

Community empowerment: lessons learned from a local health programme

Fonseca Braga, Mariana^a; Moreno-Rangel, Alejandro^b; Tseklevs, Emmanuel^{a*}

^a ImaginationLancaster, Lancaster University, Lancaster, UK

^b Architecture Department, University of Strathclyde, Glasgow, UK

* e.tseklevs@lancaster.ac.uk

doi.org/10.21606/iasdr.2023.265

The use of complex public health systems to empower communities is often met with challenges and frustrations. Community empowerment programmes focus on improving mental and physical health needs, enabling individuals to become active members of the local community through collective actions. Design research plays a crucial role in understanding the interactions between health and communities. Healthier Fleetwood is a successful community empowerment program in the northwest of the UK, that connects residents with local services, groups, and events to foster a sense of community and encourage them to control their health and well-being. The success of this approach and its impact on health has been reflected in encouraging trends for reduced GP and A&E visits by Fleetwood residents. Nevertheless, the why and how behind the success of this community programme and its impact had never been previously captured and understood. The aim of the research, reported in this paper, was to develop an in-depth understanding of what impact is understood to be for the community and those engaged in the Healthier Fleetwood initiative, in order to replicate benefits to other UK towns. To achieve this, the research team employed design research methods, such as co-design workshops, day in a life, photovoice, design blueprint, and conversation methods. The findings identified 12 key lessons learnt, that can be used to develop similar Health Community Programmes in other UK towns. These findings can be grouped into three key themes: working closely with the community, having enhanced communication and the programme structure.

Keywords: *health; community empowerment; design research for health; empowerment interventions*

1 Introduction

Often complex systems for public health are used to empower communities, however, there are several frustrations with the challenges associated with such models (Sims & Aboelata, 2019). Recent approaches such as social prescription gain momentum, where rather than General Practitioners (GPs) prescribing medicine, they refer people to community centres. However, challenges arise when the trust between organisations and residents is broken. The dominant approach tends to focus on



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International Licence](https://creativecommons.org/licenses/by-nc/4.0/).

specific interventions, rather than wider community-based solutions (Hawe, 2015). There is a debate on the best approach to measuring the quantitative indicators and outcomes for the empowerment of such interventions (Cyril et al., 2016; Laverack & Pratley, 2018). In the context of evaluation, design research offers meaningful opportunities to explore, identify and capture key lessons learnt at the community level that support empowerment by improving health and wellbeing. It does that by showing the impacts of programmes/projects through accessible, visual and other compelling ways of sharing the data (e.g., storytelling, personas, etc.). Design research plays an important role on understanding the interactions between health and the real world where people live, work and socialise.

Furthermore, design research offers a flexible approach to deploying participatory design and co-design methods that can be specifically crafted to promote effective place-based and situated community engagement. Participatory design methods emerged in the 1960s applied to public decision-making processes in the USA, and systems development during the 1970s in Scandinavia (Sanders & Stappers, 2008; Sanoff, 2007). Participatory design and co-design capabilities refer to designers' traditional skills of developing tools (Sanders & Stappers, 2008), and facilitating visioning and strategic planning together with communities (Sanoff, 2007).

On the one hand, co-design refers to the "collective creativity as it is applied across the whole span of a design process" (Sanders & Stappers, 2008, p.6). It is a specific instance of co-creation and concerns the creativity deployment of professional designers and other non-expert groups collaborating in the development process (Sanders & Stappers, 2008). On the other hand, participatory design processes are multidirectional learning processes by which designers, diverse stakeholder groups and citizens learn together throughout the process.

Three clusters of capabilities are identified in participatory design processes from different mainstreams of participatory design literature: the capacity (1) to visualise different views, promoting consciously collaboration; (2) to confront those views giving grounds for collective reflection; and (3) to articulate and take collaborative actions (Huybrechts et al, 2018).

Community empowerment programmes seek to enable individuals to become an active part of the local community through collective actions that focus on improving wellbeing (mental and physical health) needs removing inequality barriers in the community (Laverack, 2006). However, the complexity of the empowerment interventions relates to several components which may determine whether or not they are successful. Moreover, the professional services staff and community members driving and supporting the intervention or programme are key components. Finally, it's expected that, in successful cases, the community mentality and its existing systems where the change is built around the individual and the self-belonging grow (Rosato, 2015).

Healthier Fleetwood is a community empowerment programme based on listening to the local community to channel the appropriate support where they needed the most. It connects residents to each other, to services available from local partners and to the vibrant, inspirational network of local groups, activities and events. It owns a Wellbeing & Community Information Centre, where local residents can find more information to take away and an opportunity to chat with community members about what's happening in Fleetwood. Furthermore, they host regular drop-in events with

their community partners including the West Fleetwood Computer Clinic, The Walnut Tree dementia and Parkinson's awareness group, Autism Initiatives, pottery workshop and their Chatter Café.

Healthier Fleetwood improved the communication between Fleetwood's residents and local support and services aiming to improve health and well-being. After its creation in 2016, Healthier Fleetwood soon become the point of contact for the community, supporting residents to improve their physical and mental health (Moreno-Rangel, Tseklevs, & Spencer, 2022).

Healthier Fleetwood is based on the theory of self-determination (Deci & Ryan, 2012). The theory argues that in order to keep an individual highly self-determined and self-motivated, they must feel as having control, confidence and connection – also known as the 3Cs – in their lives (Figure 1). However, Healthier Fleetwood applied the 3Cs at a community level and in the context of health. With this approach, Healthier Fleetwood listens to and empowers the community to seek the answers they need.

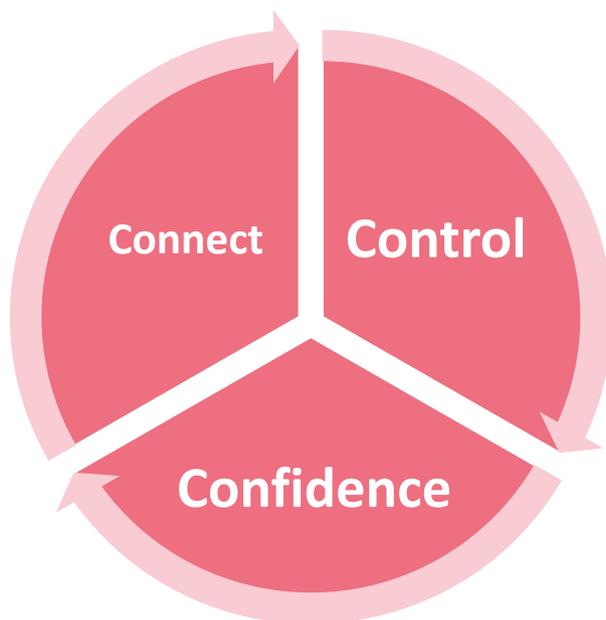


Figure 1. The three Cs as described in the self-determination theory. Source: Authors.

“Healthier Fleetwood connects residents to each other, the services available from local partners, and the inspirational network of local groups, activities, and events. They provide a forum for ideas to emerge from the community, encourage residents to take control of their health and well-being, and by growing in self-confidence to lead healthier and happier lives (Moreno-Rangel, Tseklevs, & Spencer, 2022)”.

This translates as the residents being the centre of the activities aiming to stimulate and initiate initiatives by themselves (Moreno-Rangel, Tseklevs, & Fonseca Braga, 2022).

This paper discusses the evaluation and lessons learnt from Healthier Fleetwood aimed at how these can be inspired and can be scaled across other communities for empowerment and to improve health outcomes. The aim of this paper is to provide an overview of the lessons learnt from the impact that Healthier Fleetwood had on the community and those engaged in the Healthier Fleetwood initiative.

In doing so, this paper will be discussing the findings divided into two sections looking at the perspective of i) the residents and ii) the stakeholders involved in the programme. More detailed information about each of these perspectives can be found in previous publications (Moreno-Rangel, Tseklevs, & Fonseca Braga, 2022; Moreno-Rangel, Tseklevs, & Spencer, 2022).

2 Method

Design research was employed to comprehensively evaluate the quantitative outcomes and qualitative impact of the Healthier Fleetwood Programme over a one-year period, spanning from June 2021 to May 2022. To gain a deep understanding of the program's effects on individual residents and the local community, various creative and participatory research methods were employed. Namely, interviews, online conversation, day in the life, photovoice and workshops.

To explore the program's impact on residents' lives, a group of 20 participants was engaged, representing a diverse range of perspectives. These participants were divided into two groups: professional stakeholders representing organizations involved in the program (n=10), and members of the Healthier Fleetwood program (n=10).

Through a blended approach of face-to-face and online interactions, participants were encouraged to share their personal stories using methods such as the "day in a life" approach (del Rio Carral, 2014) during conversations and the utilization of the photovoice method (Sutton-Brown, 2014). Conversation lasted on average 45 minutes. During the photovoice method participants were shown a number of representative photos from their local area ranging from past to current photos. They were also encouraged to bring and show their own photos. These were used as prompts that allowed participants to express their experiences and provide valuable insights into the program's influence on their daily lives.

Concurrently, the experiences of professional stakeholders were gathered through one-to-one online guided conversations (n=10), wherein stakeholders described their involvement in the program over the past five years. The interviews lasted on average 35 minutes. This facilitated a comprehensive understanding of the process, challenges, and success stories associated with the Healthier Fleetwood Programme. In addition, the use of service design blueprints (Bitner et al., 2008) aided in mapping the journey of local residents as they accessed various services within the community, revealing the interactions between different service providers. These were co-created with the interviewees using online collaborative platforms, such as Miro. This served as a guide for the discussions but also as an outcome of the interviews.

The data analysis process was conducted separately for each group (professional stakeholders and community members) to derive individual insights that could be utilized for learning and program development. By analysing the data from each group independently, the research team gained a nuanced understanding of the program's impact and identified specific strengths and areas for improvement within each group. Subsequently, a comparative analysis was conducted, allowing for the identification of overarching strengths and challenges that emerged across both groups, contributing to a comprehensive assessment of the program's effectiveness.

To ensure the lessons learned throughout the year were effectively documented and shared, a face-to-face workshop was conducted in May 2022, bringing together both the community and

professional stakeholders. During the workshop the team presented the main findings and through facilitated discussions provided a space for participants to provide feedback, recommendations and identify future directions for Healthier Fleetwood as well as future research. This collaborative workshop served as a platform to consolidate the insights gained and facilitate a collective understanding of the program's impact. Furthermore, with the support of NHS England, these lessons and stories were disseminated regionally and nationally, fostering broader awareness and facilitating the exchange of knowledge and best practices.

3 Key insights from the community

Research shows that being lonely and socially isolated is as bad for your health as smoking up to 15 cigarettes a day (Holt-Lunstad, 2017). Therefore, social activities play a key role in health and well-being. Fleetwood's residents felt that socialising make them happier. The idea of visiting their parents, grandchildren and friends provided structure to their day. Hence, planning ahead where and when are you meeting was an essential part of day-to-day life. Healthier Fleetwood gave residents a platform to connect with people from diverse backgrounds that they would not necessarily meet otherwise. This helped to create strong relationships driving the change for the community. The sense of community and self-belonging is strengthened by breaking the loneliness in a community.

The activities organised by the individuals in the community and supported by Healthier Fleetwood are open to everyone. By developing these activities, people found something to look for in their week, something to be part of, somewhere where they belong. The activities and groups also formed connections within the community. Hence, healthier Fleetwood became a platform to plan the community's day-to-day lives, connect people, make new friends and support self-driven activity groups.

Healthier Fleetwood recognised that it is difficult to keep on top of everything. In the spirit of listening to the community and giving updates on the different activities, a monthly meeting is open to every resident. These meetings are a safe space for the residents to share their concerns, find out what's happening in town and meet new people. These activities helped provide residents with the 3 Cs, namely control, confidence and connection, part of the theory of self-determination (Deci & Ryan, 2012).

The key themes or factors that were identified in the community that influence the individual's moods were: social interactions (friends & family), emotions, physical state, physical activity, sense of purpose and weather. These themes were key areas which were drawn from the conversations with the community and consistently appeared with different participants and are discussed widely at the healthier Fleetwood meetings.

Figure 2 and Figure 3 show how these little changes and activities had an impact on improving the happiness of Fleetwood's residents. Most of the residents said that visiting a family member was part of their day and often what brought the most joy. However, being actively involved in an activity supported by the programme was also at the top of the list. These two points supported both physical and mental wellbeing in the community boosting their self-confidence.

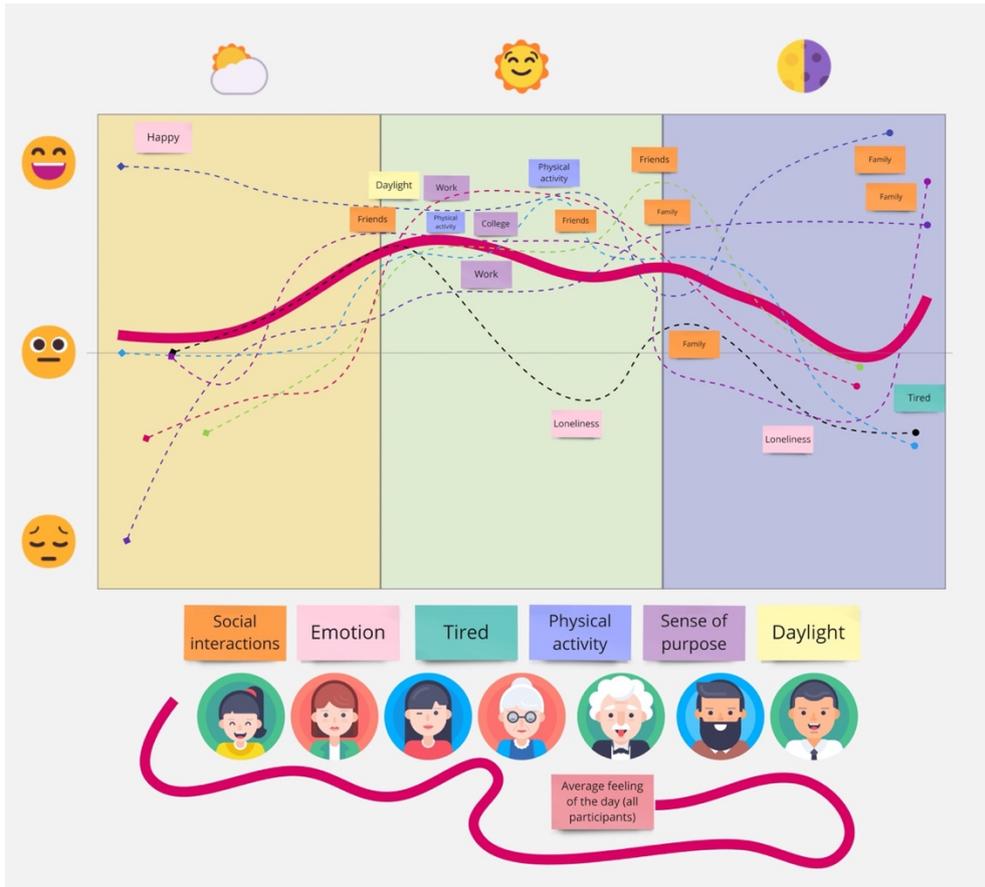


Figure 2. Day in life of Fleetwood's residents. Source Authors.

Visit family	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Visit friends	✓	✓			✓	✓		✓		✓		✓		
Walking	✓	✓		✓	✓	✓				✓	✓		✓	
Work			✓	✓			✓	✓	✓					✓
College		✓												
HF Activity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Physical health improvement	✓			✓	✓	✓	✓	✓		✓	✓		✓	✓
Mental health improvement	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Self confidence		✓		✓	✓	✓			✓	✓	✓		✓	✓
Support during COVID	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Other kind of physical activity	✓	✓					✓		✓	✓	✓	✓	✓	
Support for elderly	✓				✓	✓	✓		✓	✓			✓	✓
Church	✓				✓	✓	✓			✓	✓	✓		✓

Figure 3. How Fleetwood residents found support through Healthier Fleetwood. Source: Authors.

4 Key insights from the stakeholders

Professional stakeholders are an essential component of Healthier Fleetwood and its success. Up to 2022, Healthier Fleetwood was supported by 64 organisations from different areas in the community. They included the NHS, local authorities, businesses, schools, the voluntary and faith sector. The partners identified three key areas that have driven their involvement in Healthier Fleetwood: improvement of the organisation belonging to the community, development of services based on social opportunities in the community, and serving as a mechanism for the organisations to engage with the community. For the stakeholders, the themes that were associated with their participation were involvement, benefits/support for the community, and benefits & challenges for their organisations. These themes are discussed in greater detail in the following paragraphs.

Healthier Fleetwood played a crucial role in supporting the community during the challenging times of COVID-19. One of the key elements that contributed to its success was the organisation's support for the community. By listening to what the community wanted and needed, the partners were able to provide better support and improve the quality of life. This empowered the community and increased hope for the future, especially during the pandemic.

The partners involved in Healthier Fleetwood shared a desire to help the community, and this driver brought them together to establish new partnerships. Through these partnerships, they brought together new potential to offer different services to the community. By finding out what people needed and how the stakeholders could invest in people, the community felt supported, which elevated the sense of community that was much needed to respond to mental health, support for long-term conditions, engage with young people, and COVID-19.

Healthier Fleetwood also served as an important mechanism to support the community during COVID-19. Through the established partnerships and community life, Fleetwood thrived during these hard times. Having these partnerships established made it easier for the organisations to work together, rather than starting from scratch and establishing trust in each other.

As Healthier Fleetwood became embedded in the stakeholders' organisations, they started seeing more benefits to their organisations and the community. For instance, by having the partnership already established, it was easier for the partners to apply for external funding to develop social programs that helped the community and regenerate the town. This also helped them focus resources where they really needed to support a range of other services while developing community leadership. Moreover, they were able to provide support complemented by other organisations, helping them to access services. This was clearly perceived through economic growth, making it easier to deliver better services and improve their credibility.

Finally, some of the stakeholders also recognised that Healthier Fleetwood served as a Public Relations platform. The most important benefits for the stakeholders' organisations were connecting with the community, improved health and networking.

However, as in any other kind of partnership, the stakeholders faced some barriers and challenges. The biggest challenges they had were how to deal with big organisations such as the NHS, and how to capture the social benefits of the programme, particularly those related to young community engagement and elderly-oriented benefits. Another challenge that was recognised was the way of

thinking. For instance, some organisations had difficulties losing control over certain activities or community services. This created another way of services going from universal services to tailored to individuals. However, this change was difficult in some instances, as it would be in other organisations.

The stakeholders also faced challenges related to time, funding, and resources. These barriers were significant, but the partners involved in Healthier Fleetwood remained committed to supporting the community and finding innovative ways to overcome these challenges. In doing so, they were able to make a real difference in the lives of those in Fleetwood, improving their quality of life and strengthening the sense of community. These findings are reflected in Figure 4.

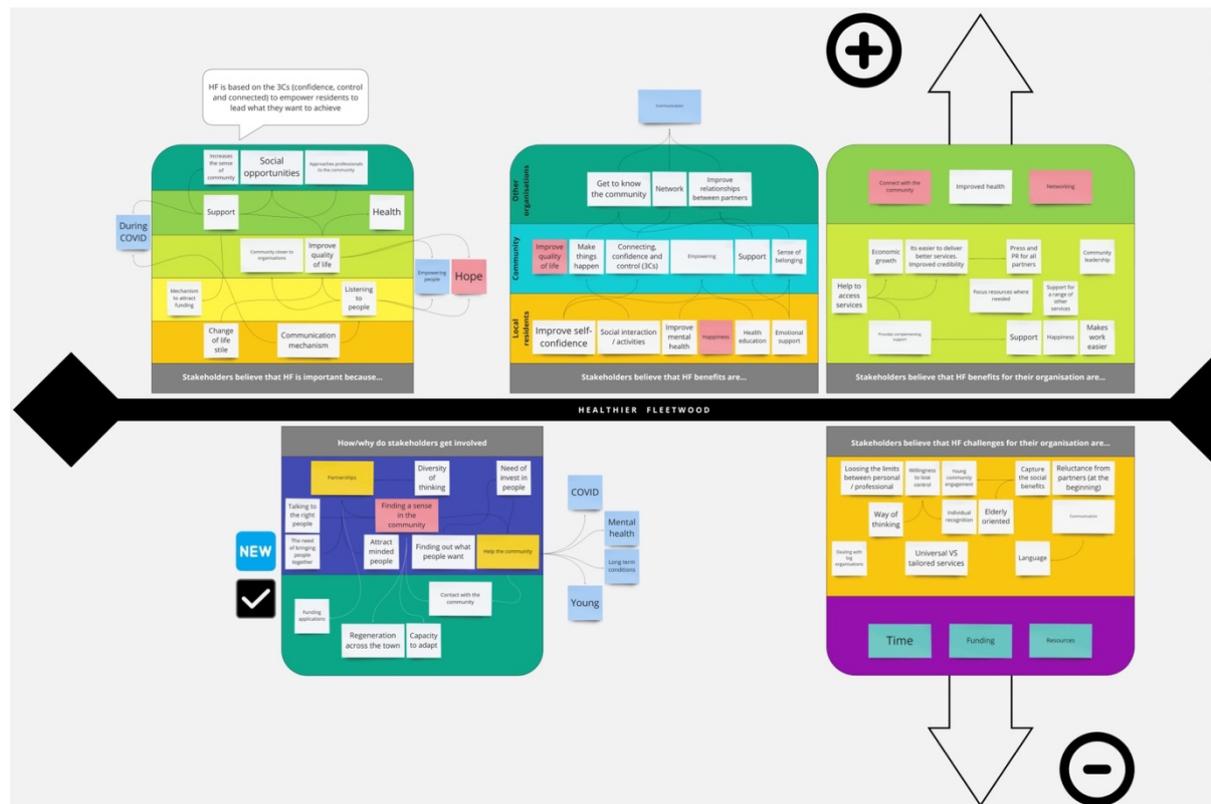


Figure 4. Summary of the stakeholders' perceptions of Healthier Fleetwood. Source Authors.

5 Moving forward and lessons learned

When it comes to implementing a program like Healthier Fleetwood in other UK towns, there are several important factors to consider. These factors can be broken down into three main categories: structure, implementation, and community engagement.

Firstly, the structure of Healthier Fleetwood should be considered. Unlike many similar organisations, Healthier Fleetwood is not constituted as a Charity or Business. Instead, it relies on its partners' goodwill to come together for the greater good of the community. This gives them the flexibility to evolve with the town's needs and re-shape themselves as needed, serving as a communications bridge between the community and the organisations. However, it's worth noting that this structure may not be suitable for every town, and different communities may need different organisational structures to suit their particular needs.

Another important factor to consider is the implementation process. The stakeholders involved in Healthier Fleetwood identified several key elements that were important to the programme's success. These included identifying individuals passionate about the community, building relationships over time, establishing a local identity, seeking out partners who care about the community, involving the NHS and other large organisations, and allowing the program to evolve organically. By following these principles, other UK towns could implement similar programmes in a way that is tailored to their specific needs.

Finally, community engagement is a critical factor in the success of a program like Healthier Fleetwood. To engage with the community, it's important to establish open communication channels and listen to the community to identify their needs. Engaging with different groups within the community is also essential, such as younger populations who are currently underrepresented in Healthier Fleetwood. By involving the community in the programme's development and implementation, other UK towns can create programmes that truly reflect the community's needs and priorities.

Furthermore, there were key elements identified by stakeholders for scaling the Healthier Fleetwood program to other UK towns. The data analysis process was conducted independently for the two stakeholder groups. This approach yielded valuable individual insights that served as valuable learning resources. Subsequently, the research team thoroughly examined and deliberated upon the lessons gleaned from each group, facilitating a comparative analysis between them. This comparative analysis enabled the identification of the programme's strengths, as well as potential areas for improvement. By leveraging this comprehensive approach, we were able to extract valuable insights to enhance the program's effectiveness. These include:

1. Identifying passionate individuals: It is important to identify individuals who are passionate about their community and have connections within the community and organizations. These individuals can be instrumental in creating the initial network and building relationships.
2. Building relationships takes time: It is important to recognize that building relationships takes time and effort. It may take some time to identify the right people to involve and to build trust within the community.
3. Establishing local identity: Each community is unique, and it is important to establish a local identity for the programme that reflects the specific needs and values of the community.
4. Engaging partners who care for the community: It is important to seek out partners who are genuinely interested and invested in improving the health and wellbeing of the community. This can include local businesses, community organizations, and healthcare providers.
5. Formal entity is unnecessary: The partnership does not necessarily need to be established as a formal entity, such as a charity or a business. An informal network can be effective in building relationships and addressing community needs.
6. Key partner support: It is important to identify and secure support from key partners, such as local councils and the NHS, at the beginning of the programme. Additional partners may join later as the program evolves.
7. Open communication channels: Establishing open communication channels with the community, stakeholders, and partners is essential for building trust, understanding community needs, and addressing challenges as they arise.

8. Listening to the community: The program should be responsive to the needs of the community. It is important to actively listen to community members and involve them in decision-making processes.
9. Involving the NHS and other big organizations: Partnering with the NHS and other large organizations can provide valuable resources and support for the programme.
10. Allowing the programme to evolve: It is important to allow the programme to evolve and grow organically, rather than starting with a preconceived idea of what it should be or provide.
11. Losing control of the programme: Partners should be prepared to lose some control over the programme and allow the community to take ownership of it. However, they should still provide leadership and guidance as needed.
12. Welcoming changes: Partners should be open to different approaches and welcome changes as the programme evolves and adapts to the needs of the community.

By following these key elements, other UK towns can create similar programs to Healthier Fleetwood that are tailored to their unique needs and resources, and that can help improve the health and wellbeing of their communities.

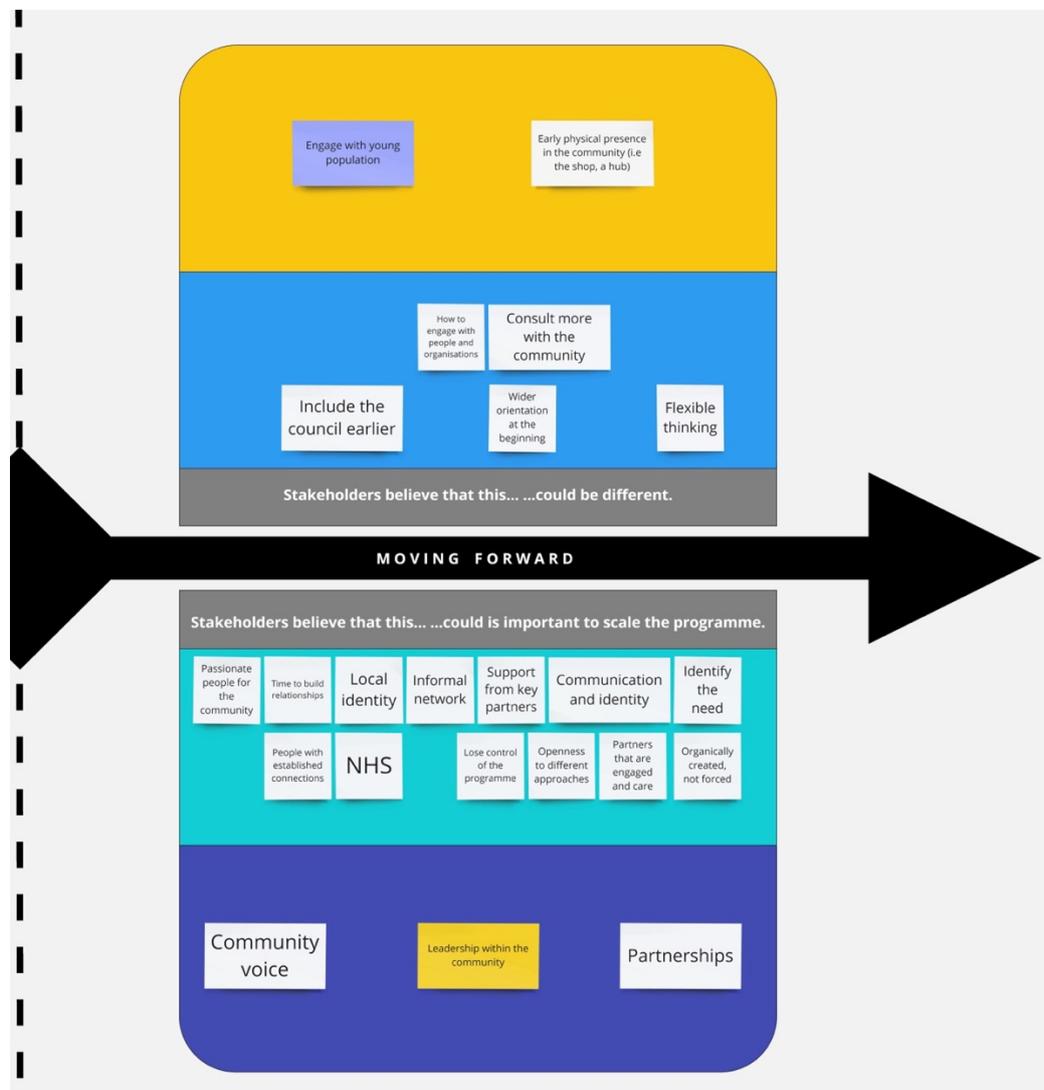


Figure 5. Summary of the views to move forward from the different Healthier Fleetwood partners. Source: Authors.

6 Conclusions

Healthier Fleetwood is an independent organization dedicated to improving the quality of life for residents of Fleetwood. By connecting residents with local services, groups, and events, Healthier Fleetwood fosters a sense of community and encourages residents to take control of their health and well-being. The Healthier Fleetwood provides a forum for community ideas to emerge and for residents to grow in self-confidence, contributing to happier and healthier lives.

The residents of Fleetwood found that socializing and planning ahead for meetings with loved ones provided structure and happiness to their lives. Healthier Fleetwood also provided a platform for residents to connect with individuals from diverse backgrounds, fostering strong relationships and a sense of community. The organization supports self-driven activity groups that are open to everyone, creating connections within the community and giving residents something to look forward to in their week. Monthly meetings provide updates on activities and a safe space for residents to share their concerns and meet new people. While external factors like weather can influence mood, residents in Fleetwood recognize that they can control their own happiness by participating in activities they enjoy.

Working closely with the community, Healthier Fleetwood facilitates community-driven initiatives. Its main role is to connect residents with local partners, who play an essential part in the programme by improving the sense of community, creating social opportunities, and facilitating access to professionals.

Enhanced communication between partners and the community is one of the most significant benefits for the organizations involved, but there are also other benefits at the local, community, and organizational levels. While the conditions in Fleetwood may differ from other UK towns, the programme's success suggests that it could be replicated elsewhere by following four key principles: showing leadership within the community, allowing partnerships to develop, giving the community a voice, and listening to the community's needs.

Implementing a program like Healthier Fleetwood in other UK towns requires careful consideration of the programme's structure, implementation process, and community engagement. By following the principles established by the stakeholders involved in Healthier Fleetwood and tailoring them to the specific needs of each town, other communities can create successful programs that improve health outcomes and benefit the community.

References

- Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: a practical technique for service innovation. *California management review*, 50(3), 66-94. <https://doi.org/10.2307/41166446>
- Cyril, S., Smith, B. J., & Renzaho, A. M. N. (2016). Systematic review of empowerment measures in health promotion. In *Health Promotion International* (Vol. 31, Issue 4, pp. 809–826). Oxford University Press. <https://doi.org/10.1093/heapro/dav059>
- Deci, E. L., & Ryan, R. M. (2012). Self-Determination Theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology: Volume 1*. SAGE Publications Ltd. <https://doi.org/https://dx.doi.org/10.4135/9781446249215.n21>
- del Rio Carral, M. (2014). Focusing on "A Day in the Life": An Activity-Based Method for the Qualitative Analysis of Psychological Phenomena. *Qualitative Research in Psychology*, 11(3), 298–315. <https://doi.org/10.1080/14780887.2014.902525>
- Hawe, P. (2015). Lessons from complex interventions to improve health. *Annual Review of Public Health*, 36, 307–323. <https://doi.org/10.1146/annurev-publhealth-031912-114421>

- Holt-Lunstad, J. (2017). The Potential Public Health Relevance of Social Isolation and Loneliness: Prevalence, Epidemiology, and Risk Factors. *Public Policy & Aging Report*, 27(4), 127–130. <https://doi.org/10.1093/ppar/prx030>
- Huybrechts, L., Dreessen, K., & Hagedaars, B. (2018). Building Capabilities Through Democratic Dialogues. *Design Issues*, 34 (4), 80-95. https://doi.org/10.1162/desi_a_00513
- Laverack, G. (2006). Improving Health Outcomes through Community Empowerment: A Review of the Literature. In *Source: Journal of Health* (Vol. 24, Issue 1). <https://about.jstor.org/terms>
- Laverack, G., & Pratley, P. (2018). *What quantitative and qualitative methods have been developed to measure community empowerment at a national level?* <https://apps.who.int/iris/handle/10665/326225>
- Moreno-Rangel, A., Tseklevs, E., & Fonseca Braga, M. (2022). *The little book of Healthier Fleetwood: stories of life and health empowerment*. Lancaster University.
- Moreno-Rangel, A., Tseklevs, E., & Spencer, M. (2022). *The little book of of Healthier Fleetwood connecting professional stakeholders to support the growth of the community*. Lancaster university.
- Rosato, M. (2015). A framework and methodology for differentiating community intervention forms in global health. *Community Development Journal*, 50(2), 244–263. <https://doi.org/10.1093/cdj/bsu041>
- Sanders, E. B.-N. & Stappers, P. J. (2008). Co-creation and the new landscapes of design. *Co-Design*, 4(1), 5-18. <https://doi.org/10.1080/15710880701875068>
- Sanoff, H. (2007). Multiple Views of Participatory Design. *International Journal of Architectural Research*, 2 (1), 57-69. <https://archnet.org/publications/5102>
- Sims, J., & Aboelata, M. J. (2019). A System of Prevention: Applying a Systems Approach to Public Health. *Health Promotion Practice*, 20(4), 476–482. <https://doi.org/10.1177/1524839919849025>
- Sutton-Brown, C. A. (2014). Photovoice: A methodological guide. *Photography and Culture*, 7(2), 169-185. <https://doi.org/10.2752/175145214X13999922103165>

About the Authors:

Dr Mariana Braga: is a design researcher in ImaginationLancaster where she co-leads the Social Design SIG. Braga’s research has been (1) identifying community-led knowledge and strategies in areas of Public Health and (2) mapping public service and policy gaps.

Dr Alejandro Moreno-Rangel: his main research interests are net zero buildings and the indoor environment, particularly Passivhaus homes. Ultimately, the connections between sustainable architecture and health exploring them through design research methods.

Prof Emmanuel Tseklevs: is a Professor of Global Health Design Innovation at Lancaster University and the Co-Director of the Future Cities Research Institute. He leads international research in design for global and planetary health.