-up and research costs, the estimated service cost would be:
- Group 2 (staff, activities): £15,321.04 or £93 per person (which works out at just over £5 per person per month);
- Group 3 (staff, administration activities, small grants): £3,374 per person (which works out at just over £188 per person per month);

It’s worthwhile to note that a proportion of these costs were spent on people who were found not to require or want support, because they were fit and healthy, or were already successfully managing one or more long-term health conditions. Unlike this randomised control trial, an effective service would be targeted at those most in need.

We also found that many participants didn’t need our support for the full 18 months, but due to the research protocol continued to receive interventions for the full period. If we had provided shorter term support this would have reduced costs significantly.
Group 3B
We did not include group 3B in the final analysis. People were placed in this group rather than randomly assigned to it, because their health needs demanded immediate or urgent attention.

Each had the same support and interventions as those in group 3. The group’s composition – 64% female, 69% BME, with an average age of 67 – was also similar to the other groups. So there is still value in analysing the group’s final results: they are stark. There were improvements across all health and wellbeing measures.

Similarly, there were reductions in all NHS usage, most notably with planned hospital appointments, with a net fall of 47. In financial terms, the NHS usage saving equated to £11,696.50, or £935 per person, per year.

More important, though, was that as a result of this study, we identified and assisted 25 people who were in severe need. Critically, previously they had been suffering in isolation and several were not on the radar of any local or community health services.

<table>
<thead>
<tr>
<th>Measure</th>
<th>First</th>
<th>Last</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>General health</td>
<td>2.12</td>
<td>2.36</td>
<td>+ 0.24</td>
</tr>
<tr>
<td>SWEMWBS measure</td>
<td>16.1</td>
<td>17.8</td>
<td>+ 1.7</td>
</tr>
<tr>
<td>ONS measure</td>
<td>11.4</td>
<td>17.1</td>
<td>+ 5.7</td>
</tr>
<tr>
<td>Loneliness</td>
<td>3.4</td>
<td>3.6</td>
<td>+ 0.2</td>
</tr>
<tr>
<td>Activity</td>
<td>3.1</td>
<td>3.7</td>
<td>+ 0.6</td>
</tr>
<tr>
<td>Mobility</td>
<td>4.7</td>
<td>5.7</td>
<td>+ 1.0</td>
</tr>
<tr>
<td>Community connections</td>
<td>2.0</td>
<td>2.3</td>
<td>+ 0.3</td>
</tr>
<tr>
<td>Falls</td>
<td>3.0</td>
<td>2.5</td>
<td>- 0.5</td>
</tr>
</tbody>
</table>

Figure 6: Group 3B wellbeing findings
Mr A

We met Mr A when knocking on doors as part of our recruitment drive. His property was no longer in a suitable condition for him and, initially, he told us his main difficulties were financial.

As we talked through the health assessment form with him, though, it became clear he had a number of health issues, and long-term health conditions, that were not being managed.

Despite being diagnosed with sickle cell anemia, he wasn’t registered with a local GP. So whenever his condition got bad, he would go to A&E. And this was happening frequently.

We allocated him a support worker immediately. She supported him to register with a local GP and explained the information he was given about his condition. His support worker also referred him to our welfare rights team.

Now, he’s in receipt of the correct benefits, has reduced his debts, his property suits his needs and he is successfully managing his long-term health condition.

Figure 7: Group 3B NHS findings

<table>
<thead>
<tr>
<th></th>
<th>First</th>
<th>Last</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned GP appointments</td>
<td>5.5</td>
<td>4.3</td>
<td>-0.8</td>
</tr>
<tr>
<td>Emergency GP appointments</td>
<td>0.72</td>
<td>0.19</td>
<td>-0.53</td>
</tr>
<tr>
<td>A &amp; E attendances</td>
<td>0.44</td>
<td>0.04</td>
<td>-0.4</td>
</tr>
<tr>
<td>Nights in hospital</td>
<td>0.9</td>
<td>0.03</td>
<td>-0.87</td>
</tr>
<tr>
<td>Planned hospital appointments</td>
<td>5.2</td>
<td>3.0</td>
<td>-2.2</td>
</tr>
</tbody>
</table>
The project’s impact on group 3B participants demonstrates how important it is for housing providers to engage in conversations around health. Simply through talking with them, we identified issues that were costly to us and to the NHS, as well as being harmful to them.

Critically, by engaging with them, we were able to easily rectify some of these issues. The two case studies on pages 16 and 17 are indicative of how this relationship worked in practice.

**Mr J**

Mr J is a vulnerable adult. He suffers from multiple health problems: he’s had two heart operations, has a bad back and asthma. When we met him, he was isolated, depressed and didn’t have any family or friends.

His house was full of clutter and, as a result, he lived in his bedroom. The only time he’d leave the house was to go to a health appointment or to pick up his food or laundry once a fortnight. He was completely dependent on his carer for all his cooking, shopping and cleaning.

With our support, Mr J has started going on some of our day trips, and our Big Lottery funded *Friends who do lunch* initiative. He also started a computer course.

We’ve also helped him to de-clutter his house gradually, and to fix a few faults around his home. He was also given a small grant to buy new carpets, curtains, bedding, a vacuum cleaner and a washing machine.

Now, he’s taking care of his home, and himself.
LESSONS LEARNT

The results indicate that although the impact of the interventions wasn’t huge – or consistent – they did make a difference. This was the case particularly with regards to planned hospital appointments.

It’s not unusual
This isn’t unusual. When the Nuffield Trust evaluated over 30 community-based interventions for older people, they found no significant reduction in acute usage of NHS services, like emergency admissions.¹ As with our study, however, there was evidence of a fall in planned admissions and hospital outpatient attendances.

Other research studies have highlighted that one of the challenges in identifying significant changes in health when evaluating community-based interventions is that it takes time, to establish the service, and for the impacts to actually happen.²

Our Health Begins at Home project followed a similar path: the service had no significant impact on acute usage, but did result in a change in planned usage, especially as it developed.

We need further exploration to evaluate the impact of these interventions on reducing acute usage, as well as planned usage, in the future.

Was it us?
What, though, was our role in all of this? Are we, as a housing provider, better placed than other community-based services? Why should other organisations work with us as a partner if they want to improve people’s health and wellbeing?

Perhaps the most significant – and obvious – lesson is that our interventions had an impact because of who we are.

As a landlord, we’re in a unique position. Most of our tenants trust us: we look after their homes, assist them when something goes wrong and usually have an existing and visible presence within their communities.

¹ – Evaluating integrated and community-based care, Nuffield Trust, 2013
We were able to engage with them because they knew who we were. And by engaging with them, we uncovered a significant level of often completely undiagnosed need, ranging from severe long-term health conditions to progressive deterioration in mobility, confidence and wellbeing.

In particular, we identified 25 individuals who required intensive support. Assuming our sample was representative of our wider population of tenants aged over 50, we estimate there are an additional 475 people with similar health needs living in our homes. Extrapolating further, this means there could be over 100,000 people living in social housing who are similarly suffering in silence.

Many who participated in our study had been living in their homes for a number of years. They had kept themselves to themselves. As a result, we had lost touch with many of them, and were unaware of their individual circumstances.

By engaging with them, we not only uncovered their unmet health needs, we also identified numerous quick fixes we could make to their homes. As a result, more people can now continue living independently. So engagement had two positive outcomes: we provided a healthy home, as well as the means to live there healthily and independently.

**It’s us, and them**
There are, though, limits to our role. There are plenty of existing local services already available for people aged over 50. We shouldn’t try to replicate them. The issue is many of our tenants weren’t aware these services even existed.

Our role should be to provide our tenants with pertinent and timely information and, if necessary, to support them so they can visit these services themselves. By playing this role – of signposter, motivator and supporter – we can maximise the
effectiveness of these local services, rather than wasting precious resources in recreating them. We can also use our local knowledge to spot gaps in the market, and then develop suitable services by working with appropriate organisations.

**Health and wellbeing hubs**

Another role for us is to provide suitable space for community-based initiatives. Such spaces are typically expensive for local services to acquire and maintain, but essential to running cost-effective, sustainable services. We’re already playing this role in Hackney, where we’re partnering with Shoreditch Trust and Hackney Public Health in the Hackney Health Hub pilot.

Health hubs are community venues where local residents can access professional health improvement services, learn new skills, take part in exercise or creative classes, and receive tailored one-to-one support. We’re providing the physical space in Marsh Hill where one of these hubs is based.

This type of co-location of health and housing services can offer mutual benefits to health and housing bodies, with the closer integration and access to each other’s resources. It should, also, have multiple benefits for local people and communities.

**Supporting people**

Another lesson we’ve learned is the benefits for our tenants in participating in this type of research. As part of the final assessment process, we included a few additional questions to capture some more qualitative evidence.

We asked participants what was the most positive element of taking part in the project, as well as whether or not they felt participating had a positive impact on their health. The results were informative: all groups had a positive experience of participation.

Despite being part of the control group – and receiving no support or interventions – 42% of those in group 1 said participating had a beneficial impact on their health.

They talked about how they enjoyed having someone to talk to and how they had found the process useful in helping them to reflect on their own health. This suggests the simple act of assessment can be a positive experience for tenants.
Figure 8: Group 3B findings

Group 1

42%  Said participating in the project had a positive impact on their health

“It was nice to have someone to talk to, nice to have the social interaction with someone new”

Group 2

66%  Said participating in the project had a positive impact on their health

“I like having someone who takes an interest in what I’m doing.”

Group 3

75%  Said participating in the project had a positive impact on their health

“It has given me a purpose: it’s motivated me to move.”

Over 65% of group 2 members said participating had been beneficial for their health. They were similarly positive about the benefits of having someone to talk to, and to act as a point of contact for them. In addition, those who had participated in activities also tended to refer to them as the most important aspect of taking part.

Finally, group 3 participants: 75% said their health had improved because of taking part in the research. They liked having someone to talk with, and enjoyed this person taking an interest in them. The overwhelming majority referred to how much they enjoyed having a support worker, and the social and practical support this had included.

This suggests, though, there might have been a blurring of the support worker’s role, with some customers becoming over-reliant on them for both social interaction and practical support, rather than them being used to support improvements in their physical health, wellbeing and independence.

When delivering a health and wellbeing intervention, the implication is that the support
worker’s role needs to have a clear health and wellbeing focus.

Of course, a degree of interaction with practical home-based interventions will be necessary – and is one of the benefits we bring. Yet this should not become the support worker’s sole responsibility.

We should be supporting our customers to handle such issues, or to raise them with us effectively. By doing so, we’re encouraging them to take responsibility for making the wider lifestyle choices essential to good health.

**Signposting works**
The positive responses from group 2 members about the health benefits of participating in the research, along with the fall in number of nights spent in hospital, suggest that signposting may work.

When we examine the responses from group 2 members in more detail, however, this reduction in nights spent in hospital might be due to statistical anomalies.

There’s also the issue of roles. During the pilot, the signposting role was undertaken by our existing neighbourhood managers. At the end of the research, we conducted exit analysis qualitative interviews with them. Their reflections from these interviews included:

- the difficulties of being a good cop one day, and a bad cop the next: for example, in supporting health one day, and enforcing a tenancy issue the next. Residents also struggled to engage with this changing role;
- the strain on resources: large patch sizes and multiple responsibilities were a challenge for investing the necessary time for effective signposting;
- integration: we need to share information internally more effectively. Neighbourhood managers needed more support to provide effective signposting and health information

So whilst us being the landlord seems to help us open conversations with people around their health, it doesn’t seem that this is best done through existing housing roles. We need further research to test the effectiveness of signposting and how it is best delivered. Any future signposting might need to be a bespoke role, or within a dedicated health and wellbeing team.
Data issues
The final area of learning is whether our assessments are accurately capturing the impact of our interventions.

The questionnaire we used in the study was comprehensive, capturing everything from long-term health conditions and NHS usage, self-reported health ratings and wellbeing scores, through to falls, activity and mobility levels and winter warmth questions.

We spread our data net widely, because at the start of the research we didn’t know what kind of impact we might have. The lesson we’ve learnt, though, is that to improve our data quality, and the robustness of our statements around outcomes, we need to refine the questions we’ve been asking.

First, we need to move away from self-reported NHS usage: midway through the study, we identified a number of issues about this data, primarily around the consistency of reporting. We were seeing a lot of extreme data points, but didn’t have an idea as to what they meant, or why they were happening.

So when we conducted the final assessments, we included additional qualitative questions around these data points to provide us with a better understanding of where the data errors may lie.

The most scientifically robust approach would have been to access to NHS data, rather than relying on people to remember how many GP appointments, etc, they’ve had in the past six months. However, we weren’t able to get access to this data.

A second data lesson is we need to refine the measures we examine. Rather than assessing our impact on lots of different scales, we need to try and use one composite measure that reflects specific health issues. Using such a standardised measure would also help us to improve the reliability and validity of our final results.

Finally, we need to improve how we capture data, recording the support and interventions we’ve been providing so we can identify their relative impacts. This will enable us to invest more in those interventions or support activities that are the most effective.
**KEY LESSONS LEARNT**

Landlords like Family Mosaic are able to set the foundations for good health by ensuring our residents live in a healthy home environment. This is our fundamental purpose. As the findings from this research show, we can then use our proximity to our residents to access and engage with them, to support them in living healthily and improving their wellbeing.

1. Our health and wellbeing service made a difference. Tenants reduced their NHS usage. And, critically, the health of those who were really in need of the service improved.

2. Tenants told us they like us talking to them about their health, and that we want to help.

3. In Family Mosaic, it matters who engages with them: it’s more effective when it’s someone outside of the day-to-day management of their property.

4. Housing providers like Family Mosaic are in a unique position in being able to access some of the most vulnerable citizens who might otherwise be forgotten.

5. We need to adapt our approach to ensure we’re encouraging independent health-management, and not engendering dependency.

6. We need to amend our assessment structure, so it fully captures the impact we’re making.

7. We need to improve how we capture data, recording the support and interventions we’ve been providing so we can identify their relative impacts.
When the health pilot finished, the support provision also stopped. So what happened to the people who we were supporting?

At the end of the research study, we carried out a final health assessment of the 433 remaining participants. We identified 42 people who required continuing support, and referred them on to local services.

Most referrals were for people in group 3 or group 3B, probably because we already had a better understanding of their health situation. Consequently we were more able to identify their post-research support requirements. We referred ten people from groups 1 and 2 to other services purely as a result of the final assessment.

Those in group 3B had higher levels of need and, as a result, were more likely to require ongoing support. Nonetheless, it’s notable that 68% of them did not need any further support from other services. Support workers also reported they could have closed many cases earlier had it not been for the requirements of the research project. This could also have reduced the issue of dependency on support workers.

Figure 9: Number of people referred on to local services

<table>
<thead>
<tr>
<th>Group</th>
<th>Participants</th>
<th>Referred on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>133 people completed</td>
<td>4 referred on (3%)</td>
</tr>
<tr>
<td>Group 2</td>
<td>128 people completed</td>
<td>6 referred on (4%)</td>
</tr>
<tr>
<td>Group 3</td>
<td>147 people completed</td>
<td>24 referred on (16%)</td>
</tr>
<tr>
<td>Group 3B</td>
<td>25 people completed</td>
<td>8 referred on (32%)</td>
</tr>
</tbody>
</table>
Most of the referrals were made to floating support or befriending services. The majority of the former were focused around supporting people to move to more appropriate accommodation. The befriending referrals were for people who were persistently socially isolated.

**Figure 10: Referrals by service type**
As people become more active in managing their health, we know there is a reduction in acute health service use. Using the lessons from this pilot, we’ve refined our service model, and will be pursuing two further strands of research.

Both strands will test the impact of a service focused around health navigators, who will coach, motivate and empower our tenants to manage their own health effectively through an intensive short-term programme. Ultimately, we want to demonstrate the business case for a service that supports people to become more active in managing their health, as well as their use of preventative housing, health and community services.

One research strand will continue our focus on tenants aged over 50. The other will explore how we can apply some of our findings in our floating support services.

At the start of each strand, we will assess each participant using the Patient Activation Measure (PAM). This is a tool designed to assess an individual’s knowledge, skill and confidence in managing their health, and health care.

The PAM score segments individuals into one of four levels: those with a higher score understand the importance of taking a pro-active role in managing their health, and have the requisite skills to do this. Those with a lower score are less active in managing their own health.

PAM is a widely used tool in the USA, and is currently being piloted by five CCGs and the UK Renal Registry. The evaluations so far are indicating positive impacts.

**Strand one research**
Focused on general needs tenants aged over 50, this service will be tailored according to need. Participants will be randomly assigned to either the intervention group or control group. Each participant will be assessed at 0, 3 and 10-12 months using the PAM.

Those in high need (levels 1-2) will be assigned a health navigator, who will work with them for three months on an intensive health coaching programme. They will be coached on how to be more active in managing their health, while simultaneously being signposted and connected with the relevant health, housing and community services they need.
Figure 11: Strand one research model

1. Will be assigned health navigator
2. Will be supported by skilled volunteer
3. Continue to self-manage

Patient Activation Measure (PAM) level
Increasingly active health management

Figure 12: Strand two research model

1. Will be assigned health navigator
2. Supported by health navigator to engage with existing local services
3. Increasingly active health management

Patient Activation Measure (PAM) level
Increasingly active health management
They will also be able to access support from a volunteer recruited from level 4 participants. Those in medium need (level 3) will receive support from volunteers with specialist health knowledge.

An online coaching package will be provided to those in low need (level 4) to continue self-managing their health. They will also be encouraged to coach those in the high need group (levels 1 and 2).

**Strand two research**
This will test a remodelled floating support service against a standard model. Participants will be assessed at 0, 3 and 10-12 months using PAM.

A health navigator will provide an intensive health coaching and navigating service, encouraging independence and links to local services. They will focus on those with highest need (levels 1 and 2).

Participants assessed as medium and low need (levels 3 and 4) will be supported by a volunteer to engage with their local community and maintain and improve their health management, where possible. The most highly motivated will also be encouraged to coach those in the high need groups.
The approach we’re taking with these two strands of research means we can act reactively and proactively. We can identify and work with those who are in immediate need of support. And we can offer a preventative intervention aimed at effective self-management for all.

The key objective for both service models is to provide short-term provision to support independence and empower tenants to effectively manage their health.

Self-management of long-term health conditions is a key priority for the NHS, with 50% of all GP appointments and 70% of days spent in hospital beds used by those with chronic conditions. Their care absorbs 70% of hospital and primary care budgets in England.

An essential part of any short-term intervention is motivation, along with a support network to continue positive health behaviours. Both research strands will have a strong focus on building social networks and engaging with local community services. We aim to raise people’s awareness of, and their confidence in accessing, these services.

We need to integrate our new service with those already in existence locally. To facilitate this, we will use our role as a landlord to engage with local public health bodies, clinical commissioning groups, GP practices, community health and volunteer services, so we can offer the most effective and sustainable support network to our residents.

To achieve this, we need to engage with local partners. After focusing our initial research on residents in north London, for these two research strands we’re switching our focus to our residents living in Lambeth, Southwark and Lewisham. We may then look for research participants in other south London boroughs where we have stock.

If you provide a service in these areas, and can see an opportunity to collaborate in this next research stage, please contact us.

We will continue to report about the findings of both research strands over the forthcoming 18 months. If you want to keep informed of our progress, please contact us.

GET ENGAGED
If you can see an opportunity to collaborate in this next research stage, please contact Jemma Mouland, Head of Research and Policy at Family Mosaic.

T: 020 7089 1304

E: jemma.mouland@familymosaic.co.uk

If you contact us via email, please include the following information:

Contact name

Contact number

Contact email

Organisation name

Organisation description

Proposal for collaboration

If you are interested in supporting the project as a volunteer, please email:

HWBvolunteers@familymosaic.co.uk

We will then send you further information.

We look forward to hearing from you.