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Developing a conversation about identifying community needs to embrace well-being through social prescribing interventions

Thomas, Gwenlli

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Developing a conversation about identifying community needs to embrace well-being through social prescribing interventions

Gwenlli Mair Thomas, BA. Master of Science by Research (MScRes) Thesis Bangor University School of Health Sciences

September 2021









Declaration:

Yr wyf drwy hyn yn datgan mai canlyniad fy ymchwil fy hun yw'r thesis hwn, ac eithrio lle nodir yn wahanol. Caiff ffynonellau eraill eu cydnabod mewn cromfachau yn rhoi cyfeiriadau eglur. Nid yw sylwedd y gwaith hwn wedi cael ei dderbyn o'r blaen ar gyfer unrhyw radd, ac nid yw'n cael ei gyflwyno ar yr un pryd mewn ymgeisiaeth am unrhyw radd oni bai ei fod, fel y cytunwyd gan y Brifysgol, am gymwysterau deuol cymeradwy.'

Rwy'n cadarnhau fy mod yn cyflwyno'r gwaith gyda chytundeb fy Ngoruchwylwyr Dr Mary Lynch a Dr Llinos Haf Spencer.

I hereby declare that this thesis is the results of my own investigations, except where otherwise stated. All other sources are acknowledged by bibliographic references. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless, as agreed by the University, for approved dual awards.'

I confirm that I am submitting the work with the agreement of my Supervisors Dr Mary Lynch and Dr Llinos Haf Spencer.

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Funding Body: Knowledge Economy Skills Scholarships (KESS2 East.

Funding partner: Grŵp Cynefin Housing Association.

Qualification/Degree Obtained: Master of Science by Research.

Acknowledgments

First, I wish to thank my academic supervisors, Dr Mary Lynch and Dr Llinos Haf Spencer. Thank you for allowing me to undertake this research and for your time, support, and guidance.

I would like to express my gratitude to KESS2 East for funding my masters, for all their support and for the useful training opportunities.

Thank you also to my company partner, Grŵp Cynefin housing association for funding my masters. My sincere thanks go to Mair Edwards, Ben Gregory, and Bethan Thomas from Grŵp Cynefin's Community Initiatives team for being so helpful and for their invaluable advice.

A heartfelt thank you to my fellow student, Cher Lewney, for being so willing to listen and share ideas.

I am also very grateful to Andrew Rogers, Gwenallt Consulting for all his support and guidance.

I would also like to express my profound gratitude to the Nantlle Valley residents who gave their time to participate in this research and provided critical knowledge and insight.

Acknowledgments are also due to Yasmin Noorani, Academic Support Librarian from the Bangor University School of Health Sciences for her support in developing the search strategy for the third Chapter of this Thesis. I would also like to acknowledge the support of the Welsh School of Social Prescribing Research who gave me the opportunity to present the findings from an early draft of the third Chapter of this Thesis and provided constructive comments. Thank you also to Mirain Llwyd, Gwynedd Council's Bridging the Generations Coordinator, for being so helpful.

Last, but by no means least, thank you to Ifan, my family and friends for their endless encouragement and support.

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Abstract

Background: Grŵp Cynefin, a North Wales housing association, aspire to offer a social prescription (SP) service within an innovative health and well-being Hub, currently being planned in the Nantlle Valley, North West Wales. In line with the requirement of Welsh Government policy to engage with service users when developing health services, Grŵp Cynefin want to engage the community in the development of the SP intervention through co-design and co-production.

Aim: The aim of the research was to gather information about co-production and to engage with the residents of the Nantlle Valley to gather perceptions regarding the need for co-produced SP interventions to meet the well-being needs and requirements of the community.

Methods: A systematic review was conducted to examine the evidence in developing SP interventions that applied a co-designed /or co-productive approach to improve well-being outcomes in a community setting. Applying the Preferred Reporting Items for Systemic Reviews and Meta-Analyses guidelines, eight qualitative studies were selected for inclusion in the review and a narrative thematic synthesis of the results was conducted.

In addition, a qualitative study was conducted based on the systematic review results to gain a grassroot level perspective of the Nantlle Valley residents' perceptions of SP interventions. A convenient sample (n=16) of community members were recruited by various means and data was collected through 4 focus groups. Drawing from the principles of citizen assembly deliberations and future design in developing sustainable strategies, a novel approach was applied to the focus groups. The "Today Groups" deliberated on the well-being of community today, and the "Legacy Groups" deliberated on the well-being of future generations in developing SP interventions and the well-being Hub as a whole. The focus groups results were analysed through thematic analysis.

Results: The systematic review results suggested that engaging community members in SP development through co-designed and co-produced approach empowers service users and ensures their buy-in consequently generating sustainable well-being outcomes. The results of the focus groups imply a need for such an approach to the development of additional SP in the Nantlle Valley. This is due to unaddressed social and economic determinants of health as well as a weakened core economy. The results also demonstrate that SP interventions are an integral part of establishing a holistic health service to ensure a resilient and sustainable

healthy community. However, the results of the systematic review and focus groups also suggest common barriers that could hinder the co-production of SP interventions. The identified obstacles in taking a co-production approach highlight the importance of ensuring effective leadership, sufficient resources along with suitable evaluation framework to coproduce sustainable SP intervention within community settings. The results of the focus groups also imply the potential of the well-being Hub initiative to be a catalyst not only for improving the health and well-being of the community, but to alleviate long-term health inequalities facing future generations of the Nantlle Valley.

Conclusion: This Thesis concludes that although there are current SP interventions in the Valley, there is a need for additional co-produced social prescribing interventions to improve well-being outcomes in the Nantlle Valley. The results from this study indicates that a co-produced approach should be applied to the development of SP interventions within an implementation science framework with evaluation built in from inception phase, to ensure the sustainability of the intervention. The evidence from this study also concludes that taking a short and long-term thinking deliberation approach to focus groups is effective in addressing the needs of present-day citizens and recognises local and long-term challenges. In addition, evidence demonstrates that such an approach inspires interventions that can shape healthy, sustainable communities.

Chapter 1: Thesis background and context

1 Introduction

This chapter will provide the background and contextualise this Masters Thesis. A definition of SP will be provided followed by an outline of how SP interventions accords with current Welsh Government (WG) health and well-being policies and legislation. An overview of coproduction and co-design, two approaches that will be discussed throughout this Thesis, will also be presented. The Nantlle Valley's demographics will be investigated as well as the wider determinants of health that exist in the valley. Early indications of the long-term effects of the Coronavirus (COVID-19) pandemic on the Valley and the potential risk they impose on the well-being of valley residents will also be examined. The chapter concludes with the main aim and objectives of this Thesis.

1.1 Motivations of research

This research is funded by the European Social Fund through a KESS2 studentship and is an essential component of an innovative project to develop a health and well-being Hub in the Nantlle Valley. The Nantlle Valley is a rural, post quarrying area in the county of Gwynedd, North West Wales. Planning for a new health and well-being hub in the Nantlle Valley was instigated in 2017 after the closure of the only remaining Welsh-speaking General Practitioner (GP) surgery in the village of Penygroes, the valley's economic and social centre. Residents voiced their concerns about the lack of Welsh-medium GP service and Grŵp Cynefin, a housing association operating across North Wales from Penygroes, undertook an initial feasibility study in 2018. The feasibility study investigated the potential for Penygroes to be the location of a new health and well-being Hub for the Nantlle Valley. In addition, to confirming that GP provision is vulnerable in the valley, qualitative evidence collected by Grŵp Cynefin through interviews with key stakeholders also suggested that other National Health Service (NHS) services (e.e community dental services) be included in the plans. In addition, the feasibility study also recommended that non-medical interventions and services (e.g housing sector, social care) should be co-located alongside NHS primary care health services, leading to an integrated service model (Rogers and Whitear, 2018).

Although not yet officially launched, the project for developing the health and well-being Hub is currently being called 'Llesiant Lleu', in reference to the well-being (llesiant) of the people living in the 'Lleu' area. Lleu was a character in the fourth branch of the Mabinogi (stories of Wales written in middle Welsh), who was reported to live in the Nantlle Valley area of Gwynedd (Thomas, 2006). The current health and well-being hub master plans, developed by Grŵp Cynefin, present an innovative campus that will host a primary care surgery, community services, Grŵp Cynefin housing association offices, a crèche, a care home, social housing, assisted living flats and Theatr Bara Caws (a well-established and popular Welsh theatre company). The hub will offer integrated health and well-being services based on best evidence practice with the aim of preventing illness and creating a well-being focus for redressing the social determinants of health. As part of the integrated well-being service offer, Grŵp Cynefin wishes to implement a SP intervention within the Hub. In accordance with their aim of implementing evidence-based services Grŵp Cynefin sought to involve community members, who are the prospective service users, in this development. The prospective Thesis therefore sets out to develop a conversation with the Nantlle Valley to gather perceptions regarding the need for co-produced SP interventions.

1.2 Definition of social prescribing

Chronic health conditions can stem from socioeconomic and psychological issues that medical interventions cannot always sufficiently surmount (Brandling and House, 2009). SP provides healthcare professionals with the option of referring patients to various local, nonclinical support groups within their community that can help tackle such persisting issues (South et al., 2008). Existing models of SP interventions demonstrated within the evidence varies according to the activities and level of support offered to service users (Moffatt *et al.*, 2017). The support ranges from lighter models of SP interventions that simply consist of health professionals signposting patients to community groups, to SP models that exist to tackle specific issues (e.g. exercise on prescription) and more holistic models that offer service users time with a facilitator, or a link worker (Kimberlee, 2015). Evidence demonstrates that link workers offer patients time to discuss and co-design personalised and achievable goals. The link worker then proceeds to link the patient with local groups and services that can support the patients in achieving those co-developed goals (Bertotti et al., 2018). Goals can be in relation to self-care and symptom management but also more practical issues such as housing, debt and returning to work (Wildman et al., 2019). SP interventions can therefore offer primary care service users the time and resources that health professionals do not have to overcome their challenging situations and concerns.

Groups and organizations receiving referrals may include exercise groups, hobby groups, advice services as well as opportunities to participate in voluntary work and further education (Chatterjee *et al.*, 2018). By connecting individuals with local support groups, SP has been proven effective in reducing social isolation as individuals build new relationships and a social network of support within their communities (Foster *et al.*, 2020). Evidence implies that SP can therefore empower patients to develop resilience to challenging personal situations affecting their health, consequently increasing self-confidence and self-esteem (Morton, Ferguson and Baty, 2015). Previous studies also indicate that such emotional improvements can alleviate long-term mental health issues such as anxiety and depression (Aggar *et al.*, 2021). In addition, patients with long-term physical conditions have also reported becoming self-sufficient in managing their conditions as SP interventions can also connect individuals with groups and organisations that aim to establish healthy lifestyle behaviours (Moffatt *et al.*, 2017).

Evidence of such improvements suggests that SP interventions have the ability to encourage inter-sectoral action which is necessary in tackling the "wicked problem" of health inequalities rooted in the effects of socioeconomic deprivation (Pedersen *et al.*, 2017) (p. 1). Furthermore, evidence of SP interventions leading to healthier lifestyles and self-sufficiency in managing long-term conditions among participants is key given that the World Health Organization's (WHO) agenda for sustainable development also includes preventing and healing one third of premature mortality form non-communicable diseases by 2030 (United Nations, 2015). There is evidence that improvements such as the above also leads to a reduction in medicine use as well as the number of GP appointments among individuals with long-term conditions (Mossabir *et al.*, 2014). Such outcomes suggest that SP interventions can therefore alleviate pressures from overstretched primary care service consequently leading to more sustainable healthy communities and health services.

1.3 Policy and legislative context

Prior to the coronavirus (COVID-19) pandemic the *The Parliamentary Review of Health and Social Care in Wales* indicated that the health service was already facing increasing pressures due to an ageing population, changing needs and expectations among the population and new forms of treatment and care (Welsh Government, 2018). The review highlighted that the current Welsh health service based on a traditional medial model of health and a separate social care system would not meet the growing needs of the population into the future. As a result the WG published their long-term vision of a whole approach to the health system within *A Healthier Wales: Our Plan for Health and Social Care* with its emphasis on health and well-being and illness prevention (Welsh Government, 2019a).

The long-term plan does not refer directly to SP. However, such interventions arguably have a role to play in realizing the government's vision of a system that focuses on "what matters" to replace the current tendency for health professionals to approach patients as passive service users. This could certainly be argued in terms of holistic models of SP interventions that offer patients appointments with link workers to discuss their whole situation and co-design their personalised social prescription (Kimberlee, 2015). SP interventions also accords with the WG's emphasis within the *A Healthier Wales* strategy on the importance of connecting service users with community activities to enable them to remain active, reduce loneliness and isolation and support mental and physical health. More recently however, the WG has recently published their new program for government which outlines the goals of their post-Covid-19 recovery. This program recognizes SP's potential to realize the foregoing visions thus contributing to their long-term vision of a stronger health service. The program specifically presents the WG's intention to introduce a national framework for social prescribing to tackle loneliness as a component of their aim to "provide effective, high-quality and sustainable healthcare" (Welsh Government, 2021) (p. 3).

At a regional level, SP interventions are also in line with the Betsi Cadwaladr University Health Board (BCUH) three-year plan (2019-2022) *Living Healthier, Staying Well.* SP interventions arguably fit in with BCUH's intention to tackle health inequalities by establishing a lifestyle service that provides service users with the necessary information that will allow them to make the right choices and establish healthy behaviour. Considering the WG framework for SP interventions to tackle loneliness, such interventions also has potential to contribute towards the objective set out in BCUH's plan to design and build communitybased interventions to tackle problems such as loneliness and isolation (Betsi Cadwaladr University Health Board, 2019).

SP interventions also coincides with the principles of prevention and early intervention that are emphasised within WG legislation and policies. Within the *A Healthier Wales* document both principles are defined working towards facilitating and encouraging life-long good health and well-being and anticipating and obstructing poor health and well-being (Welsh

Government, 2019a). Working towards preventing illness is also a key part of the Social Services and Well-being (Wales) Act 2014. This act was enacted to modernize and improve provision for those who receive social services support. Although that act does not directly mention SP, it places a duty on Local Authorities to implement preventative services in the form of bi-lingual information, advice and assistance services to raise people's awareness of local community-based services and find early solutions to avoid increase in long-term needs (Social Services and Well-being (Wales) Act 2014).

In assessing the policy and legislative context of this research, another prominent aspect is the emphasis within the Social Services and Well-being Act and WG health policies and strategies on co-operating with service users to design and produce health and well-being services (Welsh Government, 2018, 2019a). *The Parliamentary Review of Health and Social Care in Wales* highlighted the need to demolish the passive relationship between service user and service provider and empower people to take control of their own health and well-being (Welsh Government, 2018). The review suggested that this could be done by treating service users as knowledgeable assets, engaging them in the co-production of healthcare and utilize their experiences and knowledge to co-design new models of care locally. The review explains that this has the potential to transform the relationship between service providers and users and empower users to take control over their own health and well-being. User engagement is also encouraged to ensure personalized care that effectively meet the needs of individuals from the outset (Welsh Government, 2019a).

The Public Service (Social Value) Act 2012 also encourages consulting with service users. The act requires public services to consider the potential social, economic and environmental and social well-being benefits of services pre-procurement. This is to encourage public bodies to move away from perusing lowest costs towards ensuring maximum social value for public money. As part of this requirement, the act encourages public bodies to conduct a consultation on potential social value pre-procurement of public services. This involves consulting with service users and any organizations that represent them in the community to determine the potential social value that will be generated through the procurement. Although the act is not in force in Wales, its principles continue to influence the activity of public and third sector bodies. <u>Social Value Cymru</u> and <u>Social Value Wales – Gwerth Cymdeithasol Cymru</u> are examples of two movements in North Wales that offer advice and a framework for organizations on how to consider and consult on the potential social, economic, environmental and cultural value of their procurements.

It must also be acknowledged that prevention as well as collaboration and involvement of service users is also in line with the The Well-being of Future Generations (Wales) Act 2015. The Well-being of Future Generations Act has greatly influenced the methodology of this research, especially as it is part of an innovative project that aims to transform the future of the Nantlle Valley. This will be discussed in depth in Chapter 2.

In summary, SP fits in with the policy shift towards an integrated health and social health service that approaches service users holistically, hereby sustaining well-being and preventing illness. The policy and legislative context also emphasize engaging with service users and utilize their experiential knowledge when designing and developing more effective health and social care services. In accordance with the policy and legislative requirement to consult with service users, Grŵp Cynefin aspires to engage the Nantlle Valley community in the development of SP interventions through a co-productive approach.

1.4 Definition of co-production and co-design

Co-production has gained prominence in the UK as a result of the realization that, since its inception in 1945, the welfare state has developed into a provision-centred system that is largely driven by targets. Such a system means that lay citizens tend to be treated as passive users and treated with short-term, unsustainable solutions to their problems (Boyle and Harris, 2009). Co-production is seen as a means of reversing this and establishing person-centred public service provision.

The term co-production was first coined by Elinor Ostrom in the 1970s and has developed to be generally understood as establishing a mutual relationship between service providers, service users and their families and communities (Brandsen and Pestoff, 2006). Co-production requires service users, volunteers and/or community organisations to participate in the production of public services in addition to consuming or otherwise benefiting from them (Alford, 1998). Figure 1 illustrates the range of user-professional roles in the design and delivery of services. As Bovaird (2007) observes, full co-production is a transformative concept as it involves not just consultation or participation, but rather a genuine equalization and reciprocal relationship between users and providers instigated from the design stage onwards to the delivery of services.

		Responsibility for design of services		
		Professionals as sole service planner	Professionals and service users as co-planners	No professional input into service planning
	Professionals as sole service deliverers Professionals	Traditional professional service provision User co-delivery	Professional service provision but users involved in planning and design	Professionals as sole service deliverers User delivery of
Responsibility for delivery of services	and user as co- delivers	of professionally designed services	Full co-production	services with little formal/ professional input.
	Users as sole deliverers	User delivery of professionally planned services	User delivery of co-planned or co- designed services	Self-organised community provision

 Table 1. Range of user-professional roles in the design and delivery of services

Source: Bovaird (2007) (p. 848)

Due to the focus on establishing equality between all stakeholders, studies of co-produced services demonstrates service users being treated as knowledgeable assets who can contribute to the design, delivery, and assessment of effective services (Dunston et al., 2009). As a result, in addition to improving service quality by moving to person-centred provision, coproduction has the potential to progress from traditional client model to establishing public services that focus on user agency and foster empowerment rather than dependence. This is as consumers realize their own ability as they are treated as experts and become more involved and responsible for service delivery (Ostrom, 1996; Crompton, 2019). As a result, it also has the potential to transcend the role of service providers from being a provider of solutions, to providing a platform for establishing constructive relationships with service users to develop collaborative solutions. As a result peer-networks and accountability mechanisms are developed among citizens, generating better equipped and self-managing citizens who do not always seek guidance and solutions from service providers (Needham, 2008). Due to how co-production enables and equips service users it is also said to have the capacity to prevent issues upstream, consequently alleviating pressures from public services, increasing their sustainability (Boyle and Harris, 2009; Bovaird and Loeffler, 2012).

Bovaird and Loeffler (2013) suggest that when a co-productive approach is applied within health services, it includes different stages of the delivery of health and well-being services. Stages include the co-commissioning of services, co-design of services, co-delivery of services and co-assessment. Co-design is therefore considered an essential part of the early stages of full user-professional co-production although, as suggested in Table 1, there is also evidence of co-design approach being applied in isolation within health service development (Green *et al.*, 2020). Since this Thesis is concerned with the development of SP interventions to improve well-being outcomes in community settings, it was decided to also explore evidence demonstrating the implications and dynamics of a co-designed approach to health service development. This included studies of co-design without it necessarily being a part of full co-production.

Co-design, like full co-production, also requires transparent collaboration between service users and providers (Bradwell and Marr, 2008). The evidence suggests that this collaboration must evolve as it takes place, to design an authentic service that best meets the needs of service users (Mulvale *et al.*, 2019). Co-design also entails ensuring equality between all participants as the approach requires service users to be treated as experts of their own experience, empowering the traditional role of the client, and generating a sense of ownership of the co-designed service (Sanders and Stappers, 2008). It must also be acknowledged that the evidence base demonstrates many approaches that aim to offer a systematic approach to co-design. One of the most comprehensive approaches, first developed within the health sector, is Experience-Based Co-design [EBCD] (Bate and Robert, 2007). This approach draws upon the principles of four other approaches to co-design: Participatory Action Research, User-centric Design, Learning theory and Narrative-based Approaches to Change (Roberts, 2013). The EBCD provides a framework for not only focusing on service users' experiences, but also ensuring that they are involved throughout the design of services in order to achieve quality service improvements (Donetto *et al.*, 2015).

Subsequently, the evidence indicates that a co-designed and full co-productive approach applied within health challenges the current model of patient health care which is primarily focused on critical illness and views patients as passive users (Palumbo, 2016). During both approaches the sharing of knowledge is somewhat democratised as patients' experiential and implicit knowledge is valued in equal terms to the formal and explicit knowledge based on clinical evidence that can be found in practice guidelines (Beckett *et al.*, 2018). Both co-design and co-production also entail a cultural realignment within health service delivery.

This cultural change takes places as the service user undertakes an active role in the delivery of health services alongside health professionals, demolishing the power relationship where the clinician is in a position of privilege and the patients is a submissive consumer of their expertise (Batalden *et al.*, 2016). This is not without its challenges, and many have highlighted that the approach requires time and capacity-building from the perspective of professionals and users as their identities within the healthcare system change (Dunston *et al.*, 2009). The effects of such challenges on the co-design and co-production of SP interventions will be further explored in Chapter 3.

1.5 The Nantlle Valley

The following section outlines the statistical profile of the valley in terms of its demographics and signs of wider determinants of health. Early indications of the effects of the COVID-19 pandemic on society's well-being are also presented.

1.5.1 Demographics

Ward	Total
Penygroes	1,793
Llanllyfni	1,256
Clynnog	997
Talysarn	1,930
Llanwnda	1,994
Groeslon	1,695
Nantlle Valley Total	9,665

Table 2. Nantlle Valley population according to the 2011 census

Source: Office for National Statistics (2013)

The Nantlle Valley is constituted of 6 wards: Penygroes, Llanllyfni, Clynnog, Talysarn, Llanwnda and Groeslon. As shown in Table 1 at the time of the 2011 census the combined population of the 6 wards that constitute the Nantlle Valley was 9,665.

	White (British, Irish, Gypsy or Irish Traveller, Other)	Mixed / multiple ethnic groups	Asian/ Asian British	Black/African/ Caribbean/ Black British	Other ethnic group
Penygroes	98.8%	0.6%	0.3%	0.3%	0%
Llanllyfni	98.2%	0.7%	0.9%	0.2%	0%
Clynnog	99.5%	0.1%	0.3%	0%	0.1%
Talysarn	97.1%	0.5%	1.9%	0%	0.4%
Llanwnda	99.3%	0.3%	0.2%	0.0%	0.2%
Groeslon	99.4%	0.2%	0.4%	0%	0%

Table 3. Nantlle Valley ethnicity profile according to the 2011 census

Source: Office for National Statistics (2013)

Table 3 demonstrates each ward's ethnic profile according to the 2011 census. The data indicates clearly that over 97% of each ward's population identified as White. The percentage of individuals that belong to other ethnic groups are therefore significantly low.

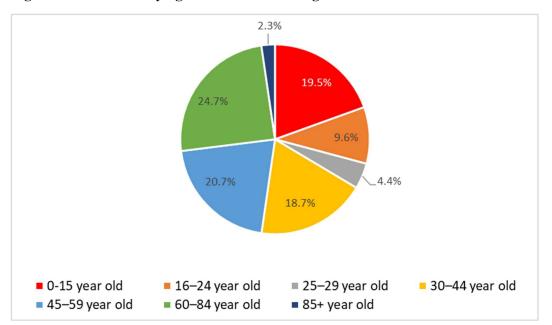


Figure 1. Nantlle Valley age structure according to the 2011 census

Source: Office for National Statistics (2013)

Figure 1 demonstrates the valley's age structure according to the 2011 census. The statistics indicate that the largest age group in the Valley were individuals aged 60-84 years (n=24.7%) followed by individuals aged between 45-59 years (n=20.7%) demonstrating that the Nantlle Valley has an aging population. An aging population means that the number of individuals aged over 65 years is set to increase. Evidence suggest that such a trend is going to pose greater pressures on health services as individuals aged 65 years and over are more likely to

be suffering from chronic illness, long-term physical disability or mental disability (Kaplan and Inguanzo, 2017). In addition, individuals aged over 65 years are also more likely to be suffering from multi-morbidity (Kingston *et al.*, 2018). Over the past 20 years the management of such chronic diseases has moved from secondary care to primary and community care (Government Office for Science, 2016). In the Nantlle Valley, this increase in primary and community care workload is coeval with the previously mentioned rapid decline in such services. However, evidence suggest that SP interventions can alleviate such challenges by improving well-being and reducing frailty among older individuals with complex, multimorbidity within a period of 12 months. Such results implies that SP intervention can therefore lead to a reduction in older citizens suffering from long-term multimorbidity's use, and consequently costs, of health services (Elston *et al.*, 2019).

Figure 2 demonstrates the changes in life expectancy (LE) at birth in Gwynedd between 2011-2013 and 2017-2019. The most recent figures demonstrate that the current LE at birth in Gwynedd is 79.54 for men and 83.02 for females. Gwynedd have seen minimal improvement in the LE at birth over recent years and the data indicates that it somewhat decreased during the last decade, particularly between 2015-2017.

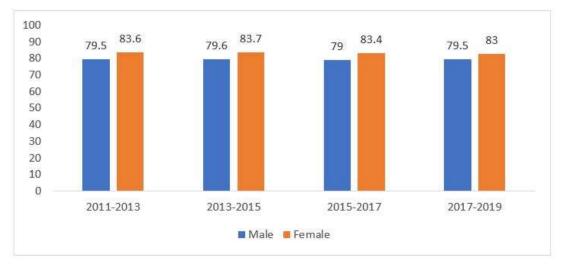


Figure 2. Gwynedd life expectancy at birth, male and female, 2011-2013 to 2017-2019

Source: Office for National Statistics (2020b)

This slowdown in the rise of life expectancy is one that is reflected across Wales as a whole (Public Health Wales Observatory, 2020). In addition, the most recent figures suggest that there is also a slowdown in the narrowing of the gap between LE and healthy life expectancy (HLE) across Wales (Public Health Wales Observatory, 2020). HLE is the average numbers

of years a person can expect to live a healthy life if the mortality rates and levels of good health for the area in which they wore born are consistent throughout their lives. In 2009-2010 the gap between HLE and LE for women in Wales was 19.7 and 16.5 years for males. The most recent figures between 2015-2017 show that the gap for females is 20.2 years and 16.9 years for males (Public Health Wales Observatory, 2020). This demonstrates that the gap between LE and HLE has somewhat increased over recent years and that the figure for women is increasing at a slightly faster pace than that for males.

1.5.2 Wider determinants of health

The latest Marmot Report reported that the slowdown in LE and HLE over the past decade cannot be attributed to harsh winters alone, and that 80% of the decline is due to social determinants of health (Marmot *et al.*, 2020). Social determinants of health are defined as the conditions in which people: are born into, live, work, age and are influenced by political, social and economic forces (Islam, 2019). This statement is supported by statistics indicating that living in deprivation increases the chances of having poor lifestyle behaviour (Statistics for Wales, 2020) and statistics suggest that the gap between LE and HLE is larger for those living in the most deprived areas. The data for Wales indicate that women living in the most deprived areas. The gap is 18.2 years for men (Office for National Statistics, 2020a).

The Welsh Index of Multiple Deprivation (WIMD) is the official measure of relative deprivation for small areas, or Lower Layer Super Outputs Ares (LSOA) in Wales (Statistics for Wales, 2019). Table 4 presents a selection of data extracted from most recent WIMD results for the five LSOA that constitute of Nantlle Valley. What is evident from the statistics is that Talysarn is the worst deprived area falling within the 20-30% most overall deprived in Wales. Talysarn is followed by Llanllyfni and Clynnog, who fall within the 30-50% most overall deprived areas in Wales. Penygroes, Llanwnda and Groeslon fall within the least 50% deprived in Wales. The statistics indicate that there is significant housing deprivation as well as degree of income, employment and health deprivation in the Nantlle Valley.

A result that outweighs the others is that four out of the five areas (Llanllyfni & Clynnog; Talysarn; Llanwnda and Groeslon) are within the 10% most deprived area in Wales in terms of access to services. Access to services deprivation is measured according to how easy it is for people to travel to get access to a range of essential services such as primary and secondary schools, GP surgery and a food shop (Statistics for Wales, 2019). Such deprivation can have a profound impact on the well-being of various individuals. From an older person's perspective, having close access to services is essential to staying active and maintain higher levels of social functioning that is crucial in sustaining independence in later life (Levasseur *et al.*, 2015). Evidence also indicate that access to services deprivation also has more farreaching impact on the independence of disabled people as their travel options are further restricted (Mackett and Thoreau, 2015). In addition, evidence suggest that unemployment or low-income affect an individual's ability to afford to buy and use a car or public transport (Mackett, 2014) and consequently further affects jobs accessibility (Fransen *et al.*, 2019) suggesting that low access to services increases their vulnerability to the negative effects of long-term unemployment on their well-being.

The above statistics suggest a scope for a SP intervention in the Nantlle Valley, to empower and educate individuals on how to develop and maintain healthy lifestyles, thus building their resilience to the negative effects of social determinants of health (Moffatt *et al.*, 2017; Wildman *et al.*, 2019; Pescheny, Randhawa and Pappas, 2020). Access to services and deprivation could suggests that some residents of the Nantlle Valley might be at risk of social isolation, therefore indicating a need for SP interventions that can connect individuals with local social networks of support, consequently reducing loneliness (Holding *et al.*, 2020; Wilkinson *et al.*, 2020). However, it must be acknowledged that access to services deprivation indicates a possible barrier to the success of a SP intervention in the Nantlle Valley. This is due to how accessing services may not be easy for individuals due to travel constraints in joining groups or availing of services that might exist outside the Nantlle Valley and its rurality. This challenge will be further explored among members of the Nantlle Valley community in Chapter 4 of this Thesis.

	Income deprivation	Employment deprivation	Health deprivation	Access to Services deprivation	Housing deprivation	Overall deprivation
Llanllyfni & Clynnog	In the 30-50% most deprived.	In the 50% least deprived	In the 50% least deprived.	In the 10% most deprived.	In the 10% most deprived.	In the 30-50% most deprived.
Penygroes	30%-50% most deprived.	In the 30-50% most deprived	In the 30-50% most deprived.	In the 50% least deprived.	In the 30-50% most deprived.	In the 50% least deprived.
Talysarn	In the 30%-50% most deprived.	30-50% most deprived	In the 50% least deprived.	In the 10% most deprived.	In the 10% most deprived.	In the 20%-30% most deprived.
Llanwnda	In the 50% least deprived.	In the 50% least deprived	In the 50% least deprived.	In the 10% most deprived	In the 20%-30% most deprived.	In the 50% least deprived.
Groeslon	In the 50% least deprived.	In the 50% least deprived	In the 50% least deprived.	In the 10-20% least deprived.	In the 30-50% most deprived.	In the 50% least deprived.

Table 4. Data for areas within the Nantlle Valley selected from the Welsh Index of Multiple Deprivation (WIMD) 2019

Source: Welsh Government (2019b)

1.5.3 COVID-19 and the Nantlle Valley

COVID-19 was first reported at a notifiable disease in the United Kingdom (UK) in March 2020 (UK Government, 2020) and early statistics are already indicating the pandemic's long-term economic impact on the Nantlle Valley. During the first wave of COVID-19 deaths between March and August 2020 (UK Government, 2021) the Nantlle Valley's main employer, Northwood Factory, was forced to close their factory in Penygroes. This resulted in the loss of 94 jobs, a significant number for a rural area with a relatively small population (Gwynedd Council, 2020). Figure 3 shows the latest figures for the number of out-of-work benefit claimants in Gwynedd 008 and Gwynedd 007 (the two Middle Layer Super Output Areas (MLSOA) which consist of the Nantlle Valley). The number of out-of-work benefit claimants was already on the rise before the COVID-19 pandemic. Table 4 above also suggests that there were already levels of employment and income deprivation in some areas of the valley. Figure 3 demonstrates a further a sharp increase in the total of out-of-work benefit claimants between February 2020 (n=807) and May 2020 (n=1054), two months from the start of the positive COVID-19 test cases in the UK. In May 2019 752 people were claiming out-of-work benefits in the Nantlle Valley, but by a year later, in May 2020, 1054 people were claiming out-of-work benefit. The number of people claiming out-of-work benefits, raised by 302 people in a calendar year.

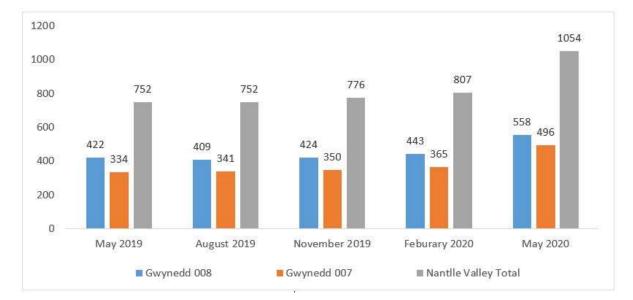


Figure 3. Number of out-of-work benefit claimants in the Nantlle Valley between May 2019 and May 2020

Source: Department of Work and Pensions (2020)

The evidence to date is predicting that there will be an increase in unemployment which will continue into the future (Su et al., 2021) and will lead to further deterioration in health at a national level. Janke et al., (2020) estimated that 1% fall in unemployment leads to 2% increase in chronic health conditions, consequently increasing pressures on already overstretched health services. Early studies show that the pressure and uncertainty caused by unemployment due to COVID-19 has already risen the number of those suffering from mental health issues (Achdut and Refaeli, 2020; Blustein and Guarino, 2020; Drake et al., 2021). If the economic downturn following COVID-19 will reflect that of the economic downturn in 2008, it is estimated that the number of working age people suffering from poor mental health in the UK will continue to increase by half a million (Banks, Karjalainen and Propper, 2020). In addition, to the effects of unemployment, other factors have also worsen individuals' mental health during the pandemic. Factors include the loss of a loved one, household dynamics during lockdowns, fear due to an underlying health condition and being a keyworker. Evidence suggest that adolescents, women and parents of nursery children have suffered most due to such pressures and will require most support following the pandemic (Pierce *et al.*, 2020). This further strengthens the case for SP interventions in the Nantlle Valley, especially in the light of evidence suggesting that SP interventions can alleviate the effects of mental health issues (Aggar et al., 2021) and consequently support individuals who wish to return to work (Hassan et al., 2020).

However, it must also be acknowledged that the pandemic has highlighted the high level of community support available in the county of Gwynedd, in which the Nantlle Valley is located. The COVID-19 Response Map (2020) was developed from a collaboration between Public Health Wales and The University of Bristol as a tool to understand which communities have the highest levels of community support. This was to aid WG and third sector organisations understand which communities have better community cohesion and organisation, and which communities have an imbalance between the need and provision of community support and are thus vulnerable. Screenshots of the map have been included in Appendix A. The map shows that Gwynedd scored the highest in Wales in terms of the number of people felt a sense of community belonging during the pandemic (see Figure A1). In addition, Gwynedd scored fifth in terms of the number of community groups available locally for every 100 person (see Figure A2) (COVID-19 Response Map, 2020). This is important information at the outset of investigating the development of future SP interventions in the area. The impact of the pandemic on the community's well-being as well

as their response to it will be investigated further with lay members of the Nantlle Valley community in Chapter 4.

1.6 Thesis aim and objectives

The statistics outlined in this chapter indicate that the health and well-being of Nantlle Valley community is facing a number of challenges that SP interventions could alleviate. This study's aim and objectives were developed in collaboration with the company partner, Grŵp Cynefin and were based on their vision for the health and well-being Hub. The overall aim of this Thesis is to engage with members of the Nantlle Valley community, to gather perceptions regarding the need for co-produced SP interventions to meet the well-being needs and requirements of the community today and future generations. It is hoped that the gathering of perceptions regarding the current and long-term needs and requirements of the community will explicate what SP interventions are needed to sustain the health and well-being of the community. The objectives attached to this aim include:

- To determine current SP interventions taking place within the Nantlle Valley and if these are addressing community needs improving health and well-being outcomes.
- To identify through conversations the specific local community needs requirements for the future and long-term sustainability.
- To detect if there are strategies among the community which would aid in developing collaborative health and well-being outcomes.
- To examine the barriers and opportunities for co-produced SP interventions development in the Nantlle Valley.
- To understand if the development of a new health/well-being and community hub has the potential to improve health and well-being outcomes among the community.
- To determine if a sustainability approach to conversations with community members could identify long-term well-being needs and strategies.
- To develop guidance for Grŵp Cynefin and partners leading to quality improvements in service delivery in driving forward health and well-being outcomes supporting community and social cohesion.

1.7 Thesis contributions

As a result of the above aim and objective this Thesis will:

- Demonstrate the investigation of SP interventions within a rural environment and how they contribute to the community's health and well-being outcomes.
- Indicate prominent issues affecting health and well-being outcomes of a rural community as well as long-term challenges that pose a risk to the well-being of the community's future generations.
- Present evidence that implies how the co-production of SP interventions can be a strategy for developing collaborative health and well-being outcomes today and in the long-term.
- Reveal how co-producing SP interventions with service users within community setting aids in identifying opportunities and barriers and setting sustainable and realistic goals among stakeholders in terms of unmet well-being needs and available resources.
- Suggests the potential of a health and well-being hub to be a catalyst for establishing a holistic health service and tackling wider determinants of health, consequently nurturing a resilient and healthy community for the well-being of current and future generations.
- Introduce the legacy approach to focus groups and how it encourages long-term thinking among participants consequently ensuring that the well-being of future generations is considered and shape strategies for delivering sustainable health and well-being outcomes.
- Unify the findings of a systematic review and focus group study to develop guidance for Grŵp Cynefin and partners that can produce quality improvements in service delivery and positive health and well-being outcomes generating community and social cohesion.

In addition to the above, this Thesis also presents an example of a bilingual (English and Welsh) focus group study in an area that is a stronghold of the Welsh language (Statistics for Wales, 2013). The decision to conduct a bilingual focus group study is in accordance with both WG and Bangor University policy requirement to give Welsh speakers the choice to discuss their health and well-being through the medium of Welsh (Welsh Government, 2019b; Bangor University, 2020).

1.8 Chapter summary

This chapter introduced the motivations of this research and how it is an integral part to the planning of an innovative health and well-being Hub in the Nantlle Valley. The concept of SP was outlined in addition to how it accords with the WG's long-term vision of a holistic and sustainable integrated health and social care service. Furthermore, the concepts of co-production and co-design were also defined, and reference was made to how such approaches is necessary in terms of the current legislative and policy context. Nantlle Valley demographics and wider social determinants of health were also introduced and how the official statistics imply the need for co-designed, co-produced SP interventions. Lastly, the Thesis's aim, objectives and contributions were presented.

The remainder of Thesis proceeds as follows:

Chapter 2 will provide the rationale for the methods and methodology chosen to reach the above aim and objectives of this Thesis. The methods applied in this Thesis, included a systematic review of the evidence in developing SP interventions that apply a co-productive, co-designed approach to improve well-being outcomes in a community setting. Building on the findings of the systematic review stakeholder engagement by means of focus groups with members of the local communities of the Nantlle Valley were conducted to gain a grassroot perspective of developing co-produced SP interventions in the area.

Chapter 3 presents a complete version of the published, peer-reviewed systematic literature review undertaken for this Thesis which examines the evidence in applying a co-designed, co-productive approach to the development of SP interventions within community settings.

Chapter 4 outlines the results of the community engagement with the Nantlle Valley to explore their acceptability of SP interventions to ascertain effectiveness in delivering positive benefits for the community and services.

Chapter 5 includes a discussion, collating the findings of both the systematic literature review and the community engagement and puts forwards recommendations for Grŵp Cynefin as they begin to further develop the SP interventions and the Hub initiative.

Chapter 6 presents the conclusion of the Thesis which includes a review of the Thesis aim, objectives and methodology, the comparison of the results with theory and recommendations for future research and possible policy implications.

Chapter 2 – Methods and methodology

2.1. Introduction

This purpose of this chapter is to provide the rationale for the research methods applied used within this Thesis. The first phase included a Systematic Review (SR) of the literature to examine the relevant evidence-base in developing SP interventions that apply a co-designed, co-productive approach to improve well-being outcomes in a community setting. The second phase included focus groups with the Nantlle Valley residents to gain a grassroot level perspective of their perceptions, attitudes and need for co-produced SP interventions. These methods will be further described following a short section on the philosophical underpinnings of engaging with community members within a naturalistic paradigm.

2.2 Philosophical underpinnings

This study is located within the naturalistic paradigm. From a naturalistic perspective, multiple realities exist that are all interrelated, forming a whole. As a result, the naturalist disagrees with the positivist who believes that there is only one reality that can be studied, controlled and predicted. Instead the naturalistic researcher takes a holistic approach to gain access to all realities in order to reach *vernstehen*, which means a level of understanding of a phenomenon (Guba and Lincoln, 1982). In terms of the current study, the intention is to gain a holistic understanding of the multiple realities in the Nantlle Valley.

From a naturalist perspective, research is also value-bound. The naturalist recognizes that values exist within the context in which the research is conducted that affects participants' perspectives. They also recognize that research is influenced by the researcher's values, both in terms of how they select and focus on a research problem as well as the influence of his paradigm (Cutler, Halcomb and Sim, 2021). As a result of this, within naturalistic inquiry the researcher treats herself and the participant as the main data collection tool. This is due to the belief that it would be impossible to devise a method that could adapt to the multiple realities as well as appreciate the different values that affect the data (Miles and Jozefowicz-Simbeni, 2019). Naturalistic inquiry therefore upholds the influence that the researcher and the respondents have on each other. As a result, there is no overemphasis on being objective, as

that this may disable the researcher from studying the most relevant data, hindering naturalistic results (Frey, 2018).

As a result of the above principles, qualitative methods are deemed most appropriate for a naturalistic inquiry as they lead to the production of in-depth data that facilitates the task of identifying the influence of participants values and context on data. Qualitative methods are also considered most suitable for adapting to and appreciating the multiple realities that the researcher might encounter (Lincoln and Guba, 1985). Qualitative data can also facilitate the end-user's assessment of the interaction between the researcher and participants and the degree to which the phenomenon is described or biased according to the researcher's values (Erlandson *et al.*, 1993).

2.3 Systematic Review – rationale

In accordance with the WG's vision and guidance for a healthy and prosperous Wales (Welsh Government, 2019a), Grŵp Cynefin wishes to engage the Nantlle Valley community in the development of a new health and well-being Hub using a co-produced approach. To support this collaborative approach in community engagement it was deemed that examination of the evidence base to support this intended engagement with the community would aid in guiding and fostering this approach. Therefore, the initial phase of this research involved examining the evidence base to ascertain the effectiveness of a co-designed or co-produced approach in the development of a SP intervention within community settings.

The initial step was to investigate which type of review would be most suitable for examining and analysing the evidence base. In particular, it was considered whether a scoping or systematic review would be most appropriate for this Thesis. The review was instigated to examine the outcomes of a particular approach to a certain intervention, for a specific population. As a result, the review question would have to be clearly defined with rigid inclusion and exclusion criteria. Based on this rationale the consensus agreement reached was that a Systematic Review (SR) would be most applicable methodology since it calls for a systematic search method which requires specific population, intervention, comparator (if any) and outcomes (Crowther, Lim and Crowther, 2010). In contrast, scoping review are considered more suitable for broader questions that are focused on mapping the available evidence base for a certain phenomenon to identify it's key characteristics and principal concepts and definitions (Munn, Peters, *et al.*, 2018).

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In addition to a systematic search method, SR also require researchers to follow rigorous methods to approve the most eligible, high-quality studies that will then be synthesized within the results (Munn, Stern, *et al.*, 2018). All methods are outlined in the preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement which provides 27 item checklist that reviewers should follow when conducting a SR. The statement also provides a flow diagram that guides the process of systematically approving the most relevant evidence (Moher *et al.*, 2009). Unlike traditional literature reviews, due to of the duty to follow predefined methods, the reviewer is unable to shape the content and results as they wish, producing reliable and meaningful results for end users with low level of bias (Mulrow, 1994). As a result, SRs are placed as the highest standard of evidence within evidence-based practice and are considered less of a discussion of specific evidence and more of a scientific tool (Petticrew and Roberts, 2006).

The application of rigorous methods that require the consideration of the quality of studies was also considered appropriate for examining the evidence base for SP interventions. This is due to the need to be cognisant of the limited evidence base for SP interventions which mainly consists of small-scale evaluations (Bickerdike *et al.*, 2017) that are often poorly designed and reported (Pescheny, Randhawa and Pappas, 2020). Existing evidence indicates that SP is still a developing concept with variation in approaches to referrals and modes of delivery (Chatterjee *et al.*, 2018), SP providers and end-users (Costa *et al.*, 2021) as well as the aim and measurement of interventions (Rempel *et al.*, 2017). This variation hinders drawing together key findings on SP interventions, in addition to studies not being published and activities not being labelled as SP interventions (Husk *et al.*, 2020).

However it is also acknowledged that SR have evolved from their original purpose of offering clinicians a practical approach to synthesize the results of only high quality studies (mainly Randomized Control Trials (RCTs)) to inform medical interventions (Purssell and McCrae, 2020). Today SRs are also considered suitable for providing evidence-base for public health interventions as well as community-based interventions (Centre for Reviews and Dissemination, 2009; Cochrane Public Health, 2021). Furthermore, the SRs have also developed to be considered an effective method for exploring individuals' experiences of health interventions and establishing the best ways to interact with service users (Pearson, 2004). This further confirms their appropriateness for this Thesis on the appropriateness of co-designed. co-produced SP intervention within a community setting.

Although RCT's are still considered to be of the highest quality and therefore the studies that should be prioritized for inclusion in a SR, it is acknowledged that it is not always possible to measure the value of public health and community-based interventions through RCT for scientific, political and practical reasons (Ogilvie *et al.*, 2005). Public health and community-based interventions are diverse and their study and evaluation complex as the involvement of a number of interventions, outcomes, participants, settings and stakeholders is essential. As a result, SR has also now evolved to include different study designs such as non-randomized control studies, before and after studies and qualitative studies. Such studies are considered effective in indicating the efficiency of interventions, including the appropriateness of interventions for participants and the factors that encourage or hinder implementation (Jackson and Waters, 2005). As a result, to obtain the most comprehensive quantity of evidence and all information that may be of value to the development of the SP intervention, no study design was excluded from the review presented within this Thesis.

Since public health interventions can be complex, many have criticized the suitability of the rigorous methods of a SR for reviewing their evidence base. However, a number of guidelines exist to address these challenges. It was decided that the review shadow the Centre for Reviews and Dissemination (2009) guidelines conducting a review of public health interventions, which they define as interventions aimed at seeking to protect, encourage or promote the health of people (Centre for Reviews and Dissemination, 2009), which accords with the definition of SP interventions provided in Chapter 1 of this Thesis. The handbook highlights essential factors that should be considered when reviewing studies of public health interventions such as the sustainability of the results (i.e how long follow-up assessment of the intervention) as well as the context of the intervention, and how it contributed to the results and the applicability of the results within other contexts. Both factors were considered when formulating comprehensive data extraction forms and when reporting on the characteristics of the individual studies in the review presented within this study. The guidelines also warn of heterogeneity among studies of public health interventions (due to differences in study design, participants, context, implementation, theoretical underpinnings and outcome and outcome measures) and advises that this can be overcome by choosing data synthesising methods that enables the identification of common patterns and factors that may explain variations within the results. This was also taken into consideration when choosing the data synthesis method for the review.

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2.4 Stakeholder engagement

Chapter 3 will demonstrate that the evidence gathered during the SR strongly evidenced that taking a co-produced, co-designed approach can be an effective mean of engaging service users in the development of SP interventions to improve well-being outcomes within a community setting. The evidence suggests that engagement with stakeholders can determine well-being needs that need to be met, consequently leading to the development of a more efficient SP intervention. However, the evidence also indicates clearly that there are barriers and facilitators within and among communities that can influence co-design and co-production. Nevertheless, the evidence also reveals that engagement with potential service users from the inception phase can identify such challenges and allow the co-design of a SP that surmounts them. As a result, it was decided that the second phase of the Thesis would include an engagement with the Nantlle Valley residents to gain a grassroot level perspective of their perceptions, and need for co-produced SP interventions, as well as an indication of any barriers and facilitators within the community. To ensure the sustainability of the SP interventions it was decided to also encourage long-term thinking and gather insight into possible future well-being needs and requirements.

Throughout the design of the study the researcher consulted with an advisory group that consisted of academic supervisors, Grŵp Cynefin Head of Community Initiatives, Grŵp Cynefin Senior Community Officer and two Community Officers, and a business consultant employed by Grŵp Cynefin. This was to seek guidance, increase the rigor of the results and ensure that the study was in line with the company partner's requirements. This is the first engagement with the community to seek their views on the potential of delivering well-being interventions through the health and well-being Hub.

2.4.1 Data collection method

Data from the Nantlle Valley community was collected using focus groups. Focus groups are defined as a small group of people with a common characteristic providing qualitative data through a focused discussion to gain understanding of a specific topic (Krueger and Casey, 2015). During a focus group the researcher acts as a moderator, structuring the discussion with open questions. However, unlike a qualitative survey study, a moderator of a focus group will allow participants to interact and frame their answers and concerns authentically (Green, 2013). In addition to this, the participants are also allowed to take some control of the

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discussion giving arise to spontaneous themes, which the moderator can then ask them to broaden or clarify. As a result, the interaction within focus groups also generates more comprehensive data in comparison to individual interviews (Holloway and Wheeler, 2010). Focus group therefore gives the researcher the ability to exploit the interaction between participants, giving a naturalistic understanding of how a phenomenon is perceived among a community, in addition to unveiling cultural norms, values or beliefs that may be contributing towards those perspectives (Green and Thorogood, 2009).

The Focus group method was chosen for data collection for the current study to bring a group of individuals living in the Nantlle Valley together to answer a set of questions and discuss. It was hoped that this method would explicate a naturalistic view of the needs as well as cultural attitudes, norms and values that could be shaping the Nantlle Valley's perception of SP interventions and the health and well-being Hub initiative currently called 'Llesiant Lleu'. Furthermore, previous studies suggest that focus groups are an effective method of engaging and initiating conversation with a community suffering from health inequalities. This approach aids in identifying the social determinants of health as well as establish key community health priorities, providing a foundation for the design of a health intervention (García *et al.*, 2021). In addition, focus groups have been proven effective in explicating barriers and facilitators that may affect service implementation within the health sector (Finkelstein, Petersen and Schottenfeld, 2017; Miller, Baptist and Johannes, 2018).

However, some limitations to this data collection method should also be considered. Similar to all qualitative methods, the validity of the data is hindered by the risk that participants could try to portray themselves in the most positive light by providing false answers, as well as intellectualize (Krueger and Casey, 2015). In addition, the group's dynamic could result in one or two group members dominating the discussion. While this elucidates the hierarchy of opinions within a community and the structures that result in the rejection of deviant views, it also limits the sharing of less acceptable opinions, consequently increasing the risk of bias (Green and Thorogood, 2009). In terms of the current study, due to the aim of including participants from various backgrounds and ages within the focus group to get a holistic view of the community, there is also the risk of educational heterogeneity among participants. That is, some might feel less educated than other participants which could hinder their self-confidence and silence them (Holloway and Wheeler, 2010).

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Krueger and Casey (2015) note that such risks can be reduced with good moderating approaches, namely showing clear respect towards all participants, communicating clear and understandable questions, and staying objective at all time. As a result, within the current study the author took time at the beginning of each focus group to introduce herself as a researcher, who was independent of Grŵp Cynefin. The independent researcher explained the concept of SP as well as the health and well-being Hub, and ensured that any contributions would be invaluable. To ensure that all information sheets and questions were intelligible, the researcher consulted with two Grŵp Cynefin Community Officers, who both have over 20 years' experience of engaging and communicating with various communities. Participants were also invited to ask questions about any unclear concepts during the discussion, and the moderator responded to dominant opinions by constantly asking participants for differing and additional views.

2.4.2 Recruitment of participants to the focus groups

A purposeful convenient sampling method was applied as it is considered an appropriate method for recruiting a range of participants across various age groups, in an effort to gain a naturalistic, holistic view of the multiple realities in the Nantlle Valley (Lincoln and Guba, 1985; Erlandson *et al.*, 1993). Due to COVID-19, the purposeful sampling method relied on online platforms due to COVID-19 social distancing restrictions. Therefore, the sampling process relied on individuals taking notice of emails and social media advertisement, hence the sampling method required applying a convenient approach. The participant inclusion and exclusion criteria are presented in Table 4.

Participant Inclusion Criteria	Participant Exclusion Criteria
 Individuals aged 18 years 	• Individuals who don't live in the
• Individuals who live in the Nantlle	Nantlle Valley
Valley	• Individuals under 18 years of age
• Individuals with a range of	• Individuals without internet access
socioeconomic characteristics	at home
• Individuals who have internet access	• Individuals who cannot read or
at home	speak Welsh or English
• Individuals who speak and read	
either Welsh or English	

 Table 5. Community engagement participants inclusion and exclusion criteria for

 purposeful convenient sampling method

Children were excluded from this study due to consent issues, especially as the research had to be conducted online, posing greater safety risks. Taking account of equity and equality to ensure individuals within the community were not excluded when suffering from digital poverty, Grŵp Cynefin offered to lend some of their stock of tablets to any Nantlle Valley resident who wished to participate but did not own an IT device. However, individuals still had to have internet access at home due to the risk of asking individuals to visit public areas to connect to the internet during the COVID-19 pandemic. Individuals who could not speak or read Welsh or English were also excluded as participants had to be able to understand the recruiting advertisements, follow instructions to join the videoconference call and engage in the focus group activities.

Participants were recruited over a period of one month (18/01/2021 - 18/02/2021). All participant information sheets (Appendix E) were collated into a digital information pack with a Welsh and English version. A bilingual participant invitation letter (Appendix D) and links to the information pack was sent via email. Participants were asked to declare their interest in participating by completing a bilingual, short personal details form, which also aided in gaining insight into the participants' demographics (see Appendix G). Since the Nantlle Valley is a Welsh language stronghold (Statistics for Wales, 2013), participants were also asked to note if they would prefer to participate through the medium of Welsh or English.

To target individuals from different age groups and backgrounds the information pack was emailed to the gatekeepers of a variety of community groups. These included youth groups (e.g. Dyffryn Nantlle young farmers club), mother and toddler groups, hobby groups (e.g. gardening, drama club, art club), a choir, and groups for the elderly (e.g. exercise groups, lunch clubs). The email was also sent to every community councillor, every primary school in the Valley and the secondary school. Within the email, the researcher also offered to send a paper copy of the information pack as well as a pre-paid envelope to any potential participants who did not have an email address. In addition, with the aid of a Grŵp Cynefin Senior Community Officer, the researcher was able to identify key Facebook pages for different age groups and individual villages within the Valley as well as pages for all Nantlle Valley residents. These pages were particularly useful as most had gained prominence during the first national lockdown 2020 to sustain community social networks during the COVID-19 pandemic. A link to the information pack were posted weekly on the Facebook pages over the period of one month. It became apparent very early during the recruitment stage that there was a lack of interest from young people. Therefore, an additional post targeting young people was also created. Examples of Facebook posts can be seen in <u>Appendix I</u>. Advertisements was also posted on the <u>DyffrynNantlle360</u>, a Welsh online newsletter and in *Lleu*, the Nantlle Valley Welsh local paper. No English newsletters were identified for advertisements.

The personal detail form (<u>Appendix G</u>) respondents was used as a sampling frame for the focus groups. Ethical approval was obtained to hold a maximum of 10 focus groups with a maximum of 8 participants. The intention was to stratify the sampling frame first into English and Welsh speaking participants. Participants would then be stratified into age groups (18-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71-80, 81+ years old). The researcher would then randomly select a representation for each of the 8 age groups, resulting in 8 participants for each group. The results of the recruitment methods and the demographics of the final sample will be presented in <u>Chapter 4</u>.

2.4.3 Interview schedules

The following section explains the rationale and development of the focus groups interview schedules. This includes the introduction of the novel approach to focus group proposed within this Thesis.

2.4.3.1 The long-term (legacy) approach

In chapter 1, one of the Thesis objectives outlined was to determine if a sustainability approach to conversations with community members could identify long-term well-being needs and strategies. Conversations with Grŵp Cynefin established that working towards holistic health and well-being provision is part of the hub's vision, to work towards the sustainable development of a healthy, resilient community. Indeed, Grŵp Cynefin have a duty to accomplish such improvements given that the proposed hub will host public bodies and will therefore have to comply with the Well-being of Future Generations Act (Wales) 2015. This act places a well-being duty on all public bodies to adopt the principle of sustainable development as they aim to achieve seven well-being goals for future generations, including building a healthier Wales, a more equal Wales and a Wales of cohesive communities (Welsh Government, 2016).

The Future Generations Commissioner for Wales (2020) emphasizes involving service users in sustainable developments using two-way conversation methods that inspire and enthuse. An investigation into data collection methods that inspire long-term, sustainable ideas among participants revealed the future design citizen assemblies movement in Japan. Citizen assemblies are a form of deliberative democracy in which a representative sample of a population gather to learn about and discuss policy issues, leading to policy recommendations (Farrell, Suiter and Harris, 2019). The Future Design citizen assemblies require participants to imagine and deliberate on the perspective of future generations with the aim of encouraging long-term thinking and sustainable action. Such citizen assemblies are considered suitable for tackling short-termism and enabling sustainability as they ensure that the future interest of a variety of individuals are considered, and not only privileged individuals. Citizen assemblies usually reconvene on more than one occasion, meaning that deliberations also occur over a period of time, giving participants sufficient time to learn and reflect on long-term issues (Kzarnic, 2020).

Further investigation revealed that future design is a recent branch of future studies developed by the economist Ttsuyoshi Saijo. The ethos is that we live in a world where human activity creates "future failures" such as global warming, loss of biodiversity and outstanding debt in many countries (Saijo, 2020) (p. 1). Future Design aims to activate a human trait called "futurability", where people feel the happiness of having acted in a way that benefits future generations (Tatsuyoshi and Osamu, 2018) (p. 8). There are several different mechanisms within Future Design to try to encourage this trait (Timilsina, Nakagawa and Kotani, 2020), and this current study is mainly influenced by the principles of the Future-Ahead-and-Back (FAB) mechanism. FAB mechanism requires participants to imagine the views and emotions of future generations and what actions would they want the present generations to carry out for the benefit of their future well-being. After imagining future generations' views, the discussion returns to focus on the present, with the hope that imagining the perspective of future generations beforehand will lead the participants (the present generation) to decide upon the most sustainable action (Shahen, Kotani and Saijo, 2020). It is acknowledged that the evidence base for using this approach is very limited, especially as Future Design is a novel approach. However, evidence of the use of FAB under laboratory conditions shows that considering future generation perspective before making a

decision led individuals to make the most sustainable decision (Shahen, Kotani and Saijo, 2021). Such sustainable results were also obtained through the application of the FAB mechanism during an experiment involving individuals from an urban, high capitalist area. It was believed that prior to the experiment, the capitalist economy's influence on residents meant that their actions were pro-self, i.e. using resources for their current economic well-being with no regard to maintaining resources for future generations (Shahrier, Koji and Saijo, 2017).

Drawing upon the above evidence base, a novel approach was applied to the Nantlle Valley focus groups interview schedules, to generate data that would provide insight into the longterm well-being needs and requirement and if co-produced SP interventions could sustainably alleviate such issues. This included developing two focus groups interview schedules presented and explained in Table 5 below. One interview schedule was titled the Today Group and facilitated a deliberation on the present generation. The second interview schedule was titled the Legacy Group. Influenced by the principles of the FAB mechanism, the questions within the Legacy Group schedule aimed to activate long-term thinking among participants by asking them to consider what they could do today for the benefit of the Nantlle Valley's future generations. The two separated interview schedules are presented in Appendix B and Appendix C. It is acknowledged that it could have been possible to ask all focus groups to deliberate on current and legacy issues by drawing upon the FAB mechanism. However, discussions with the advisory group revealed that although Grŵp Cynefin approved of the Legacy approach, they were also eager to get a comprehensive view of current issues affecting the valley. Therefore, it was decided that the best option would be to write a separate interview schedule to facilitate the deliberation on current issues (Appendix B) and an additional interview schedule that applied the novel, legacy approach to focus groups and facilitated a deliberation on future generations (<u>Appendix C</u>).

Today group(s)	Participants were asked to answer questions that focused on the
	present generations' perspective – the health and well-being issues
	and needs affecting Nantlle Valley residents today.
Legacy group(s)	Influenced by the principles of FAB mechanism (Shahrier, Kotani
	and Saijo, 2017) participants were asked questions that prompts
	long-term thinking (the Nantlle Valley in 100-200 years) and
	produce responses will make explicit the mechanisms required
	today to design a robust and resilient SP intervention that will lead
	to sustainable well-being outcomes for future generations

Table 6. Focus group titles and their meanings

Interview schedules were developed based on a template questioning route developed by Krueger and Casey (2015) to assist the task of moderation and to secure the flow and focus of the discussion. However, to ensure that the results were naturalistic, the researcher also asked additional questions during the focus groups, to broaden understanding of any important but unexpected theme that emerged during the discussion. The questions for both interview schedules were based on the aims and objectives of this research. In terms of the Legacy Group's interview schedule, the questions were also facilitated by the "Good Ancestor Conversations" principles developed by Roman Krznaric (2020) (p. 242). Recognizing that our actions today affect the quality of life of future generations, Kzarnic (2020) encourages collective long-term thinking and planning. The philosophy of these principles shapes good ancestor conversations to facilitate long-term thinking and generate ideas on how to leave a prosperous legacy for the benefit of future generations. <u>Table C1, Appendix C</u> presents a list and explanation of the principles and how they were incorporated to the Legacy Group Interview Schedule.

2.4.4 Study Settings: Impact of the COVID-19 pandemic

As this research was located within a naturalistic paradigm, it was vital that the study took place within its natural context, namely the Nantlle Valley community. This is due to the fact that naturalistic ontology claims that phenomena of study cannot be understood without considering its relationship to the time and context that is has been produced and supported (Lincoln and Guba, 1985). As a result of this the original intention while designing the study in October-November 2020 was to conduct the research at a community centre in the Nantlle Valley, specifically Penygroes Memorial Hall, as this is a community venue where residents gather frequently. However, in January 2021 the third peak of COVID-19 cases struck Wales and therefore due to the continuation of stricter social distancing rules, it was decided that the study would be conducted remotely between the 22nd and 25th of February 2021. As a result, instead of attending a community venue, participants participated in the focus groups in the Nantlle Valley but from their homes, using Zoom videoconference software (Zoom, 2021).

There was limited evidence of conducting focus groups using videoconference software. However, within recent studies most participants indicate that they are satisfied with the experience and felt comfortable and at ease (Dangerfield, Wylie and Anderson, 2021). In addition, studies that have compared virtual focus groups with in-person focus group have proven that there is no difference in the content of data obtained from participants. Indeed, the evidence demonstrated that individuals were more willing to share in-depth stories and be candid during virtual focus groups, due to the more informal atmosphere (Woodyatt, Finneran and Stephenson, 2016). Challenges to virtual focus groups indicated within the evidence included poor set-up by participants and poor internet connection causing delays in contacting the call and poor audio quality (Dodds and Hess, 2020). As a result, during the current study thorough instructions on how to set-up and join a videoconference call were offered to each participant beforehand and 2 hours were allowed for each focus group meeting to allow sufficient time to overcome any technical issues.

It was decided to host the virtual focus group using the videoconference software Zoom. Zoom was chosen amongst other software as recent focus group studies suggest it is the most convenient and user-friendly software (Archibald *et al.*, 2019). Zoom was also favoured due to option of allowing the host to video and audio record meetings, which facilitates identifying participants while transcribing. In addition, at the end of the call, the software converts the recording to an electronic file which the researcher can password-protect on any personal drive or cloud, offering secure data management.

2.4.5 Ethical considerations

Ethical approval for this study was granted by Bangor University's Healthcare and Medical Sciences Academic Ethics Committee (2020-16850) on 11th January 2021.

2.4.5.1 Participants' informed consent

Participants were asked to confirm they were 18 years old and had read the Welsh or English information leaflet in full before declaring their interest in participating via a personal details from (see <u>Appendix G</u>), to confirm that they were eligible and understood the requirements of participating. Due to the COVID-19 pandemic restrictions, the participants were sent an electronic consent form to return before the focus group and their verbal consent were also recorded at the beginning of each focus group. The consent form can be seen in <u>Appendix F</u>.

2.4.5.2 Risk to participants

There was no identifiable risk of any participants experiencing either physical or psychological discomfort during the research as the participants were not asked to share any personal experiences, and the discussion revolved around the well-being of the community as a whole. The researcher also reminded the participants that their contribution was voluntary and that they could avoid any question. However, it must be acknowledged that during a naturalistic focus group the researcher deliberately has little control and therefore there is always a possibility a participant can become distressed with the direction the discussion takes (Krueger and Casey, 2015). The researcher therefore provided their contact details at the beginning of each focus group meeting and remind participants that they could voice their concerns during the call or privately message the researcher within the Zoom chat box to ask any questions during the discussion. In addition, a distress protocol (see <u>Appendix H</u>) was written so that the researcher was prepared if one of the participants showed any sign of distress or discomfort during the focus group interview.

2.4.5.3 Data management

All personal information about participants were managed in accordance with the Data Protection Act 2018. All information received by paper (e.g., details form) were digitised, and hard copies were destroyed by means of shredding. Electronic files, including focus group transcriptions, responses to the personal detail form and consent forms were saved as password protected files that can only be accessed by the researcher. Participants have been numbered to anonymise any quotes used within the result. All data will be permanently deleted upon the successful completion of this Thesis (by the end of 2021). This was made clear to the participant, so they are aware that their contribution cannot be forgotten once the findings are published.

2.4.6 Data analysis

Naturalistic inquiry aims to gain a naturalistic understanding of phenomenon by enabling the research to develop organically. As a result, a naturalistic study is originally shaped from the "etic" issues, which are the issues that are predicted and determined earlier and used to shape the study originally. In terms of the present study, the "etic" cases are the aim and objectives. Issues that manifests during the study are called "emic" issues (Abma and Stake, 2014) (p. 1151). Emic issues are explored and discussed in the results, and may be of a different nature or direction to what was originally considered important. This enables an original and naturalistic of the ultimate phenomena.

As a result, the data was analysed using thematic analysis. Thematic analysis is a method for determining and explicating themes, or patterns of meaning, that arise naturalistically within qualitative data. It is considered a flexible method that gives the researcher an active role in the identification of codes and the development of organic themes (Clarke and Braun, 2017). Thematic analysis is has also been deemed useful for presenting data in a robust but accessible way to individuals outside academia (Braun and Clarke, 2014). This advantage is key to the eventual research that will be presented to a multi-sector steering group responsible for developing the well-being service in the Nantlle Valley. Thematic analysis is an approach that can be applied across several research paradigms as it has no theoretical commitments. It requires the researcher to familiarize themselves with transcriptions, identify and note codes, which are topics or features of data relevant to the phenomenon, and categorize the codes into broader themes (Braun and Clarke, 2006). The transcripts from the current study's focus groups were coded using framework analysis (Ritchie and Spencer, 2012) as evidence suggest this is a suitable and convenient method for focus group data analysis (Woo et al., 2011). To ensure rigour and reliability, recurring themes within the transcriptions were identified by the researcher and her Welsh-speaking academic supervisor. In accordance with the Thematic Analysis process, codes were then used to build broader themes.

2.5 Chapter summary

This chapter set out to explain why conducting a SR is both appropriate and beneficial in answering a specific question about using a particular approach to developing community-

based intervention. It also outlined the actions that will be taken to overcome the challenges involved with conducting such SR. The community engagement was placed within its philosophical paradigm and all community engagement approaches were outlined and justified. This includes the novel approach applied to the focus groups, with one group focusing more on generational thinking.

Chapter 3: Systematic review of the literature

A Systematic Review to examine the evidence in developing Social Prescribing interventions that apply a co-designed, co-productive approach to improve well-being outcomes in a community setting

3.1 Introduction

This chapter presents a Systematic Review (SR) of the literature conducted to examine the evidence in developing SP interventions that apply a co-designed or full co-productive approach to improve well-being outcomes in a community setting. It outlines the approaches taken to systematically search and identify eligible studies, as well as the studies quality appraisal and data extraction method. The results of the evidence are synthesized and presented through a narrative thematic synthesis and discussed in the light of previous studies. The review concludes with reference to the study's strength and limitations and the final conclusions.

An abridged and slightly modified version of this SR has also been published as a peerreviewed article within the International Journal of Environmental Research and Public Health (Thomas, Lynch and Spencer, 2021).

3.2 Motivation for the review

In accordance with the WG's vision of a holistic health service, Grŵp Cynefin aspire to engage prospective service users in the development of SP interventions by applying a coproductive approach. Prospective service users consist of members of the whole Nantlle Valley community. This aspiration is also supported by previous studies stating that a codesigned and co-productive approach is necessary in the development of non-medical interventions that seek to improve service users well-being outcomes within a community setting. Examples of such interventions include healthy aging programs (Wildman *et al.*, 2018; Mayrhofer *et al.*, 2020) non-medical mental health interventions (Hubbard *et al.*, 2020), community-based support for young onset dementia (Mayrhofer *et al.*, 2020) and a mobile health programme to reduce obesity (Verbiest *et al.*, 2019). Such studies indicate that each community has unique socioeconomic and environmental features that influence the service users' well-being (Wildman *et al.*, 2018). As a result, the evidence demonstrates that generic interventions will not lead to positive outcomes in every situation and engaging community members as service users in the development of well-being interventions through approaches such as co-design and full co-production makes explicit the main priorities for well-being improvement, resulting in a practical and effective intervention (Verbiest *et al.*, 2019; Hubbard *et al.*, 2020; Mayrhofer *et al.*, 2020). The evidence also suggests that coproduction and co-design can empower service users (Milton *et al.*, 2011) and enable them to have a sense of ownership of an intervention (Wettasinghe *et al.*, 2020) consequently encouraging their participation in the delivered service (Wildman *et al.*, 2018).

Despite the above benefits, it is also important to note that the evidence indicates some challenges in engaging service users in the development of health interventions through a codesigned and co-productive approach. The evidence indicates health professionals' concerns that patients do not have sufficient knowledge and skills to design and deliver complex health services (Holland-Hart et al., 2019) and that it is therefore unrealistic to expect health professionals to surrender their professional authority (Kaehne, Beacham and Feather, 2018). Indeed, there is evidence of cases where professionals ability to better understand the process of co-production has given them an advantage over other stakeholders, consequently reinforcing the traditional hierarchy of power between patients and health professionals (Crompton, 2019). Previous studies also demonstrate that health professionals feel that there are particular situations where mutual relationships in health cannot be established e.g when a patient makes an unhealthy lifestyle choice, the doctor cannot be blamed (Batalden et al., 2016). It must also be acknowledged that the evidence also implies that health professionals do not necessarily have the adequate skills to engage with patients on an equal level and input their experiential knowledge into practice (Dunston et al., 2009). In addition, evidence also indicates that public health and third sector organisations do not always have the organisational capability to facilitate co-production. Co-production can be hindered by professionals insufficient time allocation, inadequate resources (namely funding) and lack of effective communication systems to sustain relationships between co-producers (Lopes and Alves, 2020).

In light of such criticism, it therefore felt necessary to review the evidence base in developing SP interventions that apply a co-designed or co-productive approach to improve well-being outcomes within community settings. The objective is to review the evidence base to establish current standards in SP that engage stakeholders in co-design or co-production leading to improvements in well-being as well as examine barriers and facilitators to SP intervention development. Community well-being outcomes will also be assessed as an indicator of the SP interventions' effectiveness.

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3.3 Methods

The protocol for this review was registered on the University of York, Systematic Review database, PROSPERO (Ref. CRD42020206064) (<u>Thomas, Lynch and Spencer, 2020</u>).

Several mnemonics exist for formulating a question for systematic review (Munn, Stern, *et al.*, 2018). However, as this review examines the evidence surrounding a particular type of population (a community), intervention (co-produced/co-designed SP interventions) and outcome (well-being improvement), the Patient/Problem or Population, Intervention, Comparator, and Outcome (PICO) framework was utilised. The PICO framework is a mnemonic used in evidence-based practice to frame and answer a clinical or health care related question (Schardt *et al.*, 2007). It was decided not to include a comparator in the question of this review, and guidance confirms that it is not always necessary when examining the evidence of an intervention (Bettany-Saltikov, 2015).

3.3.1 Search terms

The main keywords were organised into "population," "intervention," and "outcomes" groups to ensure that the correct articles were identified. Search terms included a combination of Mesh (Medical Subject Heading) and non-MeSh words collected by looking at similar reviews search strategy and approaching personal contacts. A Health Sciences specialist Bangor University librarian was consulted to help finalize the search terms and truncate keywords. The final list of search terms are shown in Table 7. Search terms were connected with "or" Boolean operators within groups and with "and" Boolean operators between groups.

The following databases were searched on the 3rd of August 2020: Web of Science; CINAHL; ASSIA; PsycINFO; PubMed incorporating MEDLINE; The Cochrane Library (including the Cochrane Central Register of Controlled Trial). Targeted searching was also conducted on the CRD database. Additional search strategies included hand-searching the key journals within the database search results, targeted searching of grey literature on Google and Google Scholar, and enquiring personal contacts within the field. Search results were exported to the online bibliographic management software RefWorks (to store titles from the systematic searches and delete duplicates) and Mendeley (to facilitate the citing of references in the Microsoft Word document).

Population	Intervention		Outcome
(community)	(co-designed or co-produced SP intervention)		(well-being)
Communit*	"social prescri*"	Co-produc*	well-being NEAR/3
Neighbourhood	Non-medical NEAR/3 referral*	Co-design*	improve*
Society	Non-clinical NEAR/3	Coproduc*	wellbeing NEAR/3
Resident*	referral*	Codesign*	improve*
Patient*	"non-medical intervention"	Participat*	"community resilience"
"service user"	"non-clinical	Collaborat*	community residence
Stakeholder* people	intervention"	Engagement	"community sustainability"
people	"community-based intervention*"	Involvement	"community development"
	Wellbeing program*	"jointly produced"	5 1
	Well-being program*	"jointly designed"	"social inclusion"
	"link worker*"	User-led	"health benefit"
	"community	Co-creat*	nearth benefit
	navigator*"	Participatory design	"mental health benefit*"
	Health facilitator	Action research	""hyperical han off t*"
	"social intervention"	Participatory research	"physical benefit*"
	social NEAR/3 referral	Design*	"quality of life"
		Produce*	

Table 7. Systematic search strategy.

(All asterisks (*) were included in the search strategy to truncate search terms. Quotation marks were also included to yield more appropriate studies.)

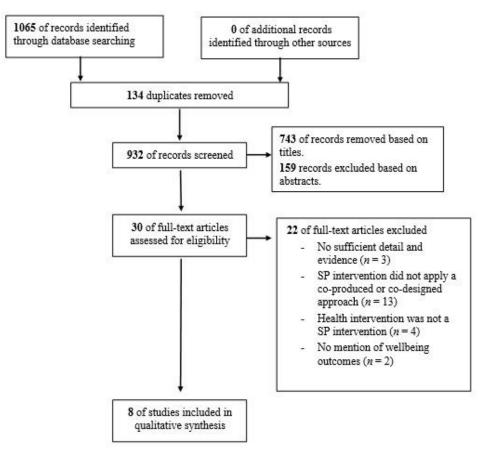
3.3.2 Study eligibility

The inclusion criteria were all papers relating to SP interventions that apply a co-designed or co-productive approach to improve well-being outcomes in a community setting. Studies published between 2000 to August 2020 were included. Due to limited translation resources the searches were limited to studies published in English or Welsh. There was no restriction on study type. In this present review well-being is defined as people's feelings, how they function on a personal and social level and their own overall evaluation of their lives (New Economics Foundation, 2012). Communities is defined within this review as a group of people with diverse characteristics but united by social ties, common perspectives and participation in a unified action within a geographical location or setting (MacQueen *et al.*, 2001). The exclusion criteria included studies not related to SP interventions that apply a co-designed, co-productive approach to improve well-being outcomes in a community setting.

3.3.3 Screening

Articles were initially screened by two reviewers, the researcher and an academic supervisor, for relevance against the eligibility criteria based on their titles. This meant that the title had to include the term community/social prescribing/co-design/co-production or well-being. The same two reviewers independently assessed the remaining studies by their abstracts, and all reviews considered relevant were obtained in full. A consensus was reached and documented on all articles meeting the inclusion and exclusion criteria. Disagreements were resolved through a discussion with a second academic supervisor. See Figure 4 for a flowchart of the search outcomes and the screening process. Eight articles were identified as relevant and eligible for inclusion.

Figure 4. Preferred Reporting Items for Systemic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009) flow diagram for literature search outcomes and screening process



3.3.4 Data extraction

The researcher independently extracted data from the final included papers. The completed data extraction form were then presented to her academic supervisors for comments and to avoid bias. Data extraction forms were created for the review and piloted on the final included studies. Final data extraction criteria included:

- Study characteristics: study type, country, aims/objectives/hypotheses
- **Demographics:** participants' characteristics, number of participants
- **Intervention:** intervention content; development of intervention; intervention providers/referrers; location of intervention; duration of intervention

- Measures: data collection tools; well-being measures such as the EQ5D, PROMIS 10, Beck's Depression Inventory (BDI), WEMWBS measures; type of statistical test
- **Outcomes:** any reports of well-being improvements or lack of; any reports of current standards in SP interventions applying a co-productive or co-designed approach; main statistical result(s)

3.3.5 Quality assessment

All final included papers were critically appraised for methodological quality. Quality appraisal methods were influenced by the GRADE Framework method (Guyatt *et al.*, 2011). In addition, since all final included papers were observational studies, a quality assessment tool for case series studies (National Heart Lung and Blood Institute, 2014) was read for guidance. Following the GRADE framework approach, each paper was primarily assessed according to the study design. The framework sets randomized control studies as high-quality evidence and observational studies as studies of the lowest quality because of residual confounding. The quality of each study was initially determined based on the study design and was further assessed according to:

- The clarity of the study's aims and objectives
- **Risk of bias** (a scoping level of risk of bias has been determined after considering the risk of confounders, selection bias, allocation bias (if randomized), performance bias, detection bias, attrition bias and measurement bias)
- **Indirectness** (did the paper state clearly what the population, intervention and outcomes were and did they address the relevant population, interventions and outcomes for this review question)
- Tests of significance and their results
- Publication bias (were all outcome stated to be measured reported or did the study authors fail to report outcome that showed no (or a negative) effect? Is there any chance of funding bias?)

Following assessment of all the above factors an overarching quality level was determined for each study using GRADE levels. Quality appraisal outcomes are presented in Table 8.

Study reference (author/year)	Study design certainty	Study aim/objective clearly stated	Risk of bias	Indirectness	Publication bias	Test of significance	Overall quality
(author/year)	certainty	cicarry stated	bias	mun cemess	6145	significance	quanty
Baker and Irving (2016)	Low	No	Moderate risk	No serious indirectness	No serious risk	No information	Low
Blickem <i>et al.</i> (2013)	Low	Yes	Moderate risk	No serious indirectness	No serious risk	No information	Low
Chesterman and Bray (2018)	Low	No	Moderate risk	No serious indirectness	No serious risk	No information	Low
Hassan <i>et al</i> . (2020)	Low	Yes	Moderate Risk	No serious indirectness	No serious risk	No information	Low
Southby and Gamsu (2018)	Low	Yes	Moderate risk	No serious indirectness	No serious risk	No information	Low
Strachan, Wright and Hancock (2007)	Low	Yes	Moderate risk	No serious indirectness	Moderate risk	No information	Low
Swift (2017)	Low	Yes	Moderate risk	No serious indirectness	Moderate risk	High significance	Low
Whitelaw <i>et al.</i> (2017)	Low	Yes	Moderate risk	No serious indirectness	No serious risk	No information	Low

Table 8. Quality Assessment of Included Studies Results

3.4 Results

3.4.1 Overview of included studies

The included studies objectives and data collection methods are presented in Table 9 below. All studies included SP intervention that led to an improvement in well-being outcomes within a community setting. The characteristics of the SP interventions, including the how the co-designed or co-productive approach was applied to each intervention are shown in Table 10 below.

As shown in tables 8 and 9 there was a wide variation in the included studies' characteristics and the content of the SP interventions. However, the data extraction process revealed common themes among studies. As a result, the data is synthesized through thematic analysis. Thematic analysis includes the identification of common and reoccurring themes within studies followed by the synthesisation of results under each theme (Thomas and Harden, 2008). This method is recommended as an useful tool for synthesizing the results of qualitative studies within systematic reviews (Centre for Reviews and Dissemination, 2009) Two overarching themes emerged among the studies. A proportion of the studies (n = 3) studied a co-productive approach to the development of a SP intervention to improve wellbeing within a community setting. These studies considered the dynamics and characteristics of the collaboration between service providers and service users and their communities. The remaining studies (n = 5) analysed the community outcomes and perspectives of a SP intervention that applied a co-designed or co-productive approach to improve the community's well-being.

Table 9 and 10 below are followed by the presentation of the results under each theme.

Table 9. Included studies characteristics

Study Author (Year)	Study design and methods	Objectives	Participants	Social context
Baker and Irving (2016)	Case Study consisting of review of project documentation; semi- structured interviews; focus groups; observations of Steering Group meetings.	To address the gap in the literature regarding the role of boundary-spanners in supporting or enabling the co-production of an arts-based, pilot SP scheme.	People living with early-onset dementia at risk of depression and their family members, project steering group, GPs and other primary care staff, Community Art Organisation, sheltered accommodation wardens.	Various community venues and sheltered accommodation in North East England.
Blickem et al. (2013)	Qualitative Study using focus group and interviews.	To combine insights from service users with long-term conditions to develop a SP intervention to promote engagement and improve access to health-relevant resources.	Individuals living with long term conditions attending health and well- being support groups.	Greater Manchester, England.
Chesterman and Bray (2018)	Action Research, Appreciative Inquiry and Action Learning	To complement the formal evaluation of schemes established by the Crawley SP Partnership with targeted Action Research. Co-researchers were members of the Crawley SP Partnership.	Co-researchers were members of the Crawley SP Partnership. The interviewees suffered from long term conditions and participated in well-being activities.	Various community venues in Crawley, England
Hassan et al. (2020)	Qualitative study using focus groups	To explore elements that contribute toward enhancing a SP model addressing the social determinants of mental health.	Individuals from Mersey Care NHS Foundation Trust who had accessed The Life Rooms between September 2017 and April 2018.	Life Rooms, Liverpool and Sefton, England—one of the most disadvantaged areas in the country.
Southby and Gamsu (2018)	Case Study using semi- structured interviews and focus group	To add to the knowledge base around collaborative practice between GPs and Voluntary and Community Sector (VCS) organisations by examining four SP schemes.	GPs and VCS organisations involved in four SP schemes.	Communities in Sheffield experiencing significant health inequalities.
Strachan,Wright, and Hancock (2007)	Survey using open and closed questionnaire.	To examine the extent to which SP participants have experienced	Tailor Made Leisure Package applicants over 16 years of age.	Healthy Living Centre, Scotland.

		improvements in their health and well- being.		
Swift (2017)	Case Study. Well-being outcomes were measured using Subjective well- being (SWEMWBS). The report also refers to qualitative data collected to determine the broader impact of the intervention on patient lives.	centred approach to health.	Patients at all 17 GP practices in Halton who had been referred to the SP interventions.	Community venues in Halton, England, an area with high levels of deprivation and signs of health inequalities.
Whitelaw et al. (2017)	Case study using 1:1 semi-structured interviews	To conduct a process-based evaluation of the inception and early implementation of a SP initiative.	The project steering group; staff of two primary care organisations and the varied community resources associated with the project.	Two GP practices in Scotland. The communities were rural in nature with low population density and relatively high levels of isolation.

Study author (Year)	Name, location and description of intervention	Co-Designed or co-produced approach
Baker and Irving (2016)	Arts-based SP provided from various community venues in North East England to combat problems of isolation and loneliness among and improve the well- being of older people with early onset dementia and depression.	Developed through a collaboration between a Primary Care Trust and Community Arts Organisation.
Blickem et al. (2013)	An online SP referral tool based on community support providers in Greater Manchester, England for people with long term conditions. Intervention was designed to provide well-being, health education, practical support and help with diet and exercise.	The intervention was developed in collaboration with service users. Noralization Process Theory guided the development in a way in which gradual changes were implemented on the bases of feedback at different stages from the patient.
Chesterman and Bray (2018)	Well-being promoting activities provided by voluntary sector organizations in various community venues in Crawley, England.	SP practitioners were recruited as co-researchers to conduct appreciative inquiry interviews with citizens participating in SP activities. Co-researchers analysed interview data with other SP practitioners to decide on further action and subsequently implemented positive change to the SP intervention.
Hassan et al. (2020)	SP provided from The Life Rooms in Liverpool and Sefton, England. SP intervention involves learning opportunities or social support. There are also advice services on housing, debt, employment, or well-being support. Employment and enterprise volunteering support is also available.	Each social prescription is co-produced with service users, carers, partner organisations and staff.
Southby and Gamsu (2018)	Four SP schemes delivered in GP surgeries and VCS organizations centres aimed at improving well-being.	All SP interventions had been developed and were delivered through a collaboration between GPs and VCS organization. The depth of collaboration varied between each case.
Strachan, Wright, and Hancock (2007)	Tailor Made Leisure Package (TMLP) is a SP intervention delivered from the Healthy Living Centre, Scotland. The intervention was developed to	The TMLP is a SP co-designed with the service users to meet individual needs and capability.

Table 10. Characteristics of the social prescribing interventions in the included studies

	encourage disadvantaged groups to embark on an individual program of exercise and relaxation.	
Swift (2017)	A community-centred approach delivered from community venues in Halton, England to respond more appropriately to social determinants of health. The approach includes a community-navigation scheme, a SP intervention and a social action element that involves recruiting patients who make use of the SP service to co-facilitate sessions with tutors.	The SP intervention was developed through a Theory of Change that was co-designed with stakeholders with a key emphasis on empowering patients. GPs were consulted before launching the intervention to seek their buy-in and establish a referral process. In addition, the SP is co-designed with the service users, and a co-production approach can also be seen within the Social Action element.
Whitelaw et al. (2017)	A link worker working within two GP practices in rural Scotland assesses patients' health and well-being needs and refers patients to available community resources.	The project was co-developed by a multi-sector steering group.

3.4.2 Theme 1: Co-produced approach to social prescribing

All included studies (Baker and Irving, 2016; Whitelaw *et al.*, 2016; Southby and Gamsu, 2018) concerned SP interventions developed in collaboration with service providers and service users within a community. Although co-production is only directly mentioned within the development of SP the intervention in one study (Baker and Irving, 2016), co-produced elements can be found in the development of the SP intervention in the two remaining studies.

All studies included within this theme were deemed a low quality (see Table 8). This was on account of being observational studies and the risk of bias assessed in each study, due to the likelihood of selection bias and measurement bias. However, the studies present common sub-themes and offer valuable insight into some of the common challenges and facilitators of co-producing a SP intervention to improve well-being outcomes within a community setting.

Sub-theme 1: Realignment

The evidence demonstrates that applying a co-productive approach to SP requires a cultural shift. The depth and success of co-production within the evidence varies according to how successful the different co-producers were in bringing the norms and values of different organisations (Whitelaw et al., 2016; Southby and Gamsu, 2018). This was particularly evident within a study that demonstrated the unsuccessful co-production of a transdisciplinary SP intervention, combining art and medicine (Baker and Irving, 2016).

The responsibility for co-production was assigned to "boundary spanners" defined within the evidence as individuals within organisations responsible for coordinating various organizational structures and resources in order to organize and govern collaborative ventures (Baker and Irving, 2016) (p.382). The failure of co-production was partly due to the desire of some boundary spanners to dominate while others failed to understand the norms and values of other organizations.

It was also evident that this cultural shift entailed a power shift since equal relationships and mutuality was required between co-producers. The evidence demonstrated that effective leadership was necessary to champion the equal relationships and promote collaboration. Effective leadership was reported to include surrendering autonomy and embracing adaptability on a grassroot level (Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). The evidence suggests that such methods ensured that decisions were made for the benefit of the greater community and enabled a sense of ownership of the SP intervention among service users (Whitelaw *et al.*, 2016).

The evidence indicates that co-production failed where equal relationships were not established. This failure was illustrated by a sense of hierarchy that remained as the traditional model of care prevailed. Health professionals continued to feel most competent and believed that voluntary and community organizations could not adequately address their patient's needs (Baker and Irving, 2016). It was reported that this sense of "professional preference" towards health professionals also remained due to patients' expectations (Whitelaw *et al.*, 2016) (p. 117). The evidence implies that patients can have misperceptions about community and voluntary organisations' in addition to a reluctance to also seek support from volunteers within their community (Whitelaw *et al.*, 2016). When such hierarchy prevailed, the evidence suggest that third sector and voluntary services were approached as additional support rather than complementary to traditional, medical solutions (Whitelaw *et al.*) *al.*, 2016; Southby and Gamsu, 2018). As a result, the evidence indicate that lack of equal relationships prevented the holistic approach to the delivery of positive well-being outcomes.

Sub-theme 2: Sustainability

Attention was also given within the evidence to the sustainability of the collaboration between the different sectors delivering the SP intervention. The evidence also demonstrates that the degree of communication between stakeholders contributed immensely to the longterm sustainability of the co-produced and co-designed SP intervention. Communication was essential to ensure that a relationship was built and maintained between the co-producers (Baker and Irving, 2016; Whitelaw et al., 2016; Southby and Gamsu, 2018). The evidence indicate that it also ensured that each stakeholder felt involved in each stage of the development and subsequent delivery of the intervention (Southby and Gamsu, 2018). Many facilitators of communication were mentioned within the SR evidence. Co-location enabled service providers from different sectors to build close relationships and share information within informal settings. The evidence implies that these relationships in themselves were also essential in sustaining co-production since health professionals were more likely to refer a service user to a trusted acquaintance (Southby and Gamsu, 2018). Perhaps the most effective medium of communication emphasized in the evidence was a feedback system. The evidence illustrates that it provided a regular reminder of the existence and benefits of the SP intervention to health professionals consequently encouraging referrals (Baker and Irving, 2016; Whitelaw et al., 2016; Southby and Gamsu, 2018).

In addition to communication, the evidence also suggests that shared resources or systems between the different sectors (e.g., integrated IT system and a single point of contact for referrals) brought convenience and consistency (Whitelaw *et al.*, 2016; Southby and Gamsu, 2018).

Sub-theme 3: Importance of evaluation

The evidence highlights the importance of evaluating the intervention from the outset. A lack of evaluation meant that GPs and health professionals were less likely to continue their contribution to the co-production of the intervention in the long term, due to healthcare professionals' responsibility to prescribe effective and unharmful resolutions. However, the evidence demonstrates that evaluating the intervention was hindered by a lack of a suitable evaluation framework (Baker and Irving, 2016). It was reported that GPs need data presented in a certain way, often using quantitative measures, in order to be persuaded that the SP intervention leads to positive well-being outcomes (Baker and Irving, 2016; Southby and Gamsu, 2018). The task of applying such evaluation frameworks fell on VCS organisations who found the task challenging (Southby and Gamsu, 2018) and preferred qualitative measures (Baker and Irving, 2016). The importance of overcoming such challenges was exemplified within the evidence as failure to sufficiently evaluate one pilot SP intervention contributed to the health sector's decision not to provide long-term funding for the intervention (Baker and Irving, 2016).

Sub-theme 4: Resources

An additional observation in each study was that collaboration depended on adequate provision of the necessary resources. Necessary resources included the investment of time to develop the collaborations. The evidence indicates that for SP to work, healthcare professionals should be ready to adapt a more holistic model of health which entails making time to assess service users' well-being and become acquainted with community resources of support. GPs reported that they did not always have the time to a fully assess patients' well-being and therefore, could not make referrals (Baker and Irving, 2016). Similarly, it was reported that GPs were detached from the Voluntary and Community Sector (VCS) as they often did not have time to raise their own awareness of the support they could offer service users and develop relationship with the VCS staff. The evidence suggest that this was less of an issue where there were pre-existing relationships between healthcare professionals and VCS organisation staff. Such relationships also assisted in establishing mutuality and trust between partners (Whitelaw *et al.*, 2016; Southby and Gamsu, 2018).

In terms of physical resources, concerns about the lack of consistency within the third sector organisations capacity was reported within the evidence. The VCS organisations were often dependent on short-term funding, which resulted in an "unintended unreliability" (Southby and Gamsu, 2018) (p. 366). The evidence indicates that GPs were resistant to refer service users to such uncertain provision of support and were more likely to refer to well-established organisations (Baker and Irving, 2016; Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). However, it was also acknowledged within the evidence that SP had the potential to increase

the numbers of referrals to such organizations, which could, in the long run, strengthen any applications for increased funding (Whitelaw *et al.*, 2016).

3.4.3 Theme 2: Service users' outcomes and perspectives

Other publications identified in the SR focused on wider service users' outcomes and/or their perspectives of co-designed or co-produced SP interventions within community settings. Five studies were included under this theme which consisted of four case studies (Blickem *et al.*, 2013; Swift, 2017; Chesterman and Bray, 2018; Hassan *et al.*, 2020) and one mixed method survey (Strachan, Wright and Hancock, 2007). All five studies were deemed of low quality on account of being observational studies. A moderate risk of bias was also assessed due to the risk of confounders (Strachan, Wright and Hancock, 2007; Swift, 2017; Swift, 2017), selection bias (Strachan, Wright and Hancock, 2007; Swift, 2017; Chesterman and Bray, 2018) and measurement bias (Blickem *et al.*, 2013; Chesterman and Bray, 2018; Hassan *et al.*, 2020). As within the previous theme, there is consistency in terms of the valuable outcomes and perspectives reported in each study which increases the credibility of the results.

An increase in confidence was a common well-being outcome reported within the studies. This was mainly as a result of a reduction social isolation as the SP intervention motivated service users to join social groups and build a social network of support (Chesterman and Bray, 2018; Hassan *et al.*, 2020). The evidence suggested that applying a co-productive approach to SP gave individuals a sense of control that also increased their self-confidence and often led to a positive mood. Such improvements were particularly appreciated by service users suffering from isolating mental health issues. Individuals reported that they had developed strategies to deal with their situation and as a result gained the confidence and self-esteem they desperately needed (Hassan *et al.*, 2020).

As well as giving individuals this sense of control, being able to co-produce or co-design with the SP intervention provider also meant that participants felt the staff were approachable, which encouraged their participation (Strachan, Wright and Hancock, 2007). The evidence demonstrates that service users greatly appreciated being listened to as they co-designed their social prescription with a support worker. This was reported as a positive change from being treated as passive users by healthcare professionals (Chesterman and Bray, 2018; Hassan *et al.*, 2020).

The evidence also suggests that the reciprocal relationships established between service users and service providers were particularly beneficial in creating positive well-being outcomes. Participants reported that being able to help others within a similar situation was rewarding and empowering as it led them to realize the strengths and weakness in themselves and others (Chesterman and Bray, 2018; Hassan *et al.*, 2020). There was also evidence that sharing experiences and coping mechanisms motivated newer service users and gave them the hope that they could achieve the same positive well-being outcomes (Swift, 2017).

The studies also provided insight into the possible obstacles that prevented service users from participating in the SP interventions. The reported obstacles were mainly due to the individual's personal situations. One of the most apparent obstacles within the evidence was lack of transport options (Blickem *et al.*, 2013; Chesterman and Bray, 2018). In addition, many felt a lack of confidence due to social isolation, felt restricted due to depression (Chesterman and Bray, 2018) and felt nervous about joining new groups due to a negative previous experience (Blickem *et al.*, 2013). The cost of the service was also a barrier reported within one study (Strachan, Wright and Hancock, 2007). However, Blickem et al. (2013) study highlights that co-designing a SP intervention gives service providers and users an opportunity to discuss concerns and design the intervention in a way that could overcome any obstacles from the outset.

The evidence also demonstrated the power of creating opportunities for SP practitioners to reflect on participants outcomes and perspectives. Reflecting on such findings through an action learning framework was shown to enable practitioners to identify good practice that enabled service users to achieve positive well-being outcomes and the consequent implications for their own practice. Establishing such "cycles of questioning, planning, experimentation and reflection" was considered effective in developing efficient and effective interventions and strengthening collaboration between disciplines and organizations (Chesterman and Bray, 2018) (p. 70).

3.5. Discussion

This systematic review set out to examine the evidence in developing SP interventions that apply a co-designed or co-productive approach to improve well-being outcomes in a community setting. A proportion of the studies (n=3) demonstrated the dynamics of co-

producing SP interventions in community settings, while the rest (n=3) investigated the wellbeing outcomes of co-designed or co-produce SP interventions among service users.

The evidence demonstrates that co-design and co-production can be an effective mean of engaging service users in the development of a SP intervention to improve well-being in a community setting. Consistent with other studies of co-designed and co-produced community well-being interventions (Wildman *et al.*, 2018) it was reported that service users value the patient-centred approach that entails being approached as individuals, not passive users. Similar to previous studies of a co-designed and co-produced approach within health (Batalden *et al.*, 2016; Palumbo, 2016; Holland-Hart *et al.*, 2019) the evidence demonstrates the establishment of a mutual relationship between service providers and service users as a transformative process. Existing evidence of co-production in health indicate that the idea of creating equal relationships and stepping away from the traditional model of health is unrealistic (Kaehne, Beacham and Feather, 2018). However, the evidence within the present study illustrates that it is possible and essential within the co-production of a SP intervention as failure to establish mutuality was reported to have created a sense of hierarchy and distrust (Baker and Irving, 2016).

However, the SR evidence also indicates clearly that there are facilitators and barriers that can influence the success of the co-design and co-production of a SP intervention within community settings. Effective leadership or boundary spanning was reported essential in advocating the necessary mutuality between co-producers and co-designers (Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). This finding mirrors those of other studies that highlight the necessity of appointing a facilitator or a champion of the co-design or co-production to break barriers between different fields of knowledge as well as ensuring an unified understanding of the final aim and maintaining constructive and focused discussion throughout its implementation (Rycroft-Malone *et al.*, 2016; Gheduzzi *et al.*, 2021). The evidence presented within this review also indicate that communication is essential in sustaining and enhancing the personal relationships between service users and providers. This finding supports previous studies that have also emphasized the importance of communication to ensure information symmetry (Li, 2020) and a positive rapport among co-producers leading to a more efficient network (Poocharoen and Ting, 2015).

Implementing a suitable evaluation framework to ascertain the effectiveness of the SP intervention from health professionals' perspective was also a suggested facilitator of the

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long-term sustainability of a co-produced SP within the current review (Baker and Irving, 2016; Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). Previous studies of co-production have stated that it is effective practice to extend the approach to co-assessment following the co-delivery of a service (Bovaird, 2007; Bovaird and Loeffler, 2012). The need to find an evaluation framework suitable for all stakeholders arguably strengthens the case for following such procedures. A study of evaluation methods for arts, health and well-being projects found that the co-production of evaluation methods is time consuming but can ensure that the evaluation framework is fully embedded in service delivery and draws upon the knowledge and skills of all stakeholders, ensuring their buy-in from the outset (Daykin *et al.*, 2017). In accordance with other studies that have assessed collaboration within community care (Weiss, Lillefjell and Magnus, 2016; Adebayo *et al.*, 2018) results of the current review indicates that the sense of trust between health professionals and SP providers owing to an effective evaluation was also crucial to the delivery of the SP intervention.

The systematic review presented in this Thesis also indicates that a context with adequate resources is also vital to the sustainability of co-designed or co-produced SP interventions. Similar to other studies of co-produced health interventions (Holland-Hart *et al.*, 2019) this review touched on the importance of ensuring that health professionals are prepared to devote time to both approaches (Baker and Irving, 2016; Southby and Gamsu, 2018). However, sufficient financial resources were the main resources required according to many of the authors (Baker and Irving, 2016; Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). This finding is supported by studies that highlight that the design of a resilient intervention requires assessing the available resources to determine what is financially feasible (Adebayo *et al.*, 2018) and establishing realistic goals and objectives to avoid loss of motivation among stakeholders (Weiss, Lillefjell and Magnus, 2016).

The evidence indicates that co-designed and co-produced SP interventions does lead to positive well-being outcomes among service users within community settings. Well-being outcomes across the included studies were reported to have been an increase in confidence, empowerment, and self-sufficiency as well as reduction in social isolation. Positive well-being outcomes were reported among service users with long term conditions (Chesterman and Bray, 2018; Hassan *et al.*, 2020), mental health problems (Hassan *et al.*, 2020) and, a co-produced SP intervention also led to feelings of "connectedness" among individuals living with early onset dementia and their families (Baker and Irving, 2016) (p. 385). They were also evident among larger, deprived communities suffering from health inequalities (Swift,

2017; Southby and Gamsu, 2018). The evidence suggests that establishing reciprocal relationships with SP providers through co-production was an important factor that secured users utilisation of the service and enabled such positive outcomes. This results also supports recent studies which highlight that establishing collaborative, mutual relationships between all SP stakeholders is necessary to ensure buy-in and consequently the sustainability of the intervention (Fixsen *et al.*, 2020).

3.6 Study strengths and limitations

A key strength of the present study was the explicit inclusion and exclusion criteria that were applied to discover relevant studies that could achieve this study's aim and objectives. In addition, a second and third reviewer were consulted during all stages of the review process to increase the robustness of the review and reduce the risk of bias. Furthermore, early drafts of the review were presented to the Wales School for Social Prescribing Research (WSSPR) and Grŵp Cynefin's "Llesiant Lleu" project board for comments. Most importantly, the content of this review has also been <u>peer-reviewed and published</u>. However, despite attempts to avoid publication bias, the current review only searched for studies published in English due to limited translating resources. Therefore, it must be acknowledged that the search strategy may not be comprehensive. The articles found in the review are mostly qualitative, however the quality assessment criteria were influenced by tools designed to evaluate quantitative studies. It is therefore recognized that this aspect could also produce a bias in the interpretation of the results.

However, this review also has its limitations. As previously discussed, all included studies were of a low-quality standard. In addition to the previously stated limitations, the exact number of participants within some studies is unknown (Swift, 2017) as well as the duration of the SP intervention within most of the studies affecting the reliability of the evidence. Similarly, while all studies met the inclusion criteria meaning that each study's population was a community, the demographics varied among the studies. In addition, various data collecting methods were used within each study. Both these factors affect the ability to generalize the findings. However, as already mentioned within this review, common subthemes and valuable outcomes were found among the studies, increasing credibility.

3.7 Conclusion

The evidence strongly suggests that co-design and co-production would be an effective approach to engage service users in the development and implementation of a SP intervention within a community setting. The results of this review also indicate that SP initiatives can be enhanced from the outset, by drawing on stakeholder knowledge to design a service that improves service users' health and well-being outcomes. Taken together, the facilitators and barriers of co-production and co-design highlighted within the evidence suggests how to efficiently implement such an approach to the development of a SP intervention within a community. When a co-production and co-design is successfully applied, the evidence illustrates that it can improve well-being outcomes, and service users within communities feel empowered by this patient-centred approach. However, caution must be applied since this review consists of only a small number of low-quality studies. Therefore, SP interventions that apply a co-designed, co-productive approach to improving well-being outcomes in a community setting require more, high quality research to further investigate.

Chapter 4: Results of the qualitative focus group interviews

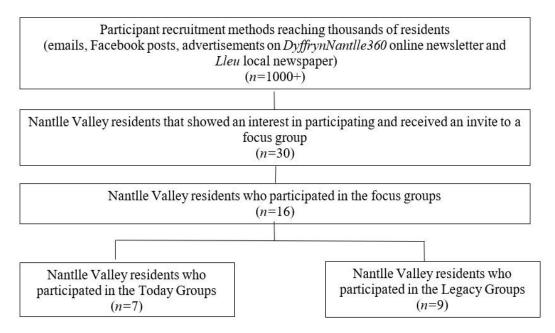
4.1 Introduction

This Chapter presents the findings from the community engagement focus groups. First, the sample is presented and the demographic details of the final participants. The chapter proceeds to present the results of the Today and Legacy focus group interviews through qualitative thematic analysis. The results of the focus groups are then discussed as well as the strengths and limitations of the results. The Chapter concludes with a summary of the key findings.

4.2 Sample

Figure 5 below displays the results of the recruitment methods.

Figure 5. Participant recruitment results



As displayed in Figure 5, recruitment for the Nantlle Valley focus groups resulted in 30 potential participants who showed an interest in participating. Unfortunately, respondents did not include representation from all age groups, namely the 18-20 and 81+ age groups.

Residents had been asked to note their language choice in the personal details form (<u>Appendix G</u>). Potential participants were therefore first stratified into English and Welsh speaking participants. Both English and Welsh participants were then stratified into the remaining age groups (21-30, 31-40, 41-50, 51-60, 61-70, 71-80 year old). Two Welsh and

two English groups were randomly selected in a manner that aimed to have as equal representation as possible of the remaining age groups. Four focus group was therefore arranged consisting of a Welsh Today and Legacy focus group and an English Today and Legacy focus group (see Table 10 below).

A total of 12 participants noted that they wished to participate through the medium of English, or would not mind doing so, meaning a total of 6 participants were invited to each English medium focus groups. A total of 9 were invited to both Welsh medium focus groups. The aim was to have a maximum of 8 participants within each focus group. However, more were invited to the Welsh focus groups as it is advisable to invite too many participants with the expectation that some will not attend (Krueger and Casey, 2015).

As demonstrated in Figure 5, a total of 16 participants returned their consent forms and joined the Zoom calls. Two participants withdrew from the research with reasons. It is not known why 12 of the participants who had declared an interest did not join the zoom calls, despite two reminder messages. The number of participants within each group is shown in Table 10.

Focus Group title	Number of participants
Today Group (Welsh medium)	5
Today Group (English medium)	2
Legacy Group (Welsh medium)	7
Legacy Group (English medium)	2
Total number of participants	16

 Table 31. Number of participants within each Focus Group

Table 11 and Figure 5 demonstrates that a total of 7 participants joined the Today Focus Groups and a total of 9 participants joined the Legacy Focus Groups. Participants joined only one focus group discussion.

4.2.1 Demographic details of the participants

The following section presents the demographic details of the focus group participants in terms of age, gender, area of resident and employment status.

Figure 6. Age of the participants

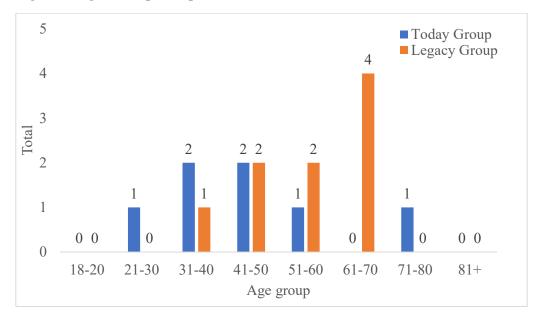
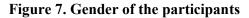


Figure 6 demonstrates the participants' age. As seen above there were no participants within the 18-20 age group nor the 81+ age group within either of the focus groups. The largest age groups were those between 41-50 and 61-70, both containing 4 participants each. However, all those between 61-70 in the sample participated in the Legacy Groups. There was one participant within the 21-30 age group and 71-80 age group, and both attended the Today Group. Two participants of the Today Groups and only one participant in the legacy groups were aged between 31-40. The Today Groups had one participant between 51-60 years old and the legacy groups had 2 participants from this age group. Therefore, overall the Legacy Groups had a slightly older demographic in comparison to the Today Groups.



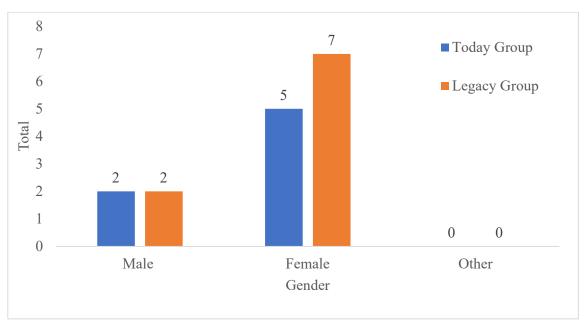


Figure 7 demonstrates the participant's gender. Most participants (n=12) identified as females and the remaining (n=4) identified as male. Nobody identified as 'other' in terms of gender.

Figure 8. Number of participants that lived within each Lower Layer Super Output Area (LSOA) that constitutes the Nantlle Valley.

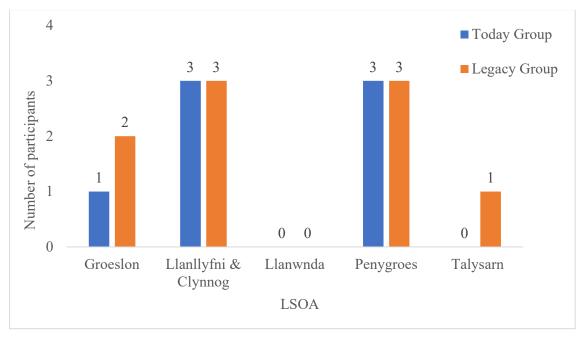


Figure 8 presents the number of participants that lived within each LSOA that constitutes the Nantlle Valley. What is clear from figure 8 is that the same number of participants (n=3) in both focus groups lived in Llanllyfni & Clynnog LSOA and Penygroes LSOA. A total of 3 participants who lived in Groeslon participated in the research and only 1 participant from Talysarn LSOA who joined the Legacy Group. None of the participants postcodes were within the Llanwnda LSOA. Comparing the results in Figure 8 above with the WIMD results demonstrated in Table 3, Chapter 1 reveals that 9 participants live within 50% least deprived areas (Groeslon and Penygroes LSOAs), 6 participants live within 30-50% most deprived areas (Llanllyfni and Clynnog LSOA) and 1 participant within the 20-30% most deprived areas of Wales (Welsh Government, 2019c).

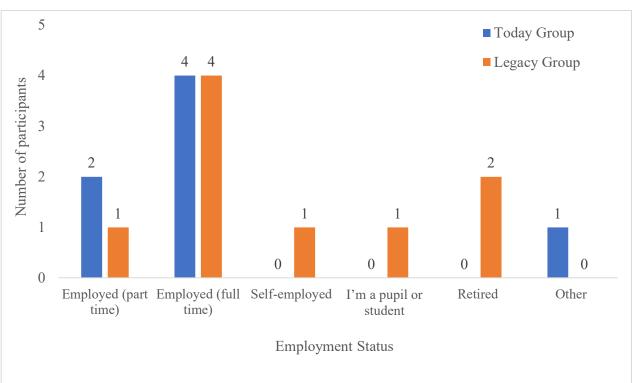




Figure 9 displays the participants' employment status as a subtle indication of the participants' economic background. Most of the Today Group participants were employed on a part time contract (n=2) or full-time contract (n=4). One participant noted "Other" and further explained that they were a volunteer. The Legacy Group participants consisted of individuals employed on a part time contract (n=1), full time contract (n=4), self-employed (n=1), a student (n=1) and retired individuals (n=2).

4.3 Findings

The following section explains the focus group procedure during this study and presents an observation of the Today and Legacy focus groups dynamics and interactions. A thematic analysis of the Today Focus Groups and Legacy Focus Groups results is also presented.

4.3.1 Focus group procedure

The researcher conducted each focus group independently and began each discussion after obtaining each participant's verbal consent, explaining the purpose of the study, the concept of SP, and in terms of the Legacy Group, the concept of long-term thinking. Table 12 below demonstrates the duration of each focus group discussion.

Focus Group Title	Duration of discussion
Welsh Today Group	01:32:36
English Today Group	00:50:20
Welsh Legacy Group	01:10:48
English Legacy Group	00:53:54.

 Table 12. The duration of each focus group discussion

Zoom screen recordings of all the focus groups were transcribed by the researcher. A separate coding framework was created for the Today Groups and Legacy Groups. In accordance with the Thematic Analysis process (Clarke and Braun, 2017), codes were then used to build broader themes. Completed hierarchal coding frameworks can be seen in <u>Appendix J</u>. The results are presented under each theme below with relevant quotes to highlight the findings. Quotes from the Welsh-medium groups are presented firstly in Welsh followed by an English translation. Original English quotes are not translated into Welsh since this Thesis is written in English. This is in-line with standard procedure where original Welsh quotes are used in English reports in Wales.

4.3.2 Findings from the Today Group

Observations of the Today Groups dynamics and interactions

During the Welsh Focus Group one participant did not respond to any of the comments and left the zoom call early. The participant followed up via a telephone call to explain that this

was due to personal reasons irrelevant to the focus group discussion. However, all remaining participants in both the Welsh and English group interacted with the facilitator equally, giving the researcher a view of how concepts were perceived collectively. Many of the participants revealed that they worked within the social service sector as well as the education sector thus giving them a more comprehensive view of local issues and needs. The researcher also encouraged the participants to elaborate on their comments and gave opportunities to respond to and elaborate on the comments of others. Although the atmosphere was relaxed and friendly, the participants were also ready to respectfully express differing views. The researcher encountered two instances where the discussion remained on one subject for too long. At those points, the researcher would summarize the earlier points before moving on to the next question.

Today Group theme 1: The Nantlle Valley community

Participants indicated that the Nantlle Valley community is facing a number of issues that may affect the well-being of individuals. The results suggest that needs mainly stem from community dynamics and unique issues among different age groups.

The community's inclusivity

An issue that was discussed to great extend during the discussions was the sense of selfenforced social exclusion among less economically privileged individuals in the community. Participants expressed repeatedly that they could not identify the cause of such exclusion, but agreed that it had been a tendency among some groups for generations:

"Ma na fatha 'generational' problem rhywsut. Ma' 'na rai 'di rhoi eu hunain ar y 'margins' cenhedlaeth ynghynt a cyn hynna hyd yn oed. So ma''na fatha riw "ni a nhw"."

There is a sort of generational problem. Some have put themselves on the margins a whole generation earlier, and some even before that. So there is sense of "them and us". (Participant 4 Welsh Today Group (WTG))

During the discussion it was evident that signs of self-enforced social exclusion deeply frustrated the participants, since they felt that every resident has something they could offer the wider community. When asked about ways to reverse those boundaries, reference was made to the fact that the secondary school's annual Eisteddfod¹ always manages to break down the boundaries among young people for a short period of time:

"Ma gen pawb ei dŷ felly am unwaith 'di o ddim plant dre yn erbyn plant y wlad. Ond am riw bump wythnos 'da chi'n gweld nhw yn 'neud efo'i gilydd, a mae o yn tynnu nhw mewn go iawn."

"Everybody is allocated to a house and so for once it's not the countryside kids versus the town kids. For about five weeks they mix, and it really brings them in." (Participant 4 WTG)

The previous quote suggests that there are also boundaries between children living in the countryside and children living in more urban areas, and that having something in common for a short period of time, increases social cohesion.

Reference was also made to the fact that the many Nantlle Valley residents can be brazenfaced and have a resilient "*front*". Participant felt it was therefore necessary for any new development to be sensitive of these virtues by engaging with the community and developing any initiative or intervention *with* them, instead of *for* them:

"Ma angen i'r ymgysylltiad cynta' 'na fod yn uffernol o ofalus, i 'neud o hefo nhw de." (Cyfranogwr 3 GHC)

"Ia, lle bo nhw yn meddwl: "ma' rhain yn trin fi 'ŵan". Dw i'n meddwl na dyna ydi lot, ma nhw rhy wynab galad, ma' nhw'n meddwl: "dw i'm angan help efo dim byd"." (Cyfranogwr 4 GHC)

"That first engagement needs to be extremely careful, do it with them." (Participant 3 WTG) "Yes, so that they won't think: "they are trying to fix me now". I think that's what a lot of it is, they're too brazen-faced, they think: "I don't need help with anything"." (Participant 4 WTG)

During discussions about the community's dynamics, one English speaking participant also voiced how important it is to administrate everything bilingually to ensure that everyone feels included:

"Some things are only posted in Welsh [...] I think everything has to be bilingual if it's meant to attract people because you shouldn't be discriminating one way or another." (Participant 6 English Today Group (ETG)

¹ Eisteddfod are events in Welsh culture consisting of adjudicated musical, literal, literature and dance competitions. Many schools and local areas have their own annual Eisteddfod and there is also the annual *National Eisteddfod of Wales*, which is a week-long event held in a different location across Wales each year.

Community Age Groups

The results also indicate that there are different concerns among the community regarding different age groups. The biggest concern for young people was anti-social behavior. Anti-social behavior was deemed a product of a lack of direction or sense of belonging amongst less economically privileged young people in the valley. Participants therefore felt the need for an opportunity to draw them in to the wider community:

"Ma' [..] lle ma' nhw 'di glanio mewn bywyd wedi rhoi nhw ar 'margins' y gymuned so ma' nhw'n cerddad y strydoedd 'ma yn gwybod bod bobl ddim yn hoff iawn o be' ma nhw'n neud 'lly [...] 'Sa 'wbath yn dod, a bo nhw yn cael teimlo [...] bo nhw yn rhan o 'wbath, fysa fo yn riw fath o olau bach iddyn nhw."

"Where they've landed in life, it has put them on the margins of the community, so they walk these streets aware that people are not very keen on what they're doing [...] If something came and they felt [...] that they're a part of it, it would be a ray of hope for them." (Participant 4 WTG)

Reference was also made to how involving young people in the development of an initiative or regeneration effort in the past had empowered them and generated a sense of ownership that led to greater respect for the results:

"O'dd rhywun [...] di cl'wad un ohonyn nhw yn [...] deud wrth un arall "Oi! Paid â malu hwnna, ni 'nath hwnna!" Achos na nhw o'dd di neud o, o'dd ganddo nhw fwy o falchder ohono fo 'lly de.

"Someone [...] had heard one of them [...] say to their friend "Hey! Don't break that, we made that!". Because they had made it, they were prouder of it." (Participant 4 WTG)

Interestingly, when asked about any other approaches that could alleviate such behaviors, the

participants also referred to intergenerational activities that had worked well in the past:

"Ma' nhw 'di bod yn treialu project yn Dyffryn Nantlle efo cael plant yn gymdogion i'r henoed [...] na'th o gymaint o les o ran hyder y plant 'ma"

They have been piloting a project in the Nantlle Valley with children befriending older people [...] *it did so much good to these children's confidence.* (Participant 4 WTG)

It was felt that increasing such opportunities for children and young people to socialize with

people from different ages and different backgrounds was essential to ensuring their

acceptance of community group and activities as adults:

"Ma'n dod yn ôl i cael digon o gyfleoedd sy'n dod a phleser iddyn nhw pan ma nhw yn ifanc, ella bo' nhw fwy tebygol o ddefnyddio y petha' ma, normaleiddio fo, dod i arfer cymysgu efo bobl o wahanol gefndiroedd." "It comes back to getting plenty of opportunities that they enjoy when they're young, maybe they'll be more likely to avail of these things, normalize it, become used to mixing with people form different backgrounds." (Participant 1 WTG)

The participants also mentioned that intergenerational activities are just as beneficial in maintaining the well-being of older people, especially in terms of tackling loneliness among those age groups:

"O'dd yr hen bobl wrth eu bodda yn gweld [plant y cyfranogwr] ... a ca'l eistedd yn fan'na efo'u bisged a phanad [...] lot o bobl o'dd yn unig, o'dda' nhw yn ca'l cyfle i ddal i fyny efo bobl."

"The old people were delighted to see [participant's children] ... and getting to sit around with their biscuit and cuppa [...] many were lonely, they got a chance to catch-up with people." (Participant 2 WTG)

In addition to the young and the elderly, participants also indicated a lack of groups and

activities to protect adults' well-being:

"Dw i'n teimlo bod na lot o ffocws ar bobl hyn a bobl ifanc, be am y bobl yn canol? Dw i'n teimlo 'left-out' weithia'."

"I feel like there is a lot of focus on older people and young people, what about the people in the middle? I feel left-out sometimes." (Participant 3 WTG)

When asked about ideas that could be initiated to tackle the lack of provision for the working

age population, participants mainly suggested creating opportunities for socializing, such as

book launches, charity fashion shows and choirs:

"Dw i'n meddwl bod o'n bwysig cofio faint gafodd bobl na'th ymuno efo côr Dyffryn Nantlle ar gyfer 'Steddfod [Genedlaethol] Llanrwst gael allan o hwnna [...] o'dd o'n gyfle i siarad efo bobl ella fyswn i ddim wedi siarad efo o'r blaen."

"I think it's important to remember how much those who joined with the Nantlle Valley choir that was established for the [National] Eisteddfod in Llanrwst got out of that [...] it was an opportunity to talk with people that I might not have spoken to otherwise." (Participant 2 WTG)

Today Group theme 2: Social prescribing

During the Today Groups the facilitators and barriers to further development of SP interventions were discussed as well as various approaches to referral routes.

Facilitators of Social Prescribing intervention development:

Participants were not aware of any current SP interventions being offered in the Nantlle

Valley but were keen to draw attention to groups that do contribute to the well-being of the

Nantlle Valley residents. Groups and activities included the previously mentioned intergenerational activities, existing mother and toddler groups, *DementiaGo* and *AgeCymru* activities, and an array of activities held in various community venues. Participants seemed proud of such provision and we're keen for any new SP intervention to build upon it instead of duplicate.

Participants were also keen to offer ideas and opportunities for additional well-being groups and interventions that could be established as part of a new SP intervention, but also stressed that any new group had to be a constructive idea:

"Dim 'wbath sy'n 'tokenistic', ti isho rhywbeth sy'n ddefnyddiol ac yn mynd i 'neud gwahaniaeth"

"Not something that's tokenistic, you need something that's useful and that's going to make a difference." (Participant 2 WTG)

Such ideas included creating more intergenerational opportunities, such as a repair shop or a musical band, but with the inclusion of working age individuals, to encourage all age groups to socialize and share skills:

"riw make-up space, perthyn i 'Men's Sheds' ond bod o yn ehangach [...] bod o ddim am 'demographic' hŷn yn unig, cysylltu fo i fewn efo'r ysgol a cal bobl oedran fi [oedran gwaith] yn y canol [...] datrys problemau bach o gwmpas Penygroes [...] tynnu bobl ifanc a hen, a fysa fo'n gwella'r Dyffryn."

"a make-up space, similar to Men's Sheds but wider [...] that it's not only for the the older demographic, but get the school involved and people my age [working age] in the middle [...] repairing things around Penygroes [...] drawing old and young people in, and it would improve the Valley." (Participant 3 WTG)

In addition, opportunities to bring families from different backgrounds together to increase social cohesion:

"clybiau coginio, rhieni a phlant ar ôl ysgol math yna o beth, jyst i ga'l teuluoedd ma sydd di colli riw fath o afael ar gymuned rhywsut."

"cooking clubs, for parent and children after school that type of thing, just to reach these families that has lost their grip on community somehow." (Participant 4 WTG)

Barriers to Social Prescribing intervention developments:

In discussing the potential barriers that might interfere with the success of SP intervention in the Nantlle Valley, reference was made to the fact that it was difficult to get enough volunteers with sufficient time to run groups for a long period of time. Acquiring funding to run affordable groups was also a barrier expressed in all the focus groups and a frustrating factor that often prevented initiatives from making a real impact:

"Once the grant kind of finished it got a bit expensive for some of the families to afford it and the numbers disappeared." (Participant 5 ETG)

Participants also revealed that one potential barrier would be the fact that social prescription is a relatively novel concept for many people and as a result it would be necessary to gather feedback from users to demonstrate the benefits to people:

"I think you'd have to show people what the benefits are, that's the only way you're going to encourage people." (Participant 5 ETG)

Participants also warned that another barrier would be ensuring that SP interventions were mindful of individuals' commitments and busy life patterns, especially those of working age:

"Ma angen bod yn ofalus faint o gloch 'da chi'n neud petha' fyd. Dw i'n gweithio llawn amser, 'di bora coffi ar ddydd Mercher yn da 'im byd i fi."

"You need to be mindful of what time you're hosting things as well. I work full time, so a coffee morning on Wednesday is no good to me." (Participant 3 WTG)

Referral approaches Social Prescribing interventions:

Another prominent topic during the Welsh language group was also that participants felt that an array of health and social workers should be able to administrate referrals, and not just GPs, if a SP intervention is to be truly holistic. This was mainly due to the concern that many health issues, mainly mental health issues, should be tackled upstream in the community and not at primary care surgeries:

"Os ydi'r 'access' yn feddygol onid wti'n 'stuck' wedyn efo rhywun yn adnabod bod gennyn nhw broblem ac yn mynd i chwilio am ateb yn hytrach na trio dal pobl lot pellach yn ôl?"

"If the access is medical, aren't you stuck then with people recognizing that they have a problem and only seeking an answer then, instead of being able to catch the problem upstream?" (Participant 3 WTG)

They therefore wanted to establish a network of statutory and third sector health and social workers (e.g housing officers, support workers, carers) and well-being groups, who all work in the community on a daily basis, to identify problems upstream and signpost people to the most appropriate service earlier:

"Da ni ddim yn llwyddo i adnabod y bobl ar yr amser cywir. Ond ella na ddim yn gweithio digon agos efo meysydd arall yda' ni. Ma gennym ni gyfle yn fan hyn 'ŵan [...] i gael yr asiantaethau i gyd efo'i gilydd, yn gweithio yn glos ac yn lleol. Dw i'n meddwl 'sa gen ti lot mwy o gyfoeth gwybodaeth am yr ardal wedyn."

"We're failing in identifying individuals at the correct time. But maybe that's because we're not working close enough with other sectors. We have an opportunity here [...] to bring all agencies together, to work together closely and locally. I think you would have more wealth of knowledge about the area then." (Participant 2 WTG)

They also wanted to see lighter SP interventions in the form of self-referrals or drop-in sessions:

"Jest d'eud, "'da ni [gwasnaethau lles] yn y 'stafell yma ar yr adeg yma" fel bod bobl yn gwybod, bob dydd Gwener 'da ni'n mynd i fan 'na a ma' pawb [gwasanaethau lles] yna."

"Just say, "we [well-being services] are in this room at this time" so that people will know, every Friday we can go there, and everybody [well-being services] will be there" (Participant 3 WTG)

Participants also referred to examples of other communities that are was planting "hidden"

well-being services within wider activities such as mother and toddler groups:

"Plannu gweithwyr cymdeithasol aballu i fewn yn y grwpiau ond heb eu 'badges'. Wedyn fysa pawb yn dod i adnabod ei gilydd a neud ffrindiau a wedyn 'sa riwin yn clywad bo rhywun yn stryglo ac yn deud, "actually, dos i gael gair efo 'so-and-so' yn fan 'na achos 'family worker' 'di, neith hi helpu chdi".

"Plant social services and stuff within groups but without their badges. Then everyone would get to know each other and make friends and someone would hear that someone else was struggling and they would say "actually, go and have a word with so-and-so other there, because she's a family worker, and she can help you." (Participant 3 WTG)

The proposed need for such SP models largely stemmed from the sense of resilient "*front*" among the people of the Nantlle Valley, and the concern that people would not welcome being referred or directed towards a well-being service due to stigma surrounding such groups.

Today Group theme 3: The health and well-being Hub

The Today Group participants were keen to express their vision of the health and well-being Hub as a center point for the community. Participants also revealed that the Hub had potential to promote healthy behaviors and improve primary care provision in the valley. The accessibility of the Hub was also discussed.

Community center point

Participants constantly expressed their vision of a Hub that met the need for a community center-point, not only for health and well-being services and information but also for socializing:

"Sa'n braf meddwl bod o yn le os 'da chi'n pasio fedrwch chi biciad mewn, er bo' chi ddim angen dim byd yna. Lle agored lle ma pawb yn medru jyst bod"

"It would be nice to think that it will be a place, if you're passing, you can just pop in even though you don't want anything there. An open space where everyone can just be." (Participant 4 WTG)

Participants specifically felt that an initiative such as the Hub would be a fresh start, and a chance to bring the community together to tackle the previously discussed self-enforced social exclusion:

"Fysa darpariaeth newydd sbon yn torri lot o'r 'allegiances' bach yna [...] achos ma'n dir hollol newydd, tir neb dio de?"

"Maybe a new provision would break a lot of those small allegiances [...] because it will be something completely new, it will be no man's land won't it?" (Participant 3 WTG)

The results therefore indicate that the Hub is seen as an opportunity to increase social

cohesion among the community. Participants were eager for the name and design of the Hub

to reflect this:

"Os ydy o'n d'eud iechyd ar y ffrynt, 'di bobl ddim yn mynd i fynd yna os na bo' nhw eisiau doctor neu 'chemist'"

"If it says health on the front, people won't go there except for when they need a doctor or pharmacy." (Participant 3 WTG)

Health promotion

The Hub was also seen as a mean to promote healthy behaviors among the community, and two participants agreed that there was a particular need to prevent smoking among young people:

"Ma rhieni yn smocio wrth ddod a'u plant i'r ysgol ma' fatha bod o'n normaleiddio smocio ar y stryd a smocio pan ti'n ifanc."

"Parents smoke while they take their children to school, it seems like it's normalizing smoking on the streets and smoking when you're young." (Participant 1 WTG)

Health services

Although the participants' attitudes were generally positive and excited about the prospect of a new development, there were some requests and suggestions for Grŵp Cynefin. One of those was that the Hub had to augment the current primary care provision:

"It needs to be better than what's being offered already, you'll need to offer more services because otherwise it's just going to be pointless" (Participant 5 ETG)

The participants in particular requested that the Hub host a dentist, physiotherapy and modern "*American*" interventions such as group therapy.

The Hub's accessibility

In addition to this one major sub-theme that was discussed in regards to the Hub was the current lack of public transport in the Nantlle Valley, making it difficult for people to travel to Penygroes, the Nantlle Valley's center, from outside villages to avail of current services:

"The big issue is getting to and from places. That has a massive impact on people being able to take opportunities." (Participant 6 ETG)

Participants noted that finding a solution to this problem was crucial to the success of the Hub, to ensure that all residents will have easy access to its provision. One solution proposed in both the English and Welsh focus groups was to extend the green transport scheme that has already been instituted in the Nantlle Valley or purchase a minibus to transport people to the Hub:

"I know in Penygroes they've got this car now, I'm not sure if it's an electric car or something. Maybe you could get a minibus to go around the valley, pick people up and take them to different activities." (Participant 5 ETG)

In addition to transport it was also noted that a lack of parking space was currently a problem in Penygroes, and that would also have to be resolved if the Hub was built.

There were also concerns regarding the fact that the Hub will be built in Penygroes and that it could give the impression that the community services were for the people of Penygroes only:

"Ma bobl Dyffryn Nantlle di arfer dod i Benygroes i Tŷ Doctor a 'chemist' aballu dydi [...] lle dwi'n poeni ydi'r ochr mwy cymdeithasol ohono fo. 'Sa hwnna ella yn medru cael ei weld fel 'wbath i Benygroes."

"The people of the Nantlle Valley are used to travelling to Penygroes to visit the doctor or pharmacy [...] I'm just worried about the more social side to it. Maybe that could be seen as something for Penygroes." (Participant 3 WTG)

Concerns were also raised regarding the risk that the Hub could cause the community's provision to become even more "*Penygroes-centric*". As a result, participants were keen for the Hub to increase the use of existing community venues in the Valley:

"Mi fysa na lot o ddaioni yn medru cael ei wneud drwy gynnal pethau mewn canolfannau a neuaddau pentrefi eraill [...] Ma na beryg o neud y peth yn rhy 'tribal, stuck' yn Penygroes."

"A lot of good could be done by holding things in halls and centers in other villages [...] there is that risk of making it to tribal, stuck in Penygroes." (Participant 3 WTG)

Today Group theme 4: Coronavirus (COVID-19) pandemic

During the today group discussions, the COVID-19 pandemic was also a prominent theme. Participants discussed the pandemic's negative effect on residents' well-being and the signs of increasing unemployment. However, participants were also ready to discuss how the pandemic had led to a stronger sense of community, and the way forward for the Nantlle Valley.

The COVID-19 pandemic's side effects on personal well-being

Within the evidence, there were concerns about the negative effects of the pandemic on residents' well-being. Participants expressed a particular concern for the effects of national lockdowns on socialization of children and young people:

"I think you people have suffered the most because I think the young generation are quite bad at socializing anyway [...] I feel this is going to make it worse and they are going to struggle to go back and communicate with others." (Participant 5 ETG)

There was concern that such effects would also lead to an increase in young people suffering from social anxiety. The results also suggest that some might have not seek help for health issues due to the pandemic:

"I know that I haven't been to the doctor about a few things that I should have because you feel like they're so busy with COVID stuff you don't want to either risk it and catch the virus or take up their time." (Participant 6 ETG)

Such trends imply that the health services will be under increasing pressure in the upcoming months due to a backlog of appointments.

Unemployment:

Another prominent concern demonstrated within the findings was unemployment. A number of participants stated that they knew people that had lost employment as a result of the Northwood Factory closure, as well as a result of other businesses having to close:

"I know a few people who have lost their jobs. A lot have been furloughed. A lot of local restaurants that are shutting down as well." (Participant 5 ETG)

The results also highlighted a need to support young people in the face of increasing unemployment. As a result, participants suggested the introduction of opportunities to allow young people to increase their employability skills. Reference was made to a past project that existed in the Nantlle Valley that consisted of a bus taking young people around local businesses to get a taste on different work experiences and network with local employers. It was believed that the Hub also had a role to play in this regard:

"Oni'n gobeithio fysa'r ganolfan yn medru meithrin gweithwyr iechyd y dyfodol hefyd [...] ti angen gweithwyr gofal iechyd yn Gymraeg [...] a cynnig profiadau efo'r trydydd sector, profiadau gwaith i bobl gael diddordeb yn y maes gofal."

"I was hoping that the center would be able to nurture the future health workforce [...] you need Welsh speaking health workers [...] and offer experience with the third sector, work experiences to get young people interested in the care sector." (Participant 2 WTG)

The way forward

Although the negative effects of the pandemic were highlighted, the evidence also clearly indicates that participants were already thinking about the way forward out of the pandemic for the Nantlle Valley. Participants suggested ideas on how to maintain the support networks established during the pandemic:

"Os fysa'r mailing list yna yn 'syrfeifio' mi fysa hynna yn wbath. Os na fyswn i'n sbio ar Facebook fyswn i ddim callach be sy'n mynd ymlaen weithiau, a dw i yn sbio ar 'emails'."

"If that mailing list would survive, that would be something. If I didn't look at Facebook, I wouldn't be aware what's going on sometimes, but I do look at my emails." (Participant 3 WTG)

Such enthusiasm suggests that the pandemic had therefore led to a stronger sense of community and connectivity among Nantlle Valley residents.

Participants also agreed that there would be an increase in poverty and income deprivation and that a money advice service in the Nantlle Valley would be beneficial: "Weithia tydi bobl ddim yn gwybod am y taliadau ma nhw yn medru gael de os ydyn nhw wedi colli gwaith. Mae angen gwasanaeth fel'a, yn enwedig ar ôl pandemig."

"Sometimes people don't know about the benefits they're entitled to if they've lost their job. There is a need for a service like that, especially after a pandemic." (Participant 1 WTG)

Participants expressed a need to take control of the situation themselves and not depend on public funding or strategies:

"Does 'na neb yn mynd i helpu ni yn economaidd, 'sna neb am ddod i fewn i achub Dyffryn Nantlle. Unai ma bobl yn mynd i orfod symud allan i chwilio am waith neu 'da ni fel cymuned yn gwneud pethau yn hunain"

"Nobody will help us economically; nobody will come in to save the Nantlle Valley. People will either have to move out to look for work or we as a community will have to do things ourselves." (Participant 3 WTG)

When asked about what kind of steps could be taken, reference was made to social enterprises already existing in the Valley and the Dolan initiative, which is a community coventure between Ffestiniog, Nantlle and Ogwen, three of Gwynedd's post-quarrying communities). The initiative develops strategies to ensure that the local economy within these communities, serve and benefit the community.

4.3.3 Findings from the Legacy Groups

Observations of the Legacy Groups dynamics and interactions

During both the Welsh and English Legacy focus groups the atmosphere was comfortable, and participants contributed enthusiastically. Participants revealed that they worked within the education sector, health sector, third sector and voluntary sector, and some were selfemployed and retired. As a result, the results demonstrate varying perspectives of discussed issues. Participants contributed equally and were given regular opportunities to expand on their comments. Participants were also very keen to build on each other's views as well as express contrasting views. The dynamics were therefore similar to the Today Groups and similarly gave the researcher insight into how different issues were perceived collectively. However, from the Legacy Group perspective the comfortable atmosphere also meant the discussion was close to losing direction, at which points the researcher would politely interfere and repeat questions, as well as prompt participants to think about future generations.

Legacy Group theme 1: The Nantlle Valley community

During the Legacy Groups discussions, the community was a prominent theme. Discussions took place regarding the inclusivity of the community, the needs of different age groups, community venues and the current provision of services that contribute to the well-being of the community.

Inclusivity

One participant voiced their concerns about some groups at risk of isolation, namely individuals from the LGBTQ+ community and minority cultural groups:

"Encourage people from minority groups from the villages, it can kind of help them not feeling so isolated. For a gay man living in north wales it can feel quite isolating and so somebody from a minority cultural background can feel even more isolated." (Participant 15 English Legacy Group (ELG))

Despite these concerns, other participants were keen to emphasize that the Nantlle Valley community is strong and supportive of such groups. Reference was made to a racist incident in Penygroes in spring 2020 and how members of the community came together to support the black family. One participant noted that this sense of solidarity has its root in the quarrying community that existed in the valley until the mid-twentieth century:

"There is a huge sense of wanting to help people, there is a huge sense of belonging and I think that's something inherited in these quarry districts, it goes back a long way." (Participant 14 ELG)

Age groups

Participants voiced different needs for different age groups. It was suggested that the provision of activities and services for older people to socialize is plentiful, and that it might be beneficial for the community to focus on trying to establish such provision for young people:

"Ella bo' 'na lot mwy o bethau i bobl hŷn? Swni'n eilio'r syniad o gael mwy o bethau i bobl ifanc. Ma' 'na draddodiad o drefnu a dod at ein gilydd a chefnogaeth dda os oes 'na rhywbeth ymlaen ond ella bod eisiau magu cenhedlaeth arall o hwnna."

"There might be more things for older people? I would support the idea of acquiring more things for young people. There is that tradition of organizing and getting together if there is something on but maybe we need to rear a new generation of that." (Participant 9 Welsh Legacy Group (WLG)) Discussions regarding the needs of young people referred to low self-esteem and antisocial behaviour and the need to re-establish a youth club in the community:

"Da ni wedi gwneud ychydig o ymchwil efo'r bobl ifanc a ma beth ma nhw eisiau yn amrywiol iawn, o sesiynau ma' nhw yn licio yn Plas Silyn [y ganolfan hamdden leol] i rai ohonyn nhw jyst isho 'chillio' yn rwla [...] ma 'na dystiolaeth yn dangos bod perchnogi gwagle eu hunain [...] lle ma nhw wedi creu fatha cartref iddyn nhw eu hunain, bod hynna yn codi eu 'self-esteem' nhw.'

"We've done a little research with the young people and what they want is very varied, from session they like at Plas Silyn [the leisure centre in Penygroes] to some of them just wanting somewhere to chill [...] there is evidence that owning a place [...] a place that they've made their own, increases their self-esteem." (Participant 8 WLG)

When asked to expand on ways to tackle such concerns, the involvement of young people in decision-making was also suggested:

"Ella na rheiny ydi'r bobl ifanc gwaethaf sydd yn y pentref, ond dani isho bobl fela yn rhan o'r trafodaethau achos nhw sy'n mynd i ddenu lleill, nhw sy'n mynd i berchnogi rhywbeth."

"They might be the worst behaved young people in the village, but it's them that we need as part of these discussions because it's them that's going to bring the others in, it's them that's going to make it their own." (Participant 10 WLG)

In addition, it was also suggested that more socializing opportunities for adults is needed,

especially new parents:

"Ma lot o rhieni newydd ma nhw'n medru gweld o'n unig, yn enwedig yn y cyfnod yma, ddim yn cael cymysgu. Mae o'n gallu bod yn rôl unig tydi?"

"A lot of new parents can feel lonely, especially during this period, when they're prohibited from mixing with others. It can be a very lonely role can't it?" (Participant 12 WLG)

Community venues:

Throughout the discussions, reference was made to the importance and use of community venues. One participant highlighted the importance of schools for sustaining and maintaining communities:

"The schools are the heart of the community and if you lose that you lose something really important." (Participant 14 ELG)

Another point of discussion was the need of a venue for young people. The closure of the youth club in the Nantlle Valley was seen as a huge loss and an incident that had resulted in an increase in antisocial behaviour:

"Ma na lot o broblemau cymdeithasol yn digwydd yn y pentref oherwydd tydi'r bobl ifanc ma ddim efo dim byd i neud a wedyn be sy'n digwydd ydi ma'r broblem yn symud [...] does ganddo nhw ddim cartref."

"There is a lot of social problems in the village due to the fact that these young people have nothing to do and then the problem just moves around [...] they haven't got a place where they can hang out." (Participant 12 WLG)

Build on current provision

The provision of services that are already working and improving the well-being of the Valley was once again highlighted and that any new development or intervention should build on that provision, not duplicate it. Participants also expressed that there is a lack of awareness of the current provision among some groups and more should be done to advertise effectively. These services included a range of activities in Plas Silyn Leisure Centre, activities organised by the local outdoor officer as well as efforts to develop new well-being services within villages outside of Penygroes (e.g yoga classes in the Nantlle Valley):

"Ma' 'na bethau yn mynd ymlaen yn y Dyffryn tydi pobl ddim yn gwybod amdanyn nhw [...] fyswn i ddim yn gwybod am [ddigwyddiad] oni bai bod o ar Facebook. Ond tydi pawb ddim ar Facebook."

"There are things going on in the Valley and people aren't aware of them [...] I would not have known about [an event] if it wasn't on Facebook. But some people aren't on Facebook." (Participant 7 WLG)

It was also suggested that some members of the community are aware of the provision but do not avail of it as they do not understand its purpose. Participants therefore conveyed that more should therefore be done to share the rationale behind provisions:

"Dw i'n meddwl bod 'na lot o bobl yn y gymdeithas dydyn nhw ddim yn sylweddoli bo' nhw angen y pethau ma ... felly dw i'n meddwl pan da ni'n sôn am greu rhywbeth er mwyn lles bod pobl yn cael gwybodaeth gywir am pam fod o'n digwydd ... mae o yma achos mae o'n mynd i helpu efo hwn, hwn a hwn."

"I think there is a lot of people in the community they don't realise that they need these things ... so I think when we talk about creating something for the benefit of people's well-being people should get the right information about why it's happening ... it's here for you because it's going to help with this, this and this." (Participant 10 WLG)

Legacy Group theme 2: The health and well-being Hub

The discussion around the health and well-being Hub covered a wide range of topics. All the discussion points mainly relate to the need for a focal point for the community, a local

Welsh-medium pharmacy service, a project manager for the scheme and the delivery of a holistic health service.

Center-point for the community

Legacy group participants saw the Hub as an opportunity to meet the community's need for a focal point for socializing and the sharing of information:

"Bod o'n wasanaeth sy'n hwyluso'r gymuned a hwyluso'r rhwydwaith a'r ymwneud. Bod o fatha gwas i'r gymuned. Gwasanaethu a helpu."

"That it will be a service to facilitate the community and facilitate networking and engagement. So that it will be a servant for the community. Serving and helping." (Participant 9 WLG)

Pharmacy

There was also discussion about the fact that the community would like to see a pharmacy service at the Hub. Concerns were raised about a national pharmaceutical company replacing the existing provision of Penygroes Pharmacists, who are local, Welsh-speaking individuals with vast knowledge of the Nantlle Valley's families:

"Os gewch chi rywun fatha 'Boots' yn cymryd fo drosodd 'da chi'n colli'r elfen o gymdeithas yn fan 'na. Ma'n haws efo bobl 'da chi'n 'nabod dydi?"

"If someone like Boots takes over the pharmacy, you'll lose the community element. It's easier with people you already know, isn't it?" (Participant 7 WLG)

Project manager

More than one participant communicated their wish for a project manager on the Hub to coordinate all services. This was considered essential for the long-term success and sustainability of the initiative:

"Os ydan ni'n meddwl am rhywbeth sydd am fod yn hir dymor [...] mi fysa'n bwysig cael rhywun yna sy'n gwybod be' 'ma nhw'n wneud a chodi'r weledigaeth a chwilio am grantiau ar ôl grantiau i'w gynnal."

"If we are thinking about something that is going to be long term [...] it would be important to have someone there who knows what they're doing, and raise the vision and search for grants after grants to maintain it." (Participant 10 WLG)

Participants also suggested that a Project Manager as such would also have to be a local,

Welsh-speaking individual:

"Ma' angen rhywun yn gapten ar yr Hwb." (Cyfranogwr 13) *"A rhywun lleol de* [...] *rhywun sy'n adnabod yr ardal."* (Cyfranogwr 10)

"The Hub will need a captain." (Participant 13 WLG) "And that should be someone local [...] someone who already knows the area." (Participant 10 WLG)

Holistic approach

During discussions regarding the participants' vision for the Hub, it became clear that the community wishes its provision to be innovative. Providing a holistic health service, which looks at a person's physical and mental health as well as their personal situation, was integral to that vision:

"Ma lles yn medru bod yn broblemau ariannol dydi? Ma'n gallu bod yn iechyd meddwl, yn gorfforol, ma' yna gymaint o ganghennau. Dw i'n meddwl na'r her fydd i drio diwallu gymaint o'r anghenion yna a sy'n bosib."

"Well-being can be money problems cant it? It can be mental health, something physical, there is so much aspects to it. I think the challenge will be to meet as much of those needs as possible." (Participant 12 WLG)

Reference was made in particular to the importance of providing a holistic health service for

young people, in the hope of nurturing resilient individuals and a healthy community for

future generations:

"'Da ni angen meddwl am bobl ifanc achos yn fan 'na yn aml mae o'n cychwyn [...] wedyn mae o'n aros efo nhw i fewn i fywyd fel oedolion. Felly ma'n bwysig cael cyfanwaith o bobl dim lle mae 'na le i bobl i ddod o wneud bob math o bethau er lles eu hiechyd nhw."

"We need to think about young people because it begins there usually [...] then it stays with them as they progress into adulthood. So it's important to have a whole team of people where there is room for people to come and do all sorts of things for the sake of their health." (Participant 10 WLG)

The need for SP initiatives arose organically during discussions regarding a holistic health

service in both focus groups:

"Mewn byd delfrydol mi fysa gennych chi asesiad ar yr unigolyn ynghylch eu materion personol nhw [...] rhywun efo'r amser a'r arbenigedd i fedru cymryd 'look' arnyn nhw ac ella cynghori nhw a gyrru nhw at y bobl sy'n mynd i helpu nhw."

"In an ideal world you would have the individual assessed in terms of their personal issues [...] someone with the time and expertise to be able to take a look at them and maybe advise and sign-post them to the people who could help them." (Participant 12 WLG)

Following the above comment, the researcher introduced the participants to the idea of SP

Most participants were aware of the concept and began to discuss existing SP interventions

outside the Nantlle Valley. One participant during the English Legacy focus group referred to the Arfon SP scheme and explained that it is offered from several GP surgeries in the Arfon area, including Penygroes.² Reference was also made to how having a link worker in the Valley would be useful in meeting the need for a point of contact for welfare services:

"Dw i'n gweld y syniad o'r 'link worker' yn bwerus iawn achos, jyst o fy mhrofiad i, dw i 'di bod yn cael galwadau gan bobl fel [swydd y cyfranogwr] [...] a mae'r ffaith bo nhw yn troi ato fi ... yn amlwg ma' 'na wagle yna."

"I think the idea of a link worker is a very powerful one, because from my experience, I have been receiving calls from people as a [participant's occupation] [...] and the fact that they're turning to me ... there is an obvious gap there." (Participant 8 WLG)

Participants were also keen to see SP in the form of drop-in sessions where a range of public,

third sector and voluntary services would come together in one room to advertise their

provision. Such ideas were also seen as a way of raising awareness of the available well-

being provision in the community:

"Os fysa na ond un person yn dod drwy'r drws, fysa'r un yna yn sylweddoli wedyn: gosh ma na gymaint o help yna allan i fi. Mi fysa'r un person yna yn mynd adra wedyn a dweud wrth gymdogion neu ffrindiau a mi fysa fo'n ehangu yn bysa?"

"If only one person came through the door, that one person would then realize: gosh there is so much help out there for me. That one person would go home and tell their neighbors or friends and it would expand wouldn't it?" (Participant 13 WLG)

The idea of a SP intervention referring individuals to third sector and voluntary was also seen

by participants as a way of developing a sustainable health service:

"They [NHS Wales] realized a long time ago that revolving door patients is very expensive, and they would rather have third sector organizations to prevent that revolving." (Participant 14 ELG)

However, although most participants welcomed the idea of a holistic health provision and saw it as crucial to ensuring that the Hub will be an innovative development, a few participants voiced their skeptical opinion of such an approach. Concerns were mainly raised about realizing the collaboration between local authorities and the local Betsi Cadwaladr University Health Board to provide holistic health and care services:

"Mae cael iechyd a'r Cynghorau i gydweithio yn mynd i fod yn anodd iawn, iawn. Ma nhw yn bell iawn, iawn oddi wrth ei gilydd a ma' iechyd yn aml yn gwrthod cydweithio [...] dw i'n meddwl fod na fwy o obaith ar lefel eithaf arwynebol i bethau fela fod yn digwydd a brysied y

² Arfon is the parliamentary constituency representing North Gwynedd in which the Nantlle Valley is located.

dydd pan fydd hynny yn digwydd. Ond o ran rhannu 'budget' a pethau felly, dw i'n meddwl ein bod ni'n bell iawn, iawn ohoni hi."

"Getting health and the Councils to work together is going to be very, very difficult. They are very, very far apart and health often refuses to collaborate [...] I think there is hope of such collaboration on a fairly superficial level and I hope that will happen very soon. But in terms of budget sharing and things like that, I think we're very, very far from it." (Participant 13 WLG)

Legacy Group theme 3: Long-term challenges facing the Nantlle Valley

The emphasis on long-term thinking in the questions also provided an insight of the longterm challenges facing the Nantlle Valley. The challenges concerned five issues in particular, which were lack of funding, Brexit, the environment, confidence in the area, housing and employment.

Cuts in funding

When asked about steps that should be taken to secure the well-being of future generations, participants revealed that having sustainable public funding for all public provisions in the Nantlle Valley would be essential since much of the community's energy was wasted on constantly campaigning against such movements:

"Ma rhywun wastad yn teimlo, 'da ni'n pwyso ar y Cyngor Sir i jest gadael pethau fel ma' nhw. 'Sa hynny'n rhywbeth, i ni beidio gorfod roid ein holl egnïon ni i drio stopio cau a chwtogi trwy'r amser. Mi fysa cael y sicrwydd ariannol, i bethau 'da ni'n gychwyn a phethau 'da ni'n gefnogi, fysa hwnna, fel y 'bottom line' 'lly de."

"One always feels, we're always pressuring the county council to just leave things as they are. That would be something, that we didn't have to put all of our energy to preventing closures and cuts all the time. Having that financial security, for initiatives and things that we support, having that, would be the bottom line." (Participant 9 WLG)

Participants anticipated that this challenge would be exacerbated by a recession facing the country due to the economic impact of the Coronavirus (COVID-19) pandemic. One participant suggested that one-step in overcoming this would be for the Nantlle Valley to take account of the situation themselves and develop community initiatives to replace public funding cuts:

"Dw i'n rhagweld mi fydd na gwtogi mawr gan y cyngor sir presennol i wneud i fyny am yr holl wario sydd wedi bod dros y flwyddyn diwethaf 'ma [...] mi fydd rhaid ni ddatblygu pethau ein hunain."

"I anticipate there will be no big cuts from the current county council to make up for all the last year's spending [...] we will have to develop things ourselves." (Participant 13 WLG)

The results also indicate that the lack of sustainable and consistent funding prevented some participants from envisioning a long-term project that would survive to improve the wellbeing of future generations. This was particularly demonstrated when the researcher offered the idea of planting a community garden today for future generations:

"Dw i'n licio syniad prosiect gerddi, ond y broblem sy'n cyrraedd fel arfer ydi, pan ella fod y pres yn rhedeg allan [...] os 'di prosiectau fela ar y gweill, ma raid iddo fo fod yn gynaliadwy a bo ganddo chi'r pres ar bobl yna i fedru cynnal nhw neu buan iawn ma nhw'n disgyn."

"I like the idea of garden projects, but the problem that you face most times is money running out [...] if projects like that are underway, it needs to be sustainable and you have the money and the people to run them or they will soon fall." (Participant 10 WLG)

Two participants also emphasized the importance of evaluating any third or voluntary sector intervention that is contributing to a holistic health services to demonstrate their value and encourage long-term funding:

"We need to put methodology behind it properly; they need to be measuring the value of the services they provide, so that they have a baseline to provide Welsh Government in terms of future funding." (Participant 14 ELG)

Brexit

One participant voiced their worries regarding the effects of Brexit, in particular its negative effect on agricultural families:

"Mae lot o deuluoedd cefn gwlad yn mynd i fod efo newidiadau mawr, lot o bwysau ar ffermwyr i newid eu dulliau o ffarmio ac effaith wedyn ar deuluoedd".

"A lot of families in the countryside are facing big changes, there will be a lot of pressure on farmers to change their ways of farming and that will then have an effect on families." (Participant 13 WLG)

The environment

The participants also revealed that the environment was also a long-term issue that need addressing for the benefit of future generations. On the first encounter, the participants felt that sufficient steps were being taken in the Nantlle Valley to protect the environment:

"You need environmentally friendly opportunities, you really need a green environment and I think there are so many things happening at the moment." (Participant 14 ELG)

Participants also agreed that children and young people were actively aware of climate change:

"Yn bendant, ma'n pobl ifanc ni yn ymwybodol iawn o beth sy'n digwydd i'r byd [...] Cynnal hynna ydi'r peth de? Ac iddyn nhw gael gwybod bod y Dyffryn yn cefnogi hynny, yn wyrdd"

"Our young people are certainly aware of what is happening to this planet [...] the challenge is to maintain that, isn't it? And ensuring them that the Valley supports that, and is green." (Participant 12 WLG)

However, as the discussion progressed, there were some concerns regarding the long-term impact of local planning policies on the environment. Reference was made to the fact that planning permission had been granted to turn an old quarry into a dumping ground, and that such developments had to be prevented:

"I'd certainly like to see the environment protected in Dyffryn Nantlle [Valley], because I think that's something that is radically going down the pan here because planning legislation is so poor." (Participant 14 ELG)

Confidence in the area

Participants expressed that another challenge facing the future of the Nantlle Valley is a lack of confidence in the area:

"Ma bobl yn siarad yn ddigalon am y lle, lle 'di mynd i lawr."

"People talk depressingly about the place, saying it has deteriorated." (Participant 10 WLG) It was noted that this feeling also exists among young people and often means that they are desperate for the first opportunity to leave the area:

"Dw i'n meddwl bod isho rhywbeth i roi hyder yn ein hardal ni hefyd. Un o'r pethau mwyaf digalon ydi bod pobl yn gadael Ysgol Dyffryn Nantlle a mynd i ysgol arall, bo ni'n gorfod codi proffil y Dyffryn. Mae gynno ni gymaint i'w gynnig."

"I think it also needs something to give us confidence in our area. One of the most depressing things is that people leave Dyffryn Nantlle School and go to another school, that we have to raise the Valley's profile. We have so much to offer." (Participant 9 WLG)

Housing

Participants also stated that rising house prices is a major problem in the Nantlle Valley, and that it prevents young people from being able to afford to stay in their communities. Participants agreed during the English and Welsh group agreeing that increasing the provision of affordable housing is vital to sustaining a thriving community for future generations:

"Sefyllfa arall sy'n mynd i effeithio cenedlaethau'r dyfodol ydi prisiau tai de, cartrefi fforddiadwy i bobl ifanc allu prynu tai yn eu cymuned."

"Another situation that is going to affect future generations is increasing house prices, affordable homes for young people to buy houses in their community." (Participant 7 WLG)

Employment

Another long-term challenge facing the Nantlle Valley is unemployment and lack of job opportunities and its impact on health and well-being:

"I'd like to see employment opportunities because I believe that employment opportunities are linked with opportunities to thrive and live a healthy life." (Participant 14 ELG)

Reference was also made to the fact that Northwood Factory, the largest employer in the

Valley had closed during the COVID-19 pandemic in 2020, and the long-term effect it would have on individuals' income and well-being:

"Efo colli'r ffatri a pethau, ma hwnna yn mynd i gael effaith ar iechyd pobl mi fydd na dlodi ar ôl hynna,.. dyla' bo' 'na arian yn cael ei bwmpio i fan 'ma ar drin a chyfeirio pobl."

"With regards to losing the factory and stuff, that is going to effect people's health there will be poverty after that [...] they should be bumping money here to treat and refer people." (Participant 12 ELG)

Participants also noted that another long-term challenge facing the area is lack of job

opportunities resulting in young people migrating to more urban areas to seek better career prospects:

"Mae angen gwneud yn siŵr bo' 'na swyddi lleol fel bod y plant a bobl ifanc ddim yn gorfod gadael i Loegr am swyddi efo cyflog call. Ma hwnna yn her ynddo fo'i hun dydi?"

"We need to make sure local jobs are done so that the children and young people don't have to leave England for decent paid jobs. That's a challenge in itself isn't it?" (Participant 12 WLG).

Legacy Group theme 4: Sustainable steps

Thinking about the long-term challenges facing the Valley prompted participants to think about actions that could ensure sustainability. These actions were primarily concerned with overcoming budget cuts, increasing community projects, increasing pride in the area, maintaining and increasing the digital skills of residents, solving the lack of public transport and ensuring a long-term vision for any new venture.

Community projects

Participants expressed views that community projects are essential to sustaining communities for future generations:

"Any community project will be setting some sort of stable basis for future generations [...] anything that brings volunteers and community members together that gives a good legacy for future generation. Any community activity could do that." (Participant 14 ELG)

It was also felt that the stronger sense of community belonging over the past year needed to be maintained to create supportive and inviting communities for future generations:

"When you have a sense of belonging it makes it more attractive for future generations to stay in the community if they feel they're part of that community." (Participant 14 ELG)

The Nantlle Valley's profile

Although participants were aware of individuals' lack of confidence in the area, they were very enthusiastic about the future of the Nantlle Valley and felt that the area had much to offer. They therefore felt that grasping any opportunity to raise the Nantlle Valley's profile was vital to ensuring that people stay in the area, migrate to the area and that a community was maintained for future generations. The participants agreed that the Hub would be a key part of achieving this:

"'Da ni jyst ddim ar y map rywsut. Efalla bo' na gyfle drwy'r ganolfan newydd 'ma i ddod a sylw a ffocws a hyder bo' ni ddim mor ddrwg a 'da ni yn feddwl."

"We're just not on the map somehow. Perhaps through this new center, there is a chance to bring attention and focus and confidence that we are not as bad as we think." (Participant 9 WLG)

It was also suggested that any development and success in the Nantlle Valley should be brought to the media's attention:

"Os yda chi'n 'googlo' Dyffryn Nantlle fel arfer gwch chi straeon o'r 'Daily Post' yn sôn am y petha' negyddol, a dim y pethau arloesol [...] ma na 'push' mawr angen bod ar gwthio'r pethau positif sydd yn digwydd eisoes yn y pentrefi."

"If you google the Nantlle Valley, most of the time you'll see stories from the Daily Post regarding the negative things, and not the innovative things [...] there needs to be a big push towards raising awareness of the positive things that are already happening in the Valley." (Participant 12 WLG)

Participants believed that such actions could attract new families into the Nantlle Valley and build and sustain the community:

"Os 'di hwnna ar gael, mae o am denu bobl o'r tu allan i Ddyffryn Nantlle, sydd wedi hefyd yn mynd i godi proffil y Dyffryn."

"If that's available it's going to attract people from outside the Nantlle Valley, and then that will further raise the Valley's profile." (Participant 12 WLG)

Participants also had ideas about how to increase the confidence and pride of residents who already reside in the Valley. It was felt that increased outdoor activities during COVID-19 had intensified some resident's pride in the area's natural beauty, and that more should therefore be done to encourage outdoor activities. Reference was also made to the success of an effort some years ago to brand the Nantlle Valley and create merchandise and how that appealed to young people:

"Ma' hwnna yn rhywbeth poblogaidd iawn a dim jest i bobl ifanc a dw i'n meddwl bo' tapio mewn i'r syniad yno 'branding', ma' hwnna yn mynd i fod yn rhywbeth gweladwy sy'n mynd i aros yn y cof."

"That is a really popular thing and not just for young people, and I think that tap into that idea of branding, that's something visual that's going to stay in people's minds." (Participant 10 WLG)

Maintain and increase digital skills

Maintaining and increasing the digital skills of the area's residents was also offered as a means of ensuring that the community is resilient in the face of any future pandemic:

"Dw i'n meddwl bod lot o oedolion hefyd, achos o'r pandemig ma di gorfod gwella sgiliau technoleg gwybodaeth drwy wneud cyfarfodydd rhithiol [...] cynnal fo sydd isho 'de?."

"I think there are a lot of adults too, because of the pandemic, they've had to improve information technology skills by doing virtual meetings [...] we need to maintain that now don't we?" (Participant 12 WLG)

Reference was made to an existing digital project in the Nantlle Valley that's already working towards a digital literate community. However, some participants were cautious of such movements and were keen to emphasize that it is very important to maintain opportunities for face-to-face human contact for preventing loneliness and maintaining well-being:

"Pan oedd staff y llyfrgell yn Gaernarfon wrth y bwrdd oedda chi'n medru cael sgwrs ond rŵan ma'r holl broses o wneud o'n electronig. Ond o'dd rhai jyst yn mynd yna jyst i gael sgwrs efo rhywun." "When the Library staff in Caernarfon were by the reception you could have a chat and now everything is being done electronically. Some people only went there just to have a chat with someone." (Participant 9 WLG)

Transport:

Participants also implied that finding a solution for the shortage of public transport in the Valley was essential for sustainability of any new development:

"There is no point building all of this if nobody can get there." (Participant 15 ELG)

Participants also felt that the days of a traditional bus system were over. The idea of building on the existing green transport provision in the Nantlle Valley was therefore proposed during both focus groups. One participant noted that such a scheme would also contribute to increasing social cohesion:

"Mae genno ni gar electrig rwan does? Mwy o bethau fela 'lly [...] a mae o ar gael i'r gymuned sy'n dod a'r gymdeithas i gyd at ei gilydd."

"We have an electric car now don't we? More things like that [...] it's available to the community so it also brings the community together." (Participant 7 WLG)

Long-term vision

At the end of the discussions, participants gave the impression that they had realized that having a long-term vision was important; especially in terms of ensuring that the new Hub will be sustainable:

"Dw i'n meddwl un peth sydd wedi bod yn amlwg heno ydi bod o'n bwysig bod hwn yn rhywbeth hir dymor, bod o ddim yn cael ei weld fel rhywbeth sy'n mynd i gau."

"I think one thing that's become clear tonight is that it's important that this will be a longterm thing, and that it won't be seen as something that's going to shut down." (Participant 7 WLG)

There was also talk of the Future Generations Act and the belief that every future development should be measured against the Act:

"Well I happen to think that every piece of work that we undertake or do now should be measured against those outcomes of the Future Generation Act." (Participant 14 ELG)

Such quotes from the end of the legacy group discussions suggest that participants therefore realized the value of thinking about long-term sustainability at the outset of an initiative, as

well as the importance of considering the effect that present day actions will have on the well-being of future generations.

4.4 Discussion

This focus group study set out to determine the efficiency of current SP interventions taking place in the Nantlle Valley and to identify the specific local community needs requirements for the future and long-term sustainability. The focus groups also aimed to detect strategies that would aid in developing collaborative health and well-being needs and to examine any barriers and opportunities for co-designed and co-produced SP interventions in the valley. Focus group questions were also developed to determine among Nantlle Valley community members if the new health and well-being potential to improve health and well-being outcomes. Below the results of all focus groups are discussed in terms of the former objectives.

4.4.1 Current SP interventions in the Nantlle Valley

In terms of current SP interventions taking place in the Nantlle Valley reference was made by only one participant to a SP intervention for all Arfon residents. The participant explained that the Arfon SP consists of a link worker who is taking referrals from the GP surgery in Penygroes among other surgeries in the area. This was mentioned during the last focus group that was held, and none of the other participants in previous focus groups mentioned the intervention. However, during the rest of the focus groups reference was made to various community exercise and leisure groups that are taking place in various community venues, for different age groups. The results suggest that such groups and activities does contribute positively to individual's well-being. This is due to how participants during all focus groups seemed grateful and proud of such provision and expressed their regret that some participants were not aware of some or all of it. Previous focus group studies with communities also suggest that building on current provision is an appropriate starting point to improve community health and well-being (Hilger-Kolb *et al.*, 2019) suggesting the importance of investing in existing community resources and not reinventing provision.

The community's enthusiasm to invest in existing provision also coincides with the principles of asset-based community development (ABCD). ABCD has gained prominence within

public health in recent decades due to the shift towards addressing health inequalities, inequity and encouraging communities to maintain their health and well-being (Agdal, Midtgård and Meidell, 2019). ABCD was first established by Kertzmunn and Mcknight (1996) who concluded that local development is more likely to work if it focuses on the strengths of the society rather than its needs, by accentuating and mobilizing existing assets. Assets can include individuals, associations (e.g. community groups), institutions (e.g. government agencies, non-profit organizations), economic development potential and land and other physical assets (Pan et al., 2005:1186). Evidence suggests that using ABCD approach to develop interventions for improving health and well-being empowers individuals and can lead to engagement of community members, community cohesion, improved social relationships, the development of social networks development and sustainability. Such outcomes are considered to contribute to strengthening the social capital of a community, which is seen as essential for maintaining the health and wellbeing of individuals (Blickem et al., 2018). Social capital is defined as the connectedness of a community and the resulting sense of trust and mutuality (Putnam, 2000). The current study's focus group results certainly indicate the need for such positive benefits to within the Nantlle Valley community due to concerns communicated in relation to its inclusivity and signs of self-enforced social exclusion. In addition, and more relevant to the third chapter of this Thesis, co-design and coproduction are also seen as two approaches that can facilitate ABCD due to how they enable service users to perceive their own strengths (Lam et al., 2017). The foregoing benefits to the ABCD approach therefore suggest that the community's willingness to build upon the community's existing assets should be facilitated during the development of new SP interventions.

4.4.2 Opportunities for new social prescribing interventions

Opportunities for new SP interventions during both focus groups therefore surrounded building upon what is already available and making current provision more obvious, accessible, and approachable. During every focus group, participants implied that the Hub presented an opportunity to hold well-being events or fairs where community members could drop-in and see what is available in the community. Evidence of such events suggest their effectiveness in improving public health and health literacy (Ezeonwu and Berkowitz, 2014) generating self-efficacy and confidence among community members (Lindgren *et al.*, 2018) as well as providing opportunities to offer screening services that can identify chronic illnesses earlier (Murray *et al.*, 2014).

Participants also suggested a need for a link worker, to take calls and enquiries independently (instead of only through GPs and health professionals' referrals) and navigate residents towards available well-being and welfare provision towards the right service. This was a proposed solution to the lack of efficient advertising and hence awareness of existing groups and activities that could be contributing to the well-being community members. Participant felt that a link worker should not only accept referrals from health professionals but from a network of social prescribers consisting of social care, third sector and voluntary officers that are interacting with individuals upstream, in their homes and communities daily. Such suggestions should be appreciated given that previous studies of SP interventions that accept referrals from additional services to GPs suggest that it is effective in empowering individuals with complex needs to independently promote their health and well-being (Wood et al., 2021). This vision of a community link worker is supported by studies that prove the benefit of appointing a link worker that has vast knowledge about the area's provision to coordinate the SP. The evidence suggests that such an individual increases service users' trust in the SP intervention and consequently maintains their engagement, leading to increased well-being outcomes (Bertotti et al., 2018).

4.4.3. Possible barriers to the development of co-designed and co-produced Social Prescribing interventions

The evidence from the current study also suggested that any new intervention should overcome a set of barriers that are affecting the success of current provisions. Barriers indicated within the results include engaging volunteers to keep groups going in the long-term, which is a challenge to the sustainability of SP interventions that has been identified in previous evaluations (Foster *et al.*, 2020). Reference was also made to the importance of evaluating interventions effectively to gain service users and providers' buy-in and overcome the barrier of securing long-term funding. It is recognized that this foregoing statement regarding the importance of evaluation coincides with previous findings within the Systematic Review of this Masters Thesis, as well as earlier studies previously discussed in <u>Chapter 3</u> (Chatterjee *et al.*, 2018; Skivington *et al.*, 2018). Another barrier discussed during both focus groups was the lack of transport, confirming the negative effect of access to

services deprivation that is suggested in the Welsh Multiple Index of Deprivation results for the Nantlle Valley (Welsh Government, 2019c). However, it was also suggested that the community is already tackling this barrier as many participants referred to a green transport scheme that has already been initiated in the Nantlle Valley and should be expanded.

4.4.4 Community needs and strategies

Many of the community's future needs and strategies for developing health and well-being outcomes were also identified within the focus group findings. Within all focus groups it was implied that there is sufficient effort to protect the well-being of older generations and lack of effort to protect the well-being of working age individuals as well as young people. The lack of provision for working adults is worrying given the evidence suggesting that this age cohort is facing increasing pressure. Reference was made in Chapter 1 to how working age adults mental health and well-being is at risk due to the negative effects of increasing unemployment due to Coronavirus (COVID-19) (Achdut and Refaeli, 2020; Blustein and Guarino, 2020; Drake et al., 2021). Participants, who mainly consisted of working age adults, primarily manifested a need for opportunities to socialize. This is in line with evidence indicating that having opportunities to socialize, such as in choirs, increases happiness and leads to a discovery of positive self-identity and a sense of self-improvement among working age people (Shim and Sim, 2020). The focus groups also identified the need to increase the provision of support for new parents in the Nantlle Valley. This finding is key given the evidence that indicate that new parents have lower self-efficacy since the pandemic (Xue et al., 2021) and that support groups has the ability to engage new parents with information as well as improve their relationship with their child (Reichle, Backes and Dette-Hagenmeyer, 2012).

The needs of young people were discussed to a greater extend within both focus groups. The communicated concerns were about their social confidence and well-being following the COVID-19 pandemic, reflecting other studies showing that children and young people are now at increased risk of mental health issues (de Miranda *et al.*, 2020) and negative effects of increased screen time (Imran *et al.*, 2020) as a result of lockdowns. Reference was also made to the ways in which some children's less privileged backgrounds cause them to negatively label themselves. This reflects the findings from other studies which suggested the tendency for young people living in deprivation to adopt their parents' low self-esteem attitude (Lee

and Seon, 2019) and feel less capable of academic success due to low social capital (Doi *et al.*, 2019). The findings from the focus groups also suggest that the loss of youth club has led to an increase in anti-social behaviour on the streets of Penygroes, again reflecting studies that prove that leisure boredom increases risk taking and delinquent behaviour (Wegner, 2011).

As a result of their various concerns regarding young people's needs, participants therefore communicated a need for interventions to support and increase young people's confidence. Such ideas included the re-establishment of a youth club and purposeful, intergenerational activities to allow young people to gain skills, and have positive experiences with other adults. However, it was also emphasized during all focus groups that young people would need to be involved in the development of any intervention to be utilised by them. This was due to how participants had witnessed a sense of ownership and respect among young people towards interventions and initiatives that they had been a part of developing in the past. Such claims are supported by previous studies suggesting that co-producing services with young people leads to better acceptance and ownership (Scharoun *et al.*, 2019). Evidence demonstrates that such an approach can also lead to mutual respect and understanding with service providers, which increases the chances of developing positive well-being outcomes (Hackett, Mulvale and Miatello, 2018).

An additional issue that was suggested during all focus groups was the inclusivity of the community. During a Today Group focus group interview, this issue was implicated as participants referred to the self-enforced social exclusion that exist among less privileged individuals. Reference was also made to a language barrier in the Nantlle Valley and instances where activities and events have been administrated through the medium of Welsh only, excluding those who don't speak the language. The Legacy Groups participants also explicated other groups that are at risk of being marginalised in the community due to lack of recognition such as those from the LGBTQ+ community, and minority cultural groups. However, it must also be acknowledged that some participants were also eager to empathize that there is an inherent strong solidarity within the community, rooted in past quarry communities.

There was no scope within the focus groups to further explore the community's dynamics and the reason why participants felt so different about the inclusivity of the community. However, such statements continue to indicate that some groups are vulnerable to the risk of loneliness and social isolation in the Nantlle Valley. As a result, there is also a need for interventions to encourage the social inclusivity of such groups, as previous systematic reviews demonstrate the possible negative effect of social isolation and loneliness. The evidence particularly implies that such issues can increase morbidity and mortality due to risk of developing cardiovascular diseases and poor mental health (Leigh-Hunt *et al.*, 2017). More recent studies indicate that loneliness and social isolation can also lead to increase in risk taking behaviours (Algren *et al.*, 2020).

The Legacy Groups also gave a sense of wider, more complicated issues that are threatening the well-being of future generations. These included many common, long-standing long-term challenges that are facing rural, Welsh communities such as unemployment, lack of affordable housing (Williams and Doyle, 2016) and reference was also made to poor planning legislation resulting in environmental damage. The community's long-term perspective is supported by previous studies that indicate the negative effect of unemployment (Roelfs et al., 2011; Kim and Von Dem Knesebeck, 2015) lack of affordable housing (Anderson et al., 2003) and an unprotected environment (Moore et al., 2018) on individuals well-being. The reliability of the long-term challenges identified during the Legacy Focus Groups is also strengthened by the fact that they largely replicate the challenges identified as part of the Gwynedd and Anglesey Well-being Assessment. This assessment that was conducted by Gwynedd and Môn Public Services Board (2018) as a requirement of the Well-being for Future Generation Act (Wales) 2015. Corresponding themes for ensuring the well-being of future generations with this current study included the need to maintain a healthy community spirit, increase the stock of affordable homes for local people, opportunities for every child to succeed and a protected natural environment.

What is encouraging, however, is the desire expressed among the community to take responsibility for their own sustainable development and not rely on the local authority or public services and funding. Such strategies included raising the profile of the Nantlle Valley in order to change the attitudes of existing residents as well as attract new families to the area. The participants within this study also felt they had responsibility to come together and initiate community ventures and social enterprises to overcome any cuts in public service provision. There was a suggestion that such initiatives are already taking place in the Nantlle Valley. Within the results participants named social enterprises such as <u>Yr Orsaf</u> (translates to 'The Station' in English) and the <u>Dolan</u> (roughly translates to "Link" in English) which is the name of the local joint community venture. Previous studies indicate that social

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enterprises can lead to many positive outcomes that could help overcome challenges facing the Nantlle Valley community such as increase social connectedness, enhanced confidence and self-esteem among individuals, increased employment and employability, improved spaces and environments as well as access to services. Such outcomes suggest that social enterprises can therefore contribute to tackling social determinants of health upstream (Roy *et al.*, 2014) and contribute to better and sustainable health and well-being outcomes for residents (Macaulay *et al.*, 2018)

4.4.5 The potential of the new health and well-being Hub

The Today Group and Legacy Group participants mainly discussed the Hub's potential to realize and facilitate the establishment of a holistic primary care provision through colocation of health services and well-being interventions. In addition to SP interventions, participants were eager for the Hub to offer additional health services (e.g. dental service) and new services (e.g. group therapy). The evidence suggests their hope that easy access to traditional and non-medical health and well-being services and knowledge will change health behaviours and nurture resilient and health conscious individuals today and in future generations. This vision is supported by studies that indicate how the co-locating of non-medical interventions, such as welfare advice (Woodhead *et al.*, 2017), family-focus preventive interventions (Leslie *et al.*, 2016) and SP link workers (Hazeldine *et al.*, 2021), within primary care settings facilitates and increases patients utilisation in addition to generating positive well-being outcomes.

During both focus groups, it was also suggested that the Hub has the potential to offer a neutral, simple centre point for not only health and well-being services and information, but also for every strata of the community to socialize and "just be". Participants during all focus groups voiced their hope that the Hub would consequently not only improve the well-being of the community but also generate social cohesion. The Hub could therefore be seen as a much needed "third place" in the community, which are spaces where individuals are at liberty from their multiple roles within society and are free to simply be their true self (Thompson and Kent, 2014) (p. 265). Evidence suggest that protecting and developing such places has a part in encouraging health and well-being as they offer opportunities for spontaneous social interaction, especially in deprived communities where third places (e.g. shops, youth clubs) tend to close down (Hickman, 2013). However, the participants also

promptly warned that the Hub should not take away from other community venues or third places, and cause everything to become too centralized in Penygroes. This caution is supported by previous evidence suggesting that centralizing services excessively can make hinder their accessibility to those living on the outskirts of the area, posing a risk to their health and well-being (Hilger-Kolb *et al.*, 2019).

4.5 Study limitations

This study's findings are limited as the sample was small, purposeful and not fully representative of the Nantlle Valley community. This is due to the fact that most participants identified as female, as well as the lack of participants between 18-30 years old and over 81 years of age. Furthermore, in terms of ethnicity, all of the participants identified as being White British or Welsh. Although this is representive of the area's demographic (see Table 3, Chapter 1), representation from minority ethnic groups would have certainly enriched the results and strengthened the representativeness of the data. In addition, there was not representation from all areas of the Nantlle Valley in the focus groups, namely Llanwnda LSOA. This was despite an effort to target groups of different ages as well as the use of Facebook groups for different villages. Although there was a variation in participants' employment status, there were no unemployed participants and therefore no firsthand insight into the impact of this persisting issue in the Nantlle Valley. Consequently, the results cannot be generalized for the rest of the community. However, there was extensive discussion regarding issues affecting young people and some references to provision for older people during the focus groups, as well as groups that participants considered to be excluded from the community. As a result, although these groups were underrepresented, the data continues to provide insights into issues affecting them and strategies that could lead to positive wellbeing outcomes among them.

It must also be considered that the COVID-19 pandemic has posed limitations on this study. An additional factor affecting the representativeness of the data is the fact that Nantlle Valley residents that did not have home access to the internet, or limited internet access at home were excluded since the study had to be conducted remotely. In addition, the severity of the pandemic during February 2021 meant that the external circumstances were uncertain and as a result arguably impacted on participants' ability to look ahead and think about future strategies. This was particularly the case with the Legacy Group as the participant tended to repeat issues currently affecting the Valley as a result of the pandemic, meaning that the researcher had to constantly remind participants to consider strategies for future generations. The Legacy Group participants' unwillingness to concentrate on future generations was also disappointing considering their older demographic and the concept of Generativity. Generativity is a concept first proposed in Erikson (1995:240) Eight Stages of Man theory. Each stage of psychosocial development within Erikson's theory is characterized by a developmental conflict which must be appropriately resolved so that the individual can achieve optimal development at the next stage. "Generativity vs Stagnation" is the seventh successive stage, and therefore occurs midlife (Erikson, 1995:240). Generativity involves the need among middle aged individuals to establish and lead the next generation through productive and creative actions. Failure to develop a sense of Generativity can lead to a sense of Stagnation. The sense of stagnation is characterized by feelings of self-centeredness, selfconcern and unproductiveness. Although the researcher was still able to steer the focus group discussions and gather insight into long-term issues affecting the valley, it is possible that representatives of the 18-30 age groups would have been more passionate about the future of the valley and provided a better insight into the challenges facing future generations. It is therefore recommended that a second community engagement should be conducted once the "new normal" has been established, with a focus on recruiting younger participants.

In terms of data collection methods, although the researcher chose focus groups as the most suitable method for producing naturalistic data on the community's collective attitudes and perspectives, it is recognized that any group precisely gathered or facilitated is not a completely naturalistic setting and participants were aware throughout the discussion that their contribution was being treated as data (Green and Thorogood, 2009). Although the researcher utilized moderating methods that encouraged natural conversation and a relaxed atmosphere that appreciated each participant's contribution, it is recognized that there is still a risk that participants might have modified their answers to be sociably accepted responses, affecting the reliability of the results (Krueger and Casey, 2015).

4.6 Conclusion

The primary data collection of this Thesis initiated a conversation amongst the residents of the Nantlle Valley around SP interventions and the potential of a new health and well-being Hub to deliver positive health and well-being outcomes in the community. All focus groups indicated that SP interventions would be welcomed within the community. The results also suggests that there is a need for SP intervention to refer service users to existing community groups and activities and to tackle issues such as the lack of inclusivity in the community and the different well-being needs of different age groups. Within all the focus groups it was also agreed that the Hub has the potential not only to improve the health and well-being outcomes of the community through an innovative, holistic provision, but also to improve community well-being by providing much needed opportunities to encourage social interaction between different strata of the society. The results therefore suggest that opportunities to socialize are considered equally important to the well-being of Nantlle Valley residents as any medical or non-medical intervention. In line with the Hub's vision to regenerate the area and contribute to realizing the goals set-out within The Well-being of Future Generations Act (Wales) 2015 this study also suggests long-term challenges that should be tackled and sustainable actions that could be realized through SP interventions and the Hub initiative as a whole.

4.7 Chapter summary

This Chapter began by outlining participants demographics. The Chapter then described a thematic analysis of the Today Group and the Legacy Group results separately. The results of the two groups were then merged in the discussion section and the findings were supported by previous studies. Following the discussion, the limitations of the focus group method focus groups were highlighted in addition to how the COVID-19 pandemic affected the reliability of the data. The Chapter concluded with a summary of the main focus group findings.

Chapter 5: Discussion

5.1 Introduction

This chapter merges the findings of the SR with the findings focus group results in relation to the objectives set out at the beginning of this research. Findings are also discussed in light of previous studies as well as WG policy and legislation. Throughout the Chapter recommendations are also presented in accordance with the objective set out in Chapter 1 to develop guidance for Grŵp Cynefin and partners. This guidance seeks to lead quality improvements to service delivery in driving forward health and well-being outcomes generating community and social cohesion.

5.2 Social Prescribing interventions – the need, opportunities, and barriers

The aim of the research was to gather information about co-production and to engage with the residents of the Nantlle Valley to gather perceptions regarding the need for co-produced SP interventions to meet the well-being needs and requirements of the community. The first phase consisted of a SR to examine the evidence in applying a co-designed, co-produced approach to the development of SP to improve well-being outcomes in community settings. This was in line with the requirement within the WG's long-term plan for health and social care (Welsh Government, 2019a) and the Social Services and Well-being (Wales) Act 2014 to co-design and co-produce health and social care provision with service users. A codesigned, co-produced approach also accords with the requirement to involve service users in sustainable development decisions within the Well-being of Future Generation Act (Wales) 2015. Although the SR yielded only a small number of low-quality studies, the evidence suggests that applying a co-designed, co-produced approach to the development of SP interventions to improve well-being outcomes within community settings is a sensible step. The evidence demonstrated that engaging service users in the development of SP intervention through co-design or co-production empowered them. This was due to how service providers treated users as knowledgeable assets and replaced the traditional, passive user-provider relationships with reciprocal relationships. Such relationships also increased the users' selfconfidence and reduced the negative effects of social isolation. The SR results also implies that co-design is vital in securing all stakeholders buy-in from the development stage, leading to a sustainable SP intervention that can be effective in meeting well-being needs from the outset.

As a result of the above benefits, focus groups were conducted with the aim of identifying the need for such interventions among members of the Nantlle Valley community. The initial objective was to explore current SP interventions taking place in the Nantlle Valley and their effectiveness in developing positive well-being outcomes. One participant referred to a current SP intervention being provided in the Nantlle Valley. Further investigation into this intervention revealed that it is provided by Mantell Gwynedd, a non-profit organization that supports voluntary and community groups in Gwynedd county (Mantell Gwynedd, 2020). This SP intervention is specifically for Arfon residents. A community link worker receives referrals from GPs across Arfon but also from social workers, third sector organizations, Adra housing association and an occupational therapist. Although only one participant was aware of this current intervention, its provision is in accordance with a proportion of participants' longing for a SP intervention that would accept referrals from a network community-based and third sector health and well-being workers. In terms of health and well-being outcomes the most recent report for 2019-2020 shows that of the 282 people who were referred experienced improved mental health, reduced loneliness and improved physical health and 33% reported no improvement. From a financial point of view, a Social Return on Investment (SROI) evaluation showed that for every $\pounds 1$ invested in the intervention $\pounds 6.60$ will be generated. This was despite COVID-19 limiting the reach of the SP intervention during the 2019-2020 period (Lloyd, Lewis and James, 2020).

Despite this current provision, in accordance with this study's objective to identify the Nantlle Valley's needs and requirements for the future, unmet community well-being needs were also indicated within the focus group results. Participants proposed a need to avoid duplication and raise awareness of current SP provision that could tackle such issues, such as the Mantell Gwynedd SP intervention. However, the focus group interviews also disclosed the need for additional and specific SP interventions to protect the well-being of young people due to worries regarding their lack of self-confidence and self-esteem. The focus groups result also implies a lack of socializing opportunities to allow people of working age to build a peer network of support. There were also signs of self-enforced social exclusion as well as suggestions that cultural minority groups, non-Welsh speakers and LGBTQ+ individuals felt excluded from the community. This lack of integration was also suggested in the legacy group's enthusiasm to work towards establishing a thriving and strong community to protect the well-being of future generations.

All of the foregoing needs implies that, for the Valley residents, belonging to the community and having external support apart to family is vital to sustainably maintaining health and well-being. This realization is arguably a product of how the COVID-19 pandemic has exacerbated the necessity of having a community that has strong social networks and reciprocal relationships in a time of crisis (Mazzocchi, 2021). The pandemic has also illustrated how such relationships can benefit individuals well-being by creating a sense of social connectedness, belonging and reward from helping their fellow-man (Bowe *et al.*, 2021). Such aspirations also accord with the long-term goal of establishing A Wales of Cohesive Communities, where individuals are connected through strong networks of support, set out in the Well-Being of Future Generation Act (Wales) 2015.

The above needs suggest an overarching issue of a weakened core economy in the valley. Core economy refers to human assets, primarily the home, family and communities responsible for activities such as parenting, caring for the elderly, supporting the vulnerable and hosting social events. All these activities are often taken for granted within society but provide the basis for all economic activity (Goodwin et al., 2019). In addition, a thriving core economy means strong social networks that support individuals in their communities and provide essential resources for sustainably maintaining well-being upstream (Coote, 2012). A strong core economy was evidenced during the focus groups as people referred to the tendency that existed in the Nantlle Valley since the quarrying period, to join in solidarity in times of need to support one another. However, within the evidence collected during the focus groups, there was much more apprehension that the Nantlle Valley's core economy is suffering. Indications within the results included a lack of support for nurturing young people who are prosperous and confident, lack of consideration of the welfare of working age adults and the fact that there is a strata excluded from the society. Another suggestion was the reported tendency among a strata of Nantlle Valley residents to display a "resilient front" and refuse to acknowledge their need for help from others.

An additional objective set out at the beginning of this Thesis was to identify collaborative strategies for tackling issues endangering the well-being of current and future generations, such as a weakened core economy. The SR results suggest that co-produced SP is a potential strategy for empowering and enabling socially isolated service users to create social networks resulting in increased self confidence and self-esteem. The evidence of broken-down core economy strengthens the case for applying a co-productive approach to the further development of any intervention or initiative in the valley in the future. This is due to the fact

that co-production is an approach that relies and detracts from the human resources that create the core economy and encourages individuals to come together for mutual benefit (Coote, 2012). It therefore builds local networks and strengthens the core economy by not only enabling community members to better protect each other's well-being, but also tackling the effects of social determinants of health upstream consequently reducing pressure on public services (Boyle and Harris, 2009). Full co-production of health and well-being services also encourages professionals to become involved in the process. As suggested by the SR results this can transform the relationship between service users and providers as it encourages professionals to treat service users as knowledgeable assets rather than passive service users. It therefore means that professionals have to do *with* service users rather than *for* them (Batalden *et al.*, 2016). During the focus groups, it was suggested that such an approach would be necessary to ensure buy-in from service users, especially young people, and overcome the tendency among "brazen-faced" community members to be skeptical of any attempt to support them as service users.

As a result of the above needs, this research therefore suggests that any opportunities identified during this research to develop SP interventions should be co-designed with community members as prospective service users, leading to its full co-production. This is not only to enhance the efficiency and sustainability of the SP intervention from the outset, but to also generate social cohesion. One suggested opportunity that could meet multiple well-being needs identified within the focus group interviews is SP interventions in the form of intergenerational activities. Participants explained that activities between children, young people and the elderly had already worked successfully in the Nantlle Valley. However, it was also suggested within the results that more intergenerational activities with an educational or skill-sharing element could be introduced, with the involvement of working age individuals as well. Evidence of such activities include "legacy cafes" for sharing sustainable skills among generations (Boyd, 2020), youth mentoring programs (Keller, Perry and Spencer, 2020) and digital skills sharing activities (Gomes et al., 2019). The evidence from the foregoing studies suggest that such intergenerational interventions create emotional and social value for all ages. In addition, there is evidence that intergenerational activities could realize the participants of this study's vision of a more inclusive society, increased sense of belonging among the community and reduce antisocial behavior among young people (MacCallum et al., 2010). Co-production of such an activity would also require assembling different age groups, giving them an additional opportunity to develop a sense of

solidarity. There is evidence that opportunities to unite the views of different age groups are also key in developing sustainable, age-friendly communities (Buffel *et al.*, 2014).

Furthermore, another objective instigated at the beginning of this Thesis was to identify barriers that could obstruct the development of sustainable co-produced SP interventions. The SR highlighted that one potential barrier to the co-design and co-production of SP intervention was the unsuccessful boundary spanning or health professionals and third sector organizations failing to unify norms and values and develop mutuality (Baker and Irving, 2017). Similarly, concerns were expressed during the focus groups that the potential of the SP service and the new Hub as a whole to provide a holistic approach to health could be inhibited by the health professionals and social care worker's unwillingness to cooperate. The SR results showed that failure to form equal relationships within the co-design and coproduction of SP interventions can lead to a continued sense of professional preference towards health professionals. This prevented SP interventions from being fully embedded in primary care service (Whitelaw *et al.*, 2016), and thus hindered a true holistic approach to delivering positive well-being outcomes.

However, the SR also suggested ways that Grŵp Cynefin could facilitate collaboration and establish this mutuality among co-producers. The SR indicate that effective leadership or boundary spanning could facilitate cohesion among co-producers, mainly to champion the equal relationship between co-producers and to appreciate and coordinate various organizational structures, norms and values. Focus group participants arguably sensed the need for such leadership as they implied the need to appoint a local, Welsh-speaking boundary spanner to manage the intervention and unify the traditional health and non-medical well-being interventions and ensure the long-term sustainability of such collaborations. Several studies have also referred to methods that facilitate the effective leadership of a codesign and co-production process. Evidence suggests the introduction of opportunities for learning processes where professional and experiential knowledge is shared through constant interaction between personnel involved in co-production (Sicilia et al., 2019). The benefit of such a process was highlighted in the SR through Chesterman and Bray (2018) study that demonstrated SP providers benefiting from a cycle of reflection on service users' feedback and perspectives through Action Research framework. Studies have also pointed to the importance of ensuring that those responsible for leading co-production own good moderating skills to ensure clear focus and organization (Rycroft-Malone et al., 2016; Gheduzzi et al., 2021). The results of the SR as well as previous studies (Poocharoen and

Ting, 2015; Li, 2020) also indicates the importance of consistent communication between coproducers during design and implementation to ensure information symmetry and trust.

Another potential barrier to the success of sustainable co-designed and co-produced SP interventions found in the SR and during focus groups with Nantlle Valley residents was a lack of adequate funding, specifically for maintaining the groups and services that patients were receiving referrals to them through a SP intervention. The SR insinuated that this lack of stability in funding reduced health professionals' trust in the long-term sustainability of the intervention and lessened their willingness to refer patients (Baker and Irving, 2016; Whitelaw *et al.*, 2016; Southby and Gamsu, 2018). During the focus groups, this was also identified as a potential barrier to SP interventions in the Nantlle Valley. Participants repeatedly referred to instances where groups that successfully contributed to the well-being of the area's residents had disappeared after losing funding. In addition, Mantell Gwynedd's most recent Arfon SP intervention report confirms one of the main barriers to the true impact of the intervention on users' well-being outcomes is the short-term funding of groups. The report states that this is mainly due to the inconvenience of constantly having to establish new trust partnerships between service users and providers (Lloyd, Lewis and James, 2020).

This lack of sustainable funding touches on another theme that emerged in the SR and the focus group interviews results, which is the importance of evaluating interventions. The focus group participants and the SR findings demonstrate that the evaluation of co-produced SP interventions is essential to proving the well-being and cost benefits consequently securing long-term funding and to ensure health professionals and service users buy-in the benefits of the intervention. However the SR also insinuates that finding a suitable evaluation framework for all stakeholders in the development and implementation of SP interventions is a challenge (Baker and Irving, 2016; Southby and Gamsu, 2018). In addition to this, the SR results also suggest service delivery can be improved if the evaluation framework is chosen or co-produced with all stakeholders and implemented from the inception phase onwards towards implementation. This is to ensure that the framework is embedded in service delivery and has all stakeholder buy-in.

One evaluation framework that has been used to successfully evaluate SP interventions is Social Return on Investment (SROI) (Jones et al., 2020; Foster et al., 2020; Lloyd, Lewis and James, 2020). SROI is an evaluation framework that goes beyond measuring financial value, by also seeking to improve well-being by comparing social, environmental, and economic costs and benefits. SROI can be conducted retrospectively or at the outset of developing an intervention to forecast its social, economic, and environmental value. It is also therefore a means of ensuring that the intervention complies with the principles of Social Value Wales framework and the Public Service (Social Value) Act 2012 outlined in Chapter 1 of this Thesis. A forecast SROI could consequently provide a framework for mapping inputs to the SP intervention in terms of financial resources and stakeholders knowledge and determining realistic outcomes that should be sought. Such evaluation has the potential to ultimately deliver results that can be used not only to invite investment but to also create an evaluating framework that will be valued by all stakeholders (Nicholls et al., 2012). Evidence also suggests that placing the user at the heart of the service during service blueprinting (i.e mapping a service) can also encourage co-production. This is due to how it enables service users and providers to see that co-production represents a real transformation in the way services are delivered and consequently invites contribution in an effort to improve service delivery (Sicilia et al., 2019). This Thesis therefore suggests that the implementation of an evaluation framework, such as an SROI, from the inception phase of any SP intervention could not only promote its financial sustainability but also strengthen the collaboration and sense of cohesion among it's co-producers.

5.3 The potential of the health and well-being Hub – **links with policy and legislation** In addition to examining the Nantlle Valley's community attitudes and perceptions of SP interventions, this study also set out to identify among the community the health and wellbeing Hub's potential to deliver positive health and well-being outcomes. This following section will demonstrate that the combined results of the Today and Legacy focus group interviews illustrates how the Hub could be catalyst for initiating steps that could address many of the long-term challenges that is affecting the valley today and posing a risk to the well-being of future generations.

Participants felt that the Hub should be a catalyst for establishing a holistic health service. During the first chapter of this Thesis reference was made to the government's long-term vision of establishing a holistic health service, which includes an integrated health and social care service, providing person-centered care focused on well-being and preventing illness (Welsh Government, 2019a). It became apparent during the focus group interviews that the community also realized that, for the benefit of today's residents and future generations, there is a need for to promote better collaboration and communication between third sector, health and social care staff. Participants expressed their hope that the co-location of health, social care and third sector organizations will facilitate the integration of health and well-being service and in the long-term will normalize such collaboration. The focus groups result also indicates the community's wish for the Hub to host additional primary care services in the valley such as mental health and dental services. Such a vision is arguably a product of the effects of the pandemic, which has exacerbated the need for a strong community-based, primary care foundation for population health (Islam, 2021). The pandemic has also demonstrated the true value of community-based workers and organizations in being able to identify and support people upstream in their communities (Westfall et al., 2021), possibly making people more accepting of a holistic approach to health. As a result, the results imply that the Hub has the potential to transform primary care service provision in the valley and enable residents to sustainably care for their health and well-being at a community level. This is encouraging considering that it coincides with The Well-being of Future Generation Act (Wales) 2014 long-term goal of establishing a society of health literate individuals and where physical and mental well-being is optimized.

The focus groups result also suggest that the Hub as a whole, in addition to co-produced SP interventions, should also act as a catalyst for establishing more social cohesion in the Nantlle Valley, as well as sustaining a thriving community for future generations. Again, harnessing such vision is essential given that one of the long-term goals of the Well-being of Future Generation Act (Wales) 2015 is to establish A Wales of Cohesive Communities. In particular the Hub was seen as having the potential in the community's view to meet the need for a "third place" in the form of a vibrant and new center point for health and well-being service, consequently providing spontaneous opportunities for social interaction. The establishment of compact neighborhood where community, health and social care services are delivered locally and within close proximity is also encouraged by Public Health Wales (The Health and Sustainability Hub, 2018). This is due to previous studies that have proven that compact neighborhoods can promote better social well-being since it enables closer relationships, frequent opportunities for socializing resulting in larger social networks of support (Mouratidis, 2018). Close proximity to resources is also said to lead to increased mobility in older adults as they are encouraged to walk to and between services (Levasseur *et al.*, 2015).

However, previous studies also warn that although compact neighborhoods may provide opportunities for social cohesion and better social and physical well-being, the realization of such benefits is dependent on the local context being socially and environmentally favorable (Shirazi, 2020). In terms of the Nantlle Valley the most prominent barrier to such positive outcomes identified during this study's focus groups would be the lack of public transport in the Nantlle Valley which would prevent individuals living outside Penygroes, without car ownership, from having easy access to the Hub in Penygroes. Such results confirm the negative effects of the significant access to services deprivation that was suggested in the latest WIMD results for the Nantlle Valley and discussed in the introductory chapter of this Thesis (Welsh Government, 2019c). As a result, it was also suggested that for the Hub to reach it's true potential in bringing together different strata of the community and encouraging social cohesion, the current green transport initiative that has recently been established in the valley should be expanded. The focus group results give the impression that community members would favor such sustainable and environmentally friendly transport modes over traditional public transport. This result is supported by studies indicating that electric car sharing has the potential to be successfully implemented in rural areas (Wappelhorst et al., 2014) and that eco-friendly bike and car sharing can improve the convenience of accessing services and commuting (Nakamura, Uchida and Managi, 2019).

Another challenge repeatedly referred to during the Today Group and the Legacy Groups was unemployment and lack of good job opportunities in the Nantlle Valley. This confirmed that the increasing unemployment, suggested within the statistics outlined in the introductory Chapter of this Thesis, is a prominent risk factor to the health and well-being of the residents. Participants communicated their concerns that some residents are consequently vulnerable to the effects of poverty. Unemployment and lack of decent job opportunities was also seen as a risk to the sustainability of a thriving, cohesive community due to an increasing tendency for young people to migrate to more urban areas for better job opportunities. During the focus groups participants mentioned that one way of improving the employment opportunities in the area, as well as coping with cuts in public services, was to expand existing social enterprises in the Nantlle Valley. Consequently, it could also be argued that another potential for the Hub is to foster such opportunities e.g. by offering training and workspaces for enterprises within the Hub's community center. Grŵp Cynefin already offers similar provision through two other community Hubs in North Wales - Congl Meinciau on the Llŷn Peninsula and Y Shed near Prestatyn. Reference has already been made in Chapter 4 to the fact that social enterprises can foster social cohesion and positive well-being outcomes (Roy et al., 2014) (Macaulay et al., 2018), but it must also be considered that such ideas fit with

the Well-Being of Future Generation Act (Wales) 2015 long-term goal of establishing A prosperous Wales. In her latest report the Future Generations Commissioner for Wales (2020) explains that this goal is partly concerning establishing an economy that allows individuals to benefit financially through upstanding employment opportunities. As a result, another suggestion from this Thesis is to integrate Grŵp Cynefin's expertise in the social enterprise field into the Hub's provision. The results of this Thesis implies that such an offer could benefit the Nantlle Valley's economy as well as the community's sense of solidarity and well-being.

The long-term goal of establishing A Prosperous Wales set out in the Well-being of Future Generations (Wales) Act also refers to the journey towards developing a skilled and welleducated population (Future Generations Commissioner for Wales, 2020). In addition, during the focus groups participants indicated that they were keen for the Hub to provide an educational element for young people to increase their employability skills and self-esteem. In addition to intergenerational skill sharing activities, participants proposed that the Hub could provide work experience schemes for young people through outreach with local schools, colleges and universities. Such implementations in the Nantlle Valley Hub should be considered given that Grŵp Cynefin is already offering a similar provision in North West Wales at the *HWB* in Denbigh, a center for educational provision, employment and wellbeing opportunities. This vision is also supported by an early study of a scheme aimed at promoting rural sustainability in Spain by offering rural internships to graduates. Early evidence suggest that the scheme will contribute to the social and economic regeneration of areas in decline as well as foster positive attitudes among young people towards working and pursuing careers in a rural area. Consequently, the scheme is also seen as a potential step for decelerating the tendency for young people to leave shrinking rural populations for better job opportunities (García-Casarejos and Sáez-Pérez, 2020). This evidence therefore implies that providing an educational element the Nantlle Valley health and well-being Hub could potentially increase young people's self-confidence as well as enlighten their future prospects in their local area. Consequently, an educational offer would also be contributing towards realizing the legacy of a thriving, cohesive community for future generations of the valley.

5.4 The legacy approach

Within this Masters Thesis a novel approach to focus group methodology was presented. The approach was in accordance with the Thesis objective to determine if a sustainability approach to conversations with community could identify long-term well-being needs and strategies. In the second Chapter of this Thesis, it was explained that the rationale for encouraging long-term thinking among lay members of community was based on The Wellbeing of Future Generation Act (Wales) 2015. The Act encourages the consideration of future generations in decisions and the involvement of lay community members in any sustainable development effort. The decision to establish two interviews schedules in the form of the Today Group and the Legacy Group was based on the future design citizen assembly movement in Japan (Tatsuyoshi and Osamu, 2018; Krznaric, 2020). The interview schedule for the legacy group was particularly influenced by the principles of the future-ahead-andback (FAB) mechanism (Shahrier, Koji and Saijo, 2017) and facilitated with the Good Ancestor Conversation principles (Krznaric, 2020) (presented in Chapter 2). The focus group results suggest that the Today and Legacy Group approach is effective in identifying tackle long-term challenges that threaten the well-being of future generations. Although limitations were identified in applying the Legacy Focus Group approach, namely the tendency for participants to circle back to issues affecting the Nantlle Valley today, this study has continued to successfully identify local starting points with the community for improving the well-being of future generations.

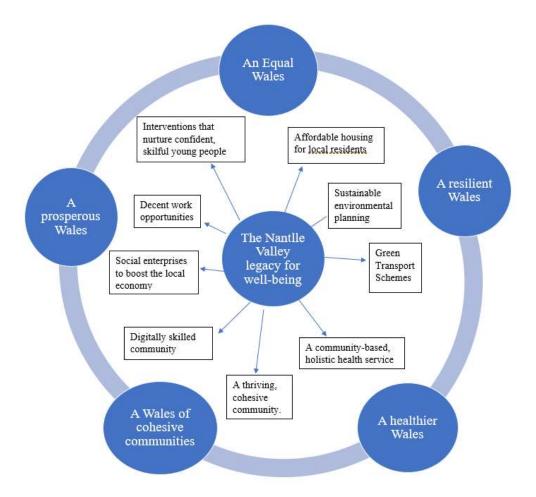


Figure 10. The Nantlle Valley Legacy for well-being

Figure 10 demonstrates the Nantlle Valley legacy for well-being. Within the inner circle, sustainable steps for securing the well-being of future generations identified during the focus group interview is placed. The outer circle displays some of the long-term well-being goals outlined in the Well-being of Future Generations Act (Wales) 2015 that the sustainable ideas could contribute towards realizing. Each sustainable step has been placed within proximity to its most relevant long-term well-being goal. Figure 10 therefore suggests that, in addition to successfully encouraging long-term thinking, this research also contributes to a body of evidence that demonstrates the benefits of engaging with lay members of communities to localize sustainable development goals such as those set out in The Well-being of Future Generation Act (Wales) 2015 and by the United Nations Agenda for Sustainable Development (United Nations, 2015). The results of this research are in line with studies that suggest such a process can empower communities to take ownership of sustainable development goals in a way that best suits their grassroots situation and maximizes their well-being (Szetey *et al.*, 2021).

It is important to note that some of these steps towards securing well-being of future generations are somewhat out of the reach of the local community and require changes in Welsh Government and Gwynedd County Council policies. Namely, securing affordable housing for local residents and ensuring that planning policies are environmentally friendly at all times. However, during the focus groups the community realized that there are collaborative steps they can take today as a community, with the Hub providing a catalyst for realizing this legacy. As discussed in Chapter 4 and Chapter 5.2, these included steps such as initiating social enterprises to promote the local economy and provide decent work opportunities, initiatives to nurture confident, skillful young people and expanding green transport schemes to alleviate access deprivation. The Hub as a whole was also seen as a development that will establish a holistic health service and continue to develop and innovate over centuries.

Clearly, such projects require hard work and participants warned that it would take years for such initiatives to be fully embed and normalized in the community, and a have a true effect on individuals well-being. However, the feeling of wanting to start projects today for the benefit of future generations also proves that the Legacy Group approach can activate cathedral thinking. Cathedral thinking is the concept of starting projects today that will continue to build and develop beyond our lifetime and reach their true impact in future generations (Antonson, 2014). Such enthusiasm suggests that this research has also succeeded in stimulating the sense of "futurability" among the community, which is the sense of reward and happiness that Future Design methods aim to trigger as individuals to act for the benefit of future generations (Saijo, 2020) (p.2).

5.5 Conclusion

In conclusion, the results of this Thesis has highlighted that although there are SP interventions currently on offer in the Nantlle Valley, they do not surmount all well-being needs. The evidence presented within this Thesis suggests the need for additional SP interventions specifically for young people, working age individuals and to strengthen the valley's core economy. A key recommendation however is for the development of any additional SP interventions in the Nantlle Valley to be conducted in collaboration with service users through co-production. This is not only due to evidence suggesting it leads to efficient and sustainable SP interventions but also strengthen community networks of support, consequently encouraging social cohesion. In addition, the study has also identified facilitators that could alleviate some of the barriers that can hinder co-production of SP

interventions. In terms of the health and well-being Hub, this Thesis suggests that it should be seen as an initiative that will lead to sustainable, healthy community not only through holistic health service, but by also bringing about social and economic improvement in the Nantlle Valley. In addition, this Thesis also implies the benefits of pursing lay community members perspective of a sustainable community for the well-being of future generations, and how that can lead to the identification of strategies that can be instigated today for their benefit.

5.6 Chapter summary

In this Chapter the results of the SR were merged with the focus group findings. The discussion demonstrates how the data meets the objectives set out at the beginning of this Thesis as well as their appropriateness in terms of WG legislation and policies. The community's vision of SP intervention and the Hub was discussed, and relevant recommendations implies that these initiatives have the potential not only generate health and well-being outcomes but also social cohesion. The community's vision of a legacy that could secure the well-being of future generations was presented and appropriateness of the legacy group methodology was also discussed.

Chapter 6: Conclusion

6.1 Introduction

In Chapter 6, the initial aim and objectives and how they were met within this Thesis is reviewed. The methodology is also reviewed and a summary of the strengths and limitations of the SR and focus group method are presented. In addition, a summary is also given of how the results of the research compare with theory. The chapter concludes with recommendations for future research and possible policy implications

6.2 Review of study objectives

The overall aim of this study was to engage with the residents of the Nantlle Valley, a rural community in North West Wales, to gather perceptions regarding the need for co-produced SP interventions to meet the well-being needs and requirements of the Nantlle Valley community. The objectives in meeting the aim was:

- To determine current SP interventions taking place within the Nantlle Valley and if these are addressing community needs improving health and well-being outcomes.
- To identify through conversations the specific local community needs requirements for the future and long-term sustainability.
- To detect if there are strategies among the community which would aid in developing collaborative health and well-being outcomes.
- To examine the barriers and opportunities for co-produced SP interventions development in the Nantlle Valley.
- To understand if the development of a new health/well-being and community hub has the potential to improve health and well-being outcomes among the community.
- To determine if a sustainability approach to conversations with community could identify long-term well-being needs and strategies.
- To develop guidance for Grŵp Cynefin and partners leading to quality improvements in service delivery in driving forward health and well-being outcomes generating community and social cohesion.

The above objectives were initially produced in partnership with the partner company, Grŵp Cynefin housing association, and have been met throughout this Thesis as demonstrated in Chapter 5. However, it must be acknowledged that it also became apparent during the research that there were some limitations to the objectives. Due to time constraints associated with the funding for this research, the focus group interviews had to be conducted in February

2021. This was before Grŵp Cynefin released their visual master plans of the Hub to the community in March 2021. Although community attitudes towards the Hub and SP interventions are certainly positive, it was also difficult for some participants to fully visualize the potential of the initiative, as they had no concrete concept of the development and content of the master plans. This meant that time during the focus groups had to go into explaining the concept of the Hub, in addition to SP interventions. A lack of awareness of the Hub's proposed provision may also have contributed in part to low turn-out in the focus groups. Despite this, it must also be acknowledged that giving prospective service users the opportunity to discuss their views and hopes before the plans were released was possibly less tokenistic and encouraged participants to give their authentic opinions in relation to the *Llesiant Lleu* project.

Another limitation to the aims and objectives was that they may be unsuitable for the unpredictability of the community's current health and well-being situation. This study occurred during a time when the health and well-being needs of communities are vulnerable and constantly changing due to the growing effects of the COVID-19 pandemic. It can therefore be argued that the aims of the research were too broad and possibly too simple for the severity of the external circumstances. It was difficult, for example, for the area's residents to propose strategies for meeting the future needs of the community, at a time when there was no real indication of when social distancing measures would be lifted, or the true social and economic effects of the pandemic on the area. Although succeeding to recruit participants and conduct focus groups virtually during those challenging circumstances was an achievement, it would certainly be beneficial to revisit the aims and objectives of this Thesis when the "new normal" is established, and the long-term effects of the COVID-19 pandemic are more apparent.

6.3 Review of the methodology

The first phase of this study consisted of a systematic review to examine the evidence in developing SP interventions that apply a co-designed, co-productive approach to improve well-being outcomes in a community setting. The SR contributed towards meeting the objectives of identifying strategies for developing health and well-being outcomes in Nantlle Valley as best as possible opportunities and barriers for the development of co-designed, co-produced SP interventions. A SR was chosen as a method as it is considered the highest

standard of evidence within evidence-based practice. This is due to the use of systematic methods to yield the most relevant studies to specific questions, leading to results of low bias (Mulrow, 1994; Petticrew and Roberts, 2006; Munn, Peters, *et al.*, 2018). The robustness of the SR presented in this Thesis was also strengthened, as the <u>protocol</u> for the SR and the <u>paper</u> as a whole were peer-reviewed (Thomas, Lynch and Spencer, 2020, 2021). Although this was the most suitable and high-quality literature review for this study, its methods were not without their challenges. The review revealed that there were only a few qualitative, low quality studies relevant to this SR question. In addition, although the thematic analysis was proven to be a suitable method for synthesizing data from all studies, the findings cannot be completely generalized to any community setting due to the diversity in the content of SP interventions and participants demographics.

Despite the SR limitations, the evidence did suggest that co-designed and co-produced SP interventions does lead to positive well-being outcomes. Building upon those results, the second phase of the research consisted of focus groups to gain knowledge of the Nantlle Valley residents' perceptions and need for co-produced SP interventions. As a result of social distancing rules in February 2021 it was decided that the most suitable method of sampling was purposeful, convenient sampling over emails and social media advertisement. Recruiting participants online proved to be extremely challenging and failed to recruit a representative sample. If COVID-19 restrictions had been lifted and if this research was not limited to one year for completion, it would have been beneficial to further attempt to recruit a representative representation of Valley residents by visiting community groups on a face-to-face basis. It is possible that this could have given the researcher an opportunity to build rapport with potential recruits and could have encouraged more interest in participating. In addition to this, it would have also been practical to have had more time to gain the appropriate certification that would have allowed the researcher to include individuals under the age of 18 in the study.

The focus groups method was shaped by an overarching objective of determining if and how long-term thinking approach to deliberations with communities produces data that identifies opportunities for sustainable interventions that can benefit the well-being of future generations. Drawing upon the principles of Future Design research methods and citizen assemblies in developing sustainable strategies, the second phase of this study consisted of deliberations with the community of the Nantlle Valley in the form of a focus groups. Deriving from the benefits of Future Design approaches in encouraging participants to think

long-term, a novel approach was applied to the focus groups that included conducting two focus groups. The "Today Group" deliberated on the well-being of community today, and the "Legacy Group" deliberated on the well-being of future generations influenced by the future-ahead-and-back mechanism (Shahrier, Koji and Saijo, 2017). The results of this research also suggest that such deliberating method was appropriate but requires strengthening through future research. This is mainly due to the tendency among participants to return to short-term thinking, circling back to issues that affected the valley today when COVID-19 restrictions were still in place. It is therefore suggested to any future application of this method include an exercise or workshop at the beginning of the focus groups that sets the legacy frame of mind. Another option would be to draw upon recent Future Design studies and hold workshops, face to face, and divide participants into two groups with one group representing future generations throughout the discussion. Evidence suggests that the presence of such imaginary future generation leads participants to make most sustainable choices that benefit future generations (Kamijo *et al.*, 2017; Uwasu *et al.*, 2020).

6.4 Comparison of results with theory

Throughout this Thesis attention has been given to how the results correspond with results of a contemporary evidence base. Although the studies included in the systematic review is limited and of poor quality, this corresponds with the results of a number of studies claiming limited evidence base of SP which mainly consist of small-scale evaluations (Bickerdike *et al.*, 2017) that are often poorly designed and reported (Pescheny, Pappas and Randhawa, 2018). However, the SR results provided in Chapter 3 continue to provide findings that are consistent with several previous studies of a co-production approach, specifically in terms of results regarding the barriers and facilitators of co-production. Chapter 3 therefore supports the number of studies that suggests SR is a useful tool for producing outcomes that can inform the development of non-medical and health promoting interventions (Jackson and Waters, 2005; Ogilvie *et al.*, 2005).

In addition, although some limitations to focus group methodology emerged during the research, naturalistic and useful results were still produced that meets the aims and objectives of this Thesis. Although current and effective SP interventions in the Nantlle Valley were identified, participants expressed the need for steps to raise awareness and coordinate such provision. Participants suggested the need for events such as well-being fairs and drop-in sessions that could facilitate this and would be a modest way of encouraging residents' utilisation of such services. The results also indicate a need to raise awareness of the Mantell

Gwynedd SP intervention, which fits with the need expressed during the focus groups interviews for a SP intervention that accepts referrals from third sector and social services workers in addition to health professionals.

However, the focus groups result also implies a need for additional co-production and codesign SP interventions in the Nantlle Valley to tackle withstanding economic and social challenges affecting the well-being of the community. Such challenges identified within the focus group interviews confirm many of the social determinants of health suggested in the statistic profile of the Nantlle Valley, presented within the first Chapter of this Thesis mainly access to services deprivation, economic deprivation and increasing unemployment. In addition, the focus group results explicated the dynamics of the community and how it is also a determinant of resident's well-being. The evidence particularly demonstrated needs such as self-enforced social exclusion among less privileged individuals, the exclusion of cultural minority groups and LGBTQ+ individuals and lack of support provision for young people and working age population. However, numerous opportunities were identified among participants for SP that can tackle such issues in the valley. Such recommendations were supported throughout the discussion sections of this Thesis by numerous studies suggesting that SP interventions can contribute to the alleviation of such social determinants of health, strengthen community networks of support and reduce social isolation (Chatterjee et al., 2018; Foster et al., 2020; Pescheny, Randhawa and Pappas, 2020; Costa et al., 2021).

In addition, although there is scope to strengthen the Legacy Focus Group approach, the focus group results still does offer opportunities for interventions that can commence today to alleviate long-term issues that could determine the well-being of future generations. As a result, this study also contributes towards an evidence base that highlights the importance and benefit of considering future generations in research within community settings. It also indicates that the application of The Good Ancestor Principles (Krznaric, 2020) facilitates future design methods and drives concepts such as Cathedral Thinking (Antonson, 2014) and leads to the production of results that can shape sustainable, healthy communities.

However, it must be considered that the results of this Thesis present only a snapshot of the community's perceptions and attitudes towards SP interventions. Although the research provides a baseline for the co-production of SP interventions, it may also have been useful to extend the research for a longer period to apply an implementation research approach. Implementation science contains a number of frameworks and models (Tabak *et al.*, 2012).

Evidence indicates that such frameworks can be used for the effective dissemination of an evidence-based intervention, to adapt the intervention to local context, and to better understand the community context of the intervention and evaluate the intervention (Westgard and Fleming, 2020). Such a study would therefore also involve health professionals and SP interventions providers in addition to end-users. Evidence of co-produced approach within research implementation is limited, but a recent study suggests that it can be an effective approach. The implementation research took place over a 5 year period and in 3 phases. The first phase, similar to the current study, involved a stakeholder engagement to ensure buy-in. The second phase involved the design and implementation of interventions and the final phase involved an evaluation of the process. The results of the evaluation show that it led to a sense of ownership as well as increased acceptance of the intervention (Mbachu, Agu and Onwujekwe, 2021). Certainly, if time and funding allowed, previous evidence suggests that such a study could have resulted in more robust evidence that would have led to the effective implementation as well as evaluation of a co-produced SP intervention in the Nantlle Valley.

6.5 Recommendations for future research and possible policy implications

This study recommends that SP interventions within community settings should be developed in collaboration through full co-production. However, this Thesis has also indicated that the co-production of SP interventions should be placed within an implementation research framework. The SR indicated a lack of high-quality studies that include all stakeholders to further confirm what makes such an approach effective within the development and implementation of SP interventions, as well as limiting its success. The evidence also demonstrates a lack of effective evaluation of co-produced SP interventions. The results of the SR and the focus groups suggest that this can affect long-term sustainability of SP interventions as it impedes long-term funding as well a lack of trust and buy-in in the efficiency of the intervention. Consequently, to improve the quality standards for research and reporting, future co-production of SP interventions should be done within an implementation research framework with evaluation built in from the inception phase onwards to the implementation. As the field of SP is an emerging area, there are many examples of frameworks that can be used to facilitate such steps. However, this research has touched upon the benefits of a forecasting SROI framework and how it would be suitable for the development of SP intervention within community settings. This is due to how it

facilitates the engagement of all relevant stakeholders who map the inputs and the ideal outputs that should be evaluated following delivery of the intervention (Nicholls *et al.*, 2012). This study therefore demonstrates a great need for such high-quality longitudinal implementation studies that will demonstrate the effectiveness and impact of co-produced SP interventions in meeting health needs and improved health outcomes.

This Thesis has also highlighted the potential that implementations of community health and well-being hubs have not only to facilitate integrated health and social care system, but also in contributing to the government's vision of healthy places for the well-being of present and future generations (The Health and Sustainability Hub, 2018). The focus group results highlight that the community is eager for the Nantlle Valley Hub to not only have a health element but also initiate opportunities to increase social cohesion as well as regenerate the area for the benefit of future generations through educational and social enterprise elements. Grŵp Cynefin's plans for a health and well-being Hub is therefore at the forefront of how the WG wants to ensure attractive local areas as part of their COVID-19 recovery plan (Welsh Government, 2020), as well as ensuring that public health is sustained by a foundation of a holistic primary care service (Welsh Government, 2019a). The development of the health and well-being Hub in the Nantlle Valley should certainly be treated as an innovative model for other rural and urban areas in Wales. As a result, another recommendation for future research would be to extend the application of implementation science approach embedded with coproduction principles to the Hub development as well. Such an approach could evaluate its successes and limitations and set a strong blueprint for the development and implementation of further health and well-being hubs across Wales.

In addition, this thesis also recommends the application of a short and long-term thinking deliberation approach to focus groups that explore the instigation and implementation of community-based interventions alongside prospective service users. The current study suggests that such approaches are effective in addressing the present needs of service users as well as local, long-term challenges that might be a risk to the well-being of future generations. Application of this approach also takes account of asset-based sustainable strategies to surmount such challenges. Further research is recommended to build on the strengths and weaknesses of the Legacy Group approach proposed in this research, to increase the robustness of this novel method that can be used to develop sustainable and long-term strategies alongside community members. There is certainly room for this methodology from a Welsh perspective considering The Well-being of Future Generation Act (Wales)

2015 which places a duty on public bodies to consider the well-being of future generations in all developments and policies. There is also scope for such methodology from an international perspective due to the United Nations 2030 Agenda for Sustainable Development (United Nations, 2015).

This thesis also suggests that the Legacy Focus Group approach should be strengthened and extended to engage communities in wider policy issues. The focus groups results revealed that the well-being of the Nantlle Valley future generations could also be jeopardized by issues such as lack of affordable housing and poor planning legislation resulting in environmental damage. As previously mentioned in Chapter 5.4, such issues are currently beyond the control of local communities and require changes in WG and Gwynedd Council policies. However, the Legacy Focus Group approach could potentially be reinforced to engage Nantlle Valley and other area's lay community members in the development of wider policy issues, such as local planning policies and planning application decisions. Such focus groups could offer means of ensuring that decisions and developments consider the greatest benefit to the health and social, cultural and environmental well-being of future generations. Indeed, future design citizen assemblies deliberations are being used in Japan to ensure that policy issues are developed with a long-term perspective (Krznaric, 2020). Citizen assemblies deliberations have also been deemed effective to engaging a representative sample of populations in developing policy recommendations for tackling the wicked and long-term problem of climate change (Devaney et al., 2020; Muradova, Walker and Colli, 2020). The Legacy Focus Groups approach is based on the principles of such approaches, and arguably offer a more practical and less time-consuming method to engage local communities in decisions that shape sustainable communities and health equity for future generations.

6.6 Chapter summary

Chapter 6 set out to recap the initial aims and objectives of this research. It has also highlighted some of the limitations of these aims and objectives and the fact that there is scope for further research. In addition, some of the methodology's main strengths and limitations were outlined and how future research can strengthen as well as build on the findings of this research. This Chapter has also demonstrated how the results of this research fit with the theory behind the research. However, it was also indicated that this thesis only presents a snapshot and there is certain room for further research that draws upon implementation science principles. The chapter concluded by setting out the main suggestions of this research in terms of further research and policy implementation. The principal

recommendation is that a co-produced approach could be applied to SP interventions, within an implementation science framework with evaluation built in from the outset.

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Appendix

Appendix A: Screenshots of COVID-19 Community Response Map (2020)

Figure A1. Sense of community belonging (per 100 person)

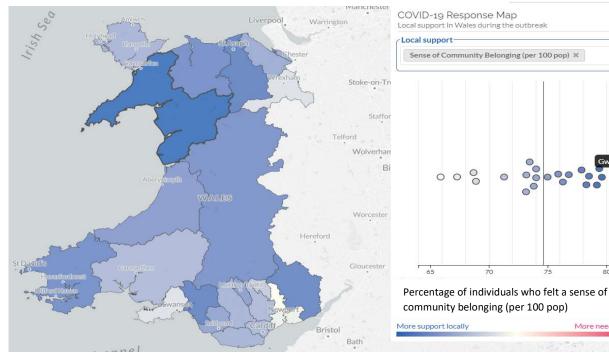
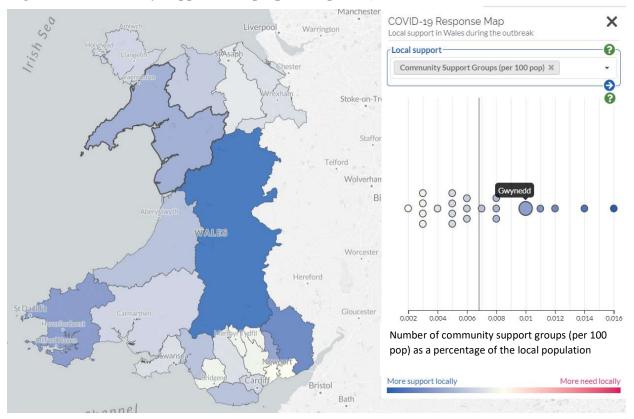


Figure A2. Community Support Groups (per 100 person)



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More need locally

Appendix B: Today focus group interview schedule

(The below interview schedule structure has been adapted from: Krueger, Richard A. and Casey, Marry A. (2015) "Developing a Questioning Route" in *Focus Groups: A Guide for Applied Research*. 5th Edition. Los Angeles, London, New Delhi: SAGE Publications.)

Introductions:	What is your name and in which village within the Nantlle Valley do you
	currently live in?
Opening	1. What does well-being mean for you?
questions:	2. What is your understanding of social prescribing?
	3. What do you know about the well-being Hub under development in the Nantlle Valley?
Key questions:	4. Are you aware of any current Social Prescribing or well-being services available in the Nantlle Valley?
	5. Do you think that these services have been welcomed among the community?
	6. Are you aware of any opportunities in the Nantlle Valley to develop new Social Prescribing well-being services/groups/interventions e.g. developing allotments / men sheds on unused green spaces?
	7. A key aim of the new health and wellbeing hub is that GP's will be able to refer patients to SP interventions within the community.
	Would you take part in SP interventions if offered?
	8. What do you think would be a challenge for you to participate in an SP intervention in the community?
	9. What do you think will be the long-term impact of the COVID 19 pandemic on the community and delivery of health and well-being interventions?
	10. What do you think Grŵp Cynefin could put in place/include now when developing the new health and well-being hub to improve the service?
Ending question:	11. Thinking about the needs of the Nantlle Valley community now what suggestions would you think should consider in the development of the new health and well-being hub?

Table B1.	Today group	interview	schedule i	n English
I abic DI.	i ouay sroup		schedule 1	n English

Table B2.	. Today Grou	p interview	schedule in Welsh	

Cyflwyniadau:	Beth yw eich enw ac ym mha bentref ydych hi'n byw?	
Cwestiynau cychwynnol:	 Beth mae lles yn ei olygu i chi? Beth ydy'ch dealltwriaeth chi o Bresgripsiwn Cymdeithasol? Beth ydych chi'n ei wybod am y cynlluniau i adeiladu Hwb Iechyd a Lles yn Nyffryn Nantlle? 	
Cwestiynau allweddol:	4. Ydych chi'n ymwybodol o wasanaeth PC neu wasanaethau lles sydd ar gael yn y Dyffryn yn barod?	
	5. Ydych chi'n meddwl bod y gymuned wedi croesawu'r gwasanaethau hyn?	
	 6. Ydych chi'n gwybod am unrhyw gyfleoedd yn Nyffryn Nantlle i ddatblygu gwasanaethau/grwpiau PC newydd? e.e datblygu rhandiroedd / siediau dynion ar fannau gwyrdd sydd ddim yn cael eu defnyddio? 	
	 Un o brif amcanion yr Hwb Iechyd a Lles yw galluogi doctoriaid teulu i gyfeirio pobl at wasanaethau neu grwpiau lles yn y gymuned drwy BC. 	
	A fyddech chi'n cymryd rhan mewn ymyraethau (sef atebion i broblemau iechyd a lles) PC pe bydden nhw'n cael eu cynnig?	
	8. Beth fyddai yn eich rhwystro rhag cymryd rhan yn y gwasanaethau PC yn y gymuned?	
	9. Beth ydych chi'n meddwl fydd effaith hir dymor pandemig COVID- 19 ar y gymuned ac ar y ffordd mae gwasanaethau iechyd a lles yn cael eu darparu?	
	10. Beth ydych chi'n meddwl y gallai Grŵp Cynefin ei roi mewn lle/cynnwys yn yr Hwb Iechyd a Lles rŵan er mwyn gwella gwasanaeth iechyd a lles?	
Cwestiwn clo:	11. Gan feddwl am Ddyffryn Nantlle heddiw, pa awgrymiadau ydych chi'n meddwl dylai gael eu hystyried wrth gynllunio a datblygu'r Hwb Iechyd a Lles?	

Appendix C: Legacy focus group interview schedules

As noted in Chapter 3, the legacy group interview schedules have been developed around the *Good Ancestor Conversation* principals developed by Rowan Krzanic (2020).

Good Ancestor Principle	Explanation
Deep-time humility	Recognizing that we're an eyeblink in the cosmic story.
Intergenerational justice	Consider the well-being of generations ahead.
Legacy mindset	Leaving a good legacy for our family, community and
	living word.
Transcendent goal	The ultimate goal for the human species to secure a
	thriving planet.
Holistic forecasting	Envision various pathways for civilisation.
Cathedral thinking	Projects that we can start today that extend beyond our
	own lifetime.

Table C1: Good Ancestor Principles

Source: Kzarnic, R. (2020) Six Ways to Think Long-term: A Cognitive Toolkit for Good Ancestors. The Long Now Foundation. [Online] Available from:

https://blog.longnow.org/02020/07/20/six-ways-to-think-long-term-a-cognitive-toolkit-for-good-ancestors/ (Accessed: 1 February 2021).

The below interview schedule structure has been adapted from: Krueger, Richard A. and Casey, Marry A. (2015) "Developing a Questioning Route" in *Focus Groups: A Guide for Applied Research*. 5th Edition. Los Angeles, London, New Delhi: SAGE Publications.

Table C2: Legacy group interview schedule in English

Introductions	Question	Good Ancestor Principles	
Opening	1. What does well-being mean for you?	#	
questions:	2. What do you know about the well-being Hub under development in the Nantlle Valley?		
sustainability fo	Short term thinking is about dealing with health and well-being services now and not about sustainability for the future. Long term thinking is realizing that we are a dot on the timeline, and we need to be thinking towards the end of the line.		
Key questions:	3. What for you are the most powerful reasons for caring about the future generations who will be living in the Nantlle Valley beyond your lifetime?	Intergenerational justice	
	4. What kind of community do want future generations to inherit from the present generation?	Legacy Mindset	
	5. What is worth fighting for to secure the future generation's health and well-being?	Deep time humility	

	 6. How can we sustain the resources of the Nantlle Valley and ensure that they are passed on to future generations that will live in the Nantlle Valley? (Resources can refer to natural resources, services, the community etc.) 	
	7. What long term projects could you pursue with others that could extend beyond your own lifetime to secure the well-being of future generations?	Cathedral Thinking
	 Think about the future. Do you anticipate a different pathway for holistic health and well- being interventions or services in the Nantlle Valley? Holistic health and well-being services take full account of the person's situation, not just treat symptoms. 	Holistic Forecasting
	e.g. Increased IT interventions (increased use of technology) or different lifestyle choices such as health and well-being projects.	
	9. What do you think should be the ultimate goal of the health and well-being Hub in the Nantlle Valley for future generations?	Transcendent goal
Ending question:	10. When thinking about the needs of future generations in the Nantlle Valley is there anything that we haven't already discussed that's important for Grŵp Cynefin to consider and include in the development of the new Health and Well-being Hub?	

Cyflwyniadau	Cwestiynau	Rhinweddau 'r Hynafiad Da
Cwestiynau	1. Beth mae lles yn ei olygu i chi?	
cychwynnol:	2. Beth ydych chi'n ei wybod am yr Hwb Iechyd a	
	Lles mae Grŵp Cynefin yn ei gynllunio?	
Os ydym ni'n n	neddwl am y tymor byr, 'rydym ni ond yn meddwl am yr ie	chyd a lles sydd
	liw ac nid sut mae modd cynnal pethau ar gyfer y dyfodol.	
	ni'n sylweddoli mai dim ond dot bychan ydym ni yn hanes	y ddaear ac mae
	vl i'r dyfodol, tuag at y pen draw.	
Cwestiynau	3. Beth ydy'r prif resymau dros boeni am	Cyfiawnder
allweddol:	genedlaethau'r dyfodol a fydd yn byw yn	rhwng
	Nyffryn Nantlle ar ôl ein hoes ni?	cenedlaethau.
	4. Pa fath o gymuned ydych chi eisiau i	Ystyried ein
	genedlaethau'r dyfodol ei hetifeddu gennym ni?	hetifeddiaeth.
	5. Beth ddylem ni eu gwarchod/ymgyrchu drostynt	Cydnabod ein
	er mwyn sicrhau lles cenedlaethau'r dyfodol?	meidroldeb.
	 Sut allwn ni gynnal adnoddau Dyffryn Nantlle er mwyn gwneud yn siŵr eu bod yn cael eu pasio 	
	ymlaen i genedlaethau'r dyfodol a fydd yn byw	
	yn y Dyffryn?	
	yn y Dynnyn:	
	(Gall adnoddau olygu pethau fel adnoddau naturiol,	
	gwasanaethau, y gymuned.)	
	7. Pa brosiectau hir dymor allwn ni eu cychwyn	Meddylfryd
	gydag eraill heddiw a allai barhau i wella lles	Cadeirlan.
	pobl tu hwnt i'n hoes ni?	
	8. Meddyliwch am y dyfodol. Ydych chi'n	Rhagweld
	rhagweld bydd ymyraethau neu wasanaethau	Cyfannol.
	iechyd a lles cyfannol yn dilyn llwybr gwahanol	
	yn Nyffryn Nantlle? Mae cyfannol yn golygu	
	gwasanaethau iechyd a lles sydd yn ystyried	
	sefyllfa'r person yn llawn, ac nid dim ond trin	
	symptomau.	
	e.e. mwy o ymyraethau sy'n defnyddio TG (mwy o	
	ddefnydd o dechnoleg) neu ddilyn ffordd wahanol o fyw	
	drwy bethau fel prosiectau iechyd a lles.	Nad
	9. Beth ydych chi'n meddwl dylai nod yr Hwb Iechyd a Lles fod yn y pen draw ar gyfer	Nod
	cenedlaethau'r dyfodol?	trosgynnol
Cwestiwn	10. Wrth feddwl am anghenion cenedlaethau'r	
clo:	dyfodol yn Nyffryn Nantlle, a oes unrhyw beth	
	nad ydym wedi'i drafod yn barod sy'n bwysig i	
	Grŵp Cynefin ei ystyried a'i gynnwys yn	
	natblygiad yr Hwb Iechyd a Lles newydd?	

Table C3: Legacy Group interview schedule in Welsh

Appendix D: Participant invitation letter

English invitation letter:

Dear Member of the Nantlle Valley community

I am a masters student at Bangor University's School of Health Sciences conducting research in collaboration with Grŵp Cynefin. My research is funded by The European Social Fund through a KESS2 East studentship. The title of my research project is:

Developing a conversation about Dyffryn Nantlle community needs to embrace well-being through social prescribing interventions.

Grŵp Cynefin's housing association has identified a need to improve the provision of healthcare in Dyffryn Nantlle. As a result, they have developed innovative plans to build a Health and Well-being Hub in Penygroes. Under the current plans the Hub will include all primary care services, Grŵp Cynefin's office, nursery, home for the elderly, social housing and the main Theatr Bara Caws Theatre Building. Grŵp Cynefin is also keen to offer a social prescribing service from the hub.

I would like to invite members of the Dyffryn Nantlle community to participate in focus groups to discuss the need for social prescribing interventions at the hub. Please click on the link included further down to access the Participant Information Leaflet that contains a definition of social prescribing and the full details regarding the research objectives and what participating in the research entails.

Participating in this research gives you the opportunity to voice any well-being needs that might exist within the Dyffryn Nantlle community that could be improved through the Health and Well-being Hub's provision. Your contribution will be used to make recommendations to Grŵp Cynefin so that they can implement an intervention that meets those needs and is effective from the outset. As a result, participating in this research would allow you to contribute to the design of a service that could enrich the Dyffryn Nantlle community.

You can choose to participate through the medium of Welsh or English. The focus group will be held in the evening, between February and April 2021. The meeting will be maximum of two hours long and the recorded discussion will be around one hour in length. The focus groups will be hosted via Zoom videoconferencing software due to Welsh Government COVID-19 restrictions. If you would like to get involved, but are not sure how to use Zoom, detailed instructions can be forwarded to you in advance. All information about you will be kept strictly confidential and secure. The comments you give us during the focus group will be anonymous and will not be used for anything other than this research.

If you would like to get involved:

If you would like to participate, please read the Participant Information Leaflet included in the following link.

Participant Information Leaflet: <u>https://bangoroffice365-</u> my.sharepoint.com/:w:/g/personal/sou9b8_bangor_ac_uk/EV_uRz1TeEpCu5eF_PUHqwgBw LDa9Z94l3ZrwFCc7rYooQ?e=sYftgZ

If you still wish to participate after reading the information leaflet, I would be very grateful if you could provide your details by clicking on this link to a Microsoft Form **before the 5th of February**:

https://forms.office.com/Pages/ResponsePage.aspx?id=VUxHxiOpKk2b1OzjcUjbsiRL4J41_dJ FnZ5NthBf-idUMThTNFQ5VIFEWUIDOVpGVjMwR1RJRE9XQi4u

After the 5th of February I will contact you to record your consent verbally and to provide the focus groups dates and time. The consent form, that you must answer verbally should you choose to participate in the focus groups, is also included within the Information Leaflet.

If you do not want to take part:

You do not need to do anything if you do not wish to participate in this study.

Please do not hesitate to contact me in English or Welsh if you have any further questions: **Email:** <u>sou9b8@bangor.ac.uk</u>.

You are also welcomed to share this information with anyone aged 18+ within the Dyffryn Nantlle and please get in touch if you are aware of someone who would prefer to receive a paper copy of all the details.

Thank you very much in advance for your time.

Yours sincerely,

GRAD

Gwenlli Mair Thomas MRes Student Bangor University School of Health Sciences

Welsh invitation letter:

PROSIECT IECHYD A LLES DYFFRYN ANANTLLE

GWAHODDIAD I GYMRYD RHAN MEWN YMCHWIL

Annwyl Aelod o gymuned Dyffryn Nantlle

'Rwy'n fyfyrwraig gradd meistr yn Ysgol Gwyddorau Iechyd Prifysgol Bangor ac yn cynnal fy ymchwil ar y cyd â Grŵp Cynefin. Mae fy ymchwil wedi'i ariannu gan Gronfa Gymdeithasol Ewrop. Teitl fy mhrosiect ymchwil yw:

Datblygu sgwrs ynghylch angen cymuned Dyffryn Nantlle i groesawu lles drwy ymyraethau rhagnodi cymdeithasol.

Mae cymdeithas dai Grŵp Cynefin wedi adnabod angen am wella'r ddarpariaeth o ofal iechyd yn Nyffryn Nantlle. O ganlyniad maent wedi datblygu cynlluniau arloesol i adeiladu Hwb Iechyd a Lles ym Mhenygroes. Yn ôl y cynlluniau presennol bydd yr Hwb yn cynnwys holl wasanaethau gofal iechyd, swyddfa Grŵp Cynefin, meithrinfa, cartref henoed, tai cymdeithasol a phrif adeilad Theatr Bara Caws. Mae Grŵp Cynefin hefyd yn awyddus i gynnig gwasanaeth presgripsiwn cymdeithasol o'r hwb.

Hoffwn wahodd aelodau o gymuned Dyffryn Nantlle i gymryd rhan mewn grwpiau ffocws i drafod yr angen am wasanaeth presgripsiwn cymdeithasol yn yr hwb. Cliciwch ar y linc yn îs i lawr i ddarllen y Daflen Wybodaeth i Gyfranogwyr sy'n cynnwys gwybodaeth llawn ynghylch beth yw presgripsiwn cymdeithasol yn ogystal â bwriad y grwpiau ffocws a beth fyddai cyfrannu yn ei olygu i chi.

Cewch gymryd rhan yn yr ymchwil yn Gymraeg neu Saesneg. Byddwn yn gofyn i chi gymryd rhan mewn grŵp ffocws gyda'r nos, rhywbryd rhwng Chwefror ac Ebrill 2021. Ni fydd y cyfarfod yn fwy na dwyawr o hyd a bydd y drafodaeth a fydd yn cael ei recordio yn tua awr o hyd. Oherwydd cyfyngiadau Covid-19 Llywodraeth Cymru, bydd y cyfarfodydd yn cael eu cynnal dros y wê, drwy Zoom. Os hoffech chi gymryd rhan, ond nad ydych yn siŵr sut i ddefnyddio Zoom, gallwn anfon cyfarwyddiadau manwl atoch chi ymlaen llaw. Bydd unrhyw wybodaeth y byddwch yn ei roi yn cael ei gadw'n hollol gyfrinachol a diogel. Bydd y sylwadau a roddwch yn ystod y grwpiau ffocws yn ddienw, ac ni fyddent yn cael eu defnyddio ar gyfer unrhyw beth arall ar wahân i'r ymchwil hwn.

Mae cyfrannu yn yr ymchwil hwn yn rhoi cyfle i chi roi llais i unrhyw anghenion lles sydd o bosib yn bodoli yng nghymuned Dyffryn Nantlle. Bydd eich cyfraniad yn cael ei ddefnyddio i lunio argymhellion i Grŵp Cynefin fel bod modd iddyn nhw ddylunio gwasanaeth sy'n cwrdd ag unrhyw anghenion yn effeithiol o'r cychwyn cyntaf.

Os hoffech chi gymryd rhan:

Os hoffech chi gymryd rhan gofynnwn i chi yn gyntaf gymryd amser i ddarllen y wybodaeth yn llawn drwy glicio ar y linc isod.

Taflen Wybodaeth i Gyfranogwr: <u>https://bangoroffice365-</u> my.sharepoint.com/:w:/g/personal/sou9b8 bangor ac uk/EQaX94Z6-PpBIQvHprS04HgB7Yg2noB8x1xyukbJ0NeCPA?e=XOmvas

Os ydych yn parhau i ddymuno cymryd rhan ar ôl darllen y wybodaeth, gofynnwn i chi ddarparu eich manylion yn y ffurflen manylion personol drwy glicio ar y linc i'r Microsoft Form yma **cyn y 5ed o Chwefror**:

https://forms.office.com/Pages/ResponsePage.aspx?id=VUxHxiOpKk2b1OzjcUjbsiRL4J41_dJ FnZ5NthBf-idUMThTNFQ5VIFEWUIDOVpGVjMwR1RJRE9XQi4u

Byddwn yn dod i gysylltiad gyda chi i adael i chi wybod pryd fydd y grwpiau ffocws ac i recordio eich cydsyniad yn llawn. Mae'r ffurflen gydsynio, y bydd yn rhaid i chi ei hateb os fyddwch yn cymryd rhan yn y grwpiau ffocws wedi'i chynnwys yn y daflen wybodaeth hefyd.

Os nad ydych am gymryd rhan:

Nid oes angen i chi wneud unrhyw beth os nad ydych am gymryd rhan yn yr astudiaeth hon.

Mae croeso i chi gysylltu â mi os hoffech holi unrhyw gwestiynau pellach drwy e-bostio sou9b8@bangor.ac.uk neu ffonio 07923642930.

Os ydych yn ymwybodol o rhywun a fyddai'n well ganddynt dderbyn copi papur o holl fanylion yr ymchwil, mae croeso i chi gysylltu â mi i drefnu hynny hefyd.

Yn gywir

Grass

Gwenlli Mair Thomas Myfyrwraig MRes Ysgol Gwyddorau Iechyd Prifysgol Bangor

Appendix E: Participant information leaflet

English Information Leaflet:

PARTICIPANT INFORMATION LEAFLET

Developing a conversation about Dyffryn Nantlle community needs to embrace well-being through social prescribing interventions.

You are invited to take part in a local research study. Before you agree to take part, it is important that you understand why this research is being conducted and what it will entail. Please take the time to read the information below carefully and discuss it with others, if you wish. Ask if something is unclear, or if you would like more information. Take your time before deciding if you want to get involved. Thank you in advance for reading this information leaflet.

What is the background to the study?

Grŵp Cynefin housing association has identified a need to improve the provision of healthcare in Dyffryn Nantlle. As a result, they have developed innovative plans to build a Health and Well-being Hub in Penygroes. Under the current plans the Hub will include all healthcare services, Grŵp Cynefin offices, nursery, home for the elderly, social housing and Theatr Bara Caws Theatre. Grŵp Cynefin is also keen to offer a social prescribing service within the hub.

What is social prescribing?

There are several definitions of social prescribing. Most refer to it as a way of enabling GPs and other healthcare professionals (e.g. nurses and health visitors) to refer their patients to community welfare services. Evidence demonstrate that patients often present to their GP with additional well-being needs that medical interventions cannot solve. Social Prescribing is a non-medical intervention that can be offered to patients with a range of social, emotional or practical needs and many schemes are focused on improving mental health and physical well-being. Patients are signposted to services and organizations within their local community that can provide the appropriate advice and support they need to resolve issues and concerns that impact their health and well-being. These support services are usually offered by the community and voluntary sector. Examples of such groups are exercise groups, mother and toddler groups, hobby groups (e.g. cooking, reading and gardening). In addition, services that could provide advice on issues such as housing or financial issues (e.g how to claim Universal Credit).

What is the purpose of this study?

The aim of this study is to explore whether social prescribing interventions are needed in the new health and well-being Hub in Penygroes. The purpose of the research is to discover whether the health and well-being hub would be an effective means of delivering positive benefits to the community. In order to achieve this the study aims to recruit a

representative sample of the Dyffryn Nantlle community to discuss and identify community health and welfare needs. In addition, the study will identify community strategies to develop health and well-being outcomes and explore barriers and opportunities for the development social prescribing service at the Health and Well-being Hub. A proportion of participants will be asked to answer questions from the perspective of the Dyffryn Nantlle community today, and some participants will be asked to answer the questions from the perspective of future generations to aid in shaping the long-term sustainability for the hub. Participants will be asked to imagine the situation of future generations to find out how to create a resilient service that will improve the well-being of the community for decades to come. All collected data will be used to produce recommendations to Grŵp Cynefin about the community services they should offer within the hub.

Why have I been invited to take part?

You have been invited to take part as you live in Dyffryn Nantlle and we are keen to gather a representative sample of the community's residents to discuss with them.

Do I have to take part?

It is up to you whether or not you want to take part in the study. You are of course free to withdraw at any time without giving a reason and without your legal rights being affected. If you withdraw, we will ask your permission to anonymously use the data you have already provided, or you may choose to be completely forgotten from the research

What will I be asked to do if I decide to take part?

You are invited to attend a discussion in the form of focus group with the researcher. The meeting will be maximum of two hours long and the recorded discussion will be around one hour in length. The focus group will be held in the evenings between January and April 2021. In an ideal scenario the focus group would be conducted in a community venue in Dyffryn Nantlle. However, due to Coronavirus (COVID-19) social restrictions, it will be a virtual meeting, held through the videoconferencing software Zoom. If you would like to get involved, but are not sure how to use Zoom, detailed instructions on how to use Zoom can be forwarded to you in advance. Your comments will be invaluable for the researcher to understand the position of Dyffryn Nantlle and what kind of provision residents believe would improve the well-being of the community today and for generations to come.

With your permission, the researcher will take notes and record answers during the focus groups, but your name will not be used and the comments you make will remain anonymous.

What are the potential disadvantages and risks of participating in the study?

There are no foreseen disadvantages or risks to you as a result of participating in the study. The researcher will not ask anyone to share any personal experiences and discussion will focus on the needs of the community as a whole. If you cannot answer any of the questions or feel uncomfortable about answering them, the researcher will advise you not to contribute to the group's answer to that question. If you have any concerns, please get in touch with the

researcher for answers to your queries. The researcher does not anticipate that you will face any harm while you are contributing in this research. However, should a problem arise while you are participating, it is fine to leave the meeting and the investigator will be happy to discuss any concerns that follow.

What are the potential benefits of taking part?

Participating in this research gives you the opportunity to voice any well-being needs that might exist in Dyffryn Nantlle that could be met through the provision of the Health and Well-being Hub. Your contribution will be used to develop recommendations to Grŵp Cynefin so that they can implement a service that meets those needs and is effective from the outset of the Hub initiative. As a result, participating in this research would allow you to contribute to the design of a service that could enrich the Dyffryn Nantlle community.

Will the fact that I participated in the study be kept confidential?

All information about you will be kept strictly confidential and secure. The comments you'll give during the interview will be anonymous and will not be used for anything other than this research. All information and data relevant to the research will be stored as password protected electronic documents. Only the researcher, will be able to access these documents.

What will happen to the results of the study?

The researcher will use the results of the study to inform part of a dissertation submitted in fulfilment of a Masters by Research degree. In addition, a report of the study will be sent to Grŵp Cynefin outlining and informing on key findings. Research findings will be prepared for peer reviewed publication in scholarly journals. If you wish to read the publication of the of the results a link for all research publication outputs will be made available on the Social Value Hub on Bangor University's website. I will not name you in any report or publication arising from this study. All research data will be destroyed forever once the Masters by Research thesis has been successfully approved (by the end of 2021).

Who is organising and funding the research?

The research is organised by Gwenlli Thomas, an MRes student at Bangor University's School of Health Sciences. She is organising the research in collaboration with her supervisors at Bangor University School of Health Sciences, Gwenallt Consulting and Grŵp Cynefin's Community Initiative Team.

The research has been funded by the European Social Fund through the Knowledge Economy Skills Scholarships East 2 [KESS2 East].

Who reviewed the study?

This study was reviewed by Bangor University's Healthcare and Medical Sciences Academic Ethics Committee.

Where can I find out more?

For more information or to discuss any concerns you may have about this study, please contact Gwenlli, MRes Student at Bangor University's School of Health Sciences – **Tel**: *********

Email: *****@bangor.ac.uk

I'm keen to participate in the research. What's the next step?

If you would like the opportunity to participate in this research, please provide your details by clicking on the link to the Microsoft Form included here and on the invite email:

https://forms.office.com/Pages/ResponsePage.aspx?id=VUxHxiOpKk2b1OzjcUjbsiRL4J41_dJ FnZ5NthBf-idUMThTNFQ5VIFEWUIDOVpGVjMwR1RJRE9XQi4u

The form asks you to note your post code, your age, gender, ethnicity group, employment status, language preference and confirm that you have internet access at home. You can choose not to answer any of the questions if you do not wish to. These details are needed for the researcher to draw up a list of potential participants. The list will be used to recruit as representative a sample of all within Dyffryn Nantlle as possible, to participate in the focus groups. If you are not randomly selected to participate in the focus groups, your contact details will be deleted from the records held securely at Bangor University. If you were to be selected, the researcher will contact you by email with the focus group meeting dates and to obtain and record your verbal consent. The consent form that randomly selected participants will have to complete is included on page 5.

All research data will be destroyed forever once the Masters by Research thesis has been successfully approved (by the end of 2021).

Please take the time to decide whether you wish to take part in the study.

Welsh information leaflet:

TAFLEN WYBODAETH I GYFRANOGWR

Datblygu sgwrs ynghylch angen cymuned Dyffryn Nantlle i groesawu lles drwy ymyraethau rhagnodi cymdeithasol.

'Rydych yn cael gwahoddiad i gymryd rhan mewn astudiaeth ymchwil leol. Cyn i chi gytuno i gymryd rhan, mae'n bwysig eich bod yn deall pam bod yr ymchwil hwn yn cael ei gynnal a'r hyn y bydd yn ei olygu. Cymerwch eich amser i ddarllen y wybodaeth isod yn ofalus a'i thrafod ag eraill, os dymunwch. Gofynnwch os nad yw rhywbeth yn eglur, neu os hoffech gael mwy o wybodaeth. Cymerwch eich amser cyn penderfynu a ydych eisiau cymryd rhan. Diolch o flaen llaw i chi am ddarllen y daflen wybodaeth hon.

Beth yw cefndir yr astudiaeth?

Mae cymdeithas dai Grŵp Cynefin wedi adnabod angen am wella'r ddarpariaeth o ofal iechyd yn Nyffryn Nantlle. O ganlyniad maent wedi datblygu cynlluniau arloesol i adeiladu Hwb Iechyd a Lles ym Mhenygroes. Yn ôl y cynlluniau presennol bydd yr Hwb yn cynnwys holl wasanaethau gofal iechyd Primaidd, swyddfa Grŵp Cynefin, meithrinfa, cartref henoed, tai cymdeithasol a phrif adeilad Theatr Bara Caws. Mae Grŵp Cynefin hefyd yn awyddus i gynnig gwasanaeth Presgripsiwn Cymdeithasol o'r hwb.

Beth yw presgripsiwn cymdeithasol?

Mae sawl diffiniad o Bresgripsiwn Cymdeithasol. Mae'r mwyafrif yn cyfeirio ato fel ffordd o alluogi meddygon teulu a gweithwyr gofal iechyd proffesiynol eraill (e.e nyrsys ac ymwelwyr iechyd) i gyfeirio eu cleifion at wasanaethau lles yn y gymuned. Mae tystiolaeth bod cleifion yn aml yn mynd at eu meddyg teulu (GP) gydag anghenion iechyd a lles ychwanegol na all meddyginiaeth yn unig eu datrys. Mae Presgripsiwn Cymdeithasol yn wasanaeth sy'n cefnogi cleifion gydag anghenion cymdeithasol, emosiynol ac ymarferol ac mae nifer yn canolbwyntio ar wella lles meddyliol a chorfforol unigolion. O fewn gwasanaeth presgripsiwn cymdeithasol, mae meddygon a gweithwyr iechyd eraill yn cyfeirio claf at wasanaethau o fewn eu cymuned leol a allai ddarparu'r amser, cyngor a'r gefnogaeth i ddatrys unrhyw achosion cymdeithasol, emosiynol neu ymarferol sy'n effeithio ar eu hiechyd a lles. Mae'r gwasanaethau hyn fel arfer yn cael eu darparu gan y sector gwirfoddol a chymunedol. Enghreifftiau yw grwpiau ymarfer corff, grwpiau mam a'i phlentyn, clybiau diddordebau (e.e coginio, darllen a garddio). Yn ogystal, gwasanaethau a allai ddarparu cyngor i bobl e.e ar faterion tai neu gyngor ariannol (e.e sut i hawlio Credyd Cynhwysol).

Beth yw pwrpas yr astudiaeth hwn?

Nod yr astudiaeth hwn yw archwilio a oes angen am wasanaeth presgripsiwn cymdeithasol yn yr Hwb lechyd a Lles. O fewn yr astudiaeth rydym am ganfod a fyddai yn ffordd effeithiol o ddarparu canlyniadau cadarnhaol i'r gymuned a'i pheidio? Er mwyn cyrraedd y nod hwn mae'r ymchwilydd yn awyddus i recriwtio sampl sydd mor gynrychioliadol a phosib o gymuned Dyffryn Nantlle er mwyn cynnal trafodaeth a darganfod beth yw anghenion lles y gymuned, canfod ffyrdd o ddatblygu canlyniadau iechyd a lles ac archwilio rhwystrau a chyfleoedd ar gyfer datblygu gwasanaeth presgripsiwn cymdeithasol yn yr Hwb Iechyd a Lles.

Bydd gofyn i rai cyfranogwyr ateb y cwestiynau o safbwynt Dyffryn Nantlle heddiw, a rhai cyfranogwyr i ateb y cwestiynau o safbwynt cenedlaethau'r dyfodol. Bydd yn gofyn i rai cyfranogwyr ddychmygu sefyllfa cenedlaethau'r dyfodol er mwyn canfod sut mae modd gwneud y gwasanaeth hwn yn un a fydd yn goroesi ac yn gwella lles y gymuned am ddegawdau i ddod. Bydd yr holl ddata a fydd yn cael ei gasglu gan drigolion Dyffryn Nantlle yn cael ei ddefnyddio er mwyn Grŵp Cynefin o'r gwasanaethau lles y dylent ei gynnig o fewn yr hwb.

Pam ydw i wedi cael gwahoddiad i gymryd rhan?

Rydych chi wedi cael gwahoddiad i gymryd rhan gan eich bod yn byw yn Nyffryn Nantlle ac mae'r ymchwilydd yn awyddus i gasglu sampl gynrychioliadol o drigolion y gymuned i drafod gyda nhw.

A oes rhaid imi gymryd rhan?

Chi sydd i benderfynu os ydych am gymryd rhan yn yr astudiaeth ai pheidio. Gallwch dynnu'n ôl unrhyw bryd heb roi rheswm ac heb i'ch hawliau cyfreithiol gael eu heffeithio. Os byddwch yn tynnu'n ôl, byddwn yn gofyn eich caniatâd chi i ddefnyddio'r data yr ydych wedi'i ddarparu yn barod yn ddienw, neu gallwch ddewis cael eich anghofio o'r ymchwil yn llwyr.

Beth fydd gofyn i mi i mi wneud os byddaf yn penderfynu cymryd rhan?

Rydych yn cael gwahoddiad i fynychu trafodaeth ar ffurf grŵp ffocws. Bydd y cyfarfod yn 2 awr o hyd a bydd yn cael ei gynnal gyda'r nos, rhywbryd rhwng mis Ionawr ac Ebrill 2021. Mewn sefyllfa ddelfrydol byddai'r grŵp ffocws yn cael eu cynnal mewn lleoliad cymunedol yn Nyffryn Nantlle. Fodd bynnag, oherwydd cyfyngiadau COVID-19 bydd rhaid cynnal y cyfarfodydd ar y wê drwy ddefnyddio Zoom. Os hoffech gymryd rhan, ond nad ydych yn siŵr sut i ddefnyddio Zoom, gall yr ymchwilydd anfon cyfarwyddiadau manwl atoch ymlaen llaw.

Bydd eich sylwadau yn hynod werthfawr i'r ymchwilydd allu deall sefyllfa Dyffryn Nantlle a pa fath o ddarpariaeth ydych chi'n credu a fyddai'n gwella lles y gymuned heddiw ac am genedlaethau sydd i ddod.

Gyda'ch caniatâd, bydd yr ymchwilydd yn cymryd nodiadau ac yn recordio atebion yn ystod y cyfarfod, ond ni fydd eich enw'n cael ei ddefnyddio a bydd y sylwadau a wnewch yn cael eu cadw'n ddienw.

Beth yw anfanteision a risgiau posib cymryd rhan yn yr astudiaeth?

Nid oes unrhyw anfanteision na risgiau i gymryd rhan yn yr astudiaeth wedi'u hadnabod. Ni fydd yr ymchwilydd yn gofyn i unrhyw un rannu unrhyw brofiad personol; bydd y drafodaeth yn canolbwyntio ar anghenion Dyffryn Nantlle fel cymuned gyfan. Fodd bynnag, os oes gennych unrhyw bryderon, mae croeso i chi gysylltu gyda'r ymchwilydd i'w trafod. Os na fedrwch ateb unrhyw un o'r cwestiynau neu os ydych chi'n teimlo'n anghyfforddus ynghylch ei ateb, nid oes rhaid i chi gyfrannu i ateb y grŵp i'r cwestiwn hwnnw. Nid yw'r ymchwilydd yn rhagweld y byddwch yn wynebu unrhyw niwed tra byddwch yn cyfrannu yn yr ymchwil hwn. Fodd bynnag, petai problem yn codi tra'r ydych yn cymryd rhan yn yr ymchwil, bydd yn iawn i chi adael y cyfarfod a bydd yr ymchwilydd yn fwy na pharod i drafod unrhyw bryderon yn dilyn.

Pa fantais sydd i gyfranogi?

Mae cyfrannu yn yr ymchwil hwn yn rhoi cyfle i chi roi llais i unrhyw anghenion lles sydd o bosib yng nghymuned Dyffryn Nantlle y gellir eu gwella drwy ddarpariaeth yr Hwb Iechyd a Lles. Bydd eich cyfraniad yn cael ei ddefnyddio i lunio argymhellion i Grŵp Cynefin fel bod modd iddyn nhw ddylunio gwasanaeth sy'n diwallu unrhyw anghenion yn effeithiol o'r cychwyn cyntaf. O ganlyniad byddai cymryd rhan yn yr ymchwil hwn yn golygu bod modd i chi gyfrannu at ddylunio gwasanaeth a allai gyfoethogi cymuned Dyffryn Nantlle.

Fydd y ffaith fy mod wedi cymryd rhan yn yr astudiaeth yn cael ei chadw'n gyfrinachol?

Bydd pob gwybodaeth amdanoch yn cael ei chadw'n hollol gyfrinachol a diogel. Bydd y sylwadau a roddwch yn ystod y grwpiau ffocws yn ddienw, ac ni fyddent yn cael eu defnyddio ar gyfer unrhyw beth arall ar wahân i'r ymchwil hwn. Bydd holl wybodaeth a data perthnasol i'r ymchwil yn cael ei gadw fel dogfennau electroneg a fydd wedi'u cloi gyda chyfrinair. Dim ond yr ymchwilydd a fydd â mynediad at y dogfennau hyn.

Beth fydd yn digwydd i ganlyniadau'r astudiaeth?

Bydd yr ymchwilydd yn defnyddio canlyniadau'r astudiaeth i lunio traethawd hir a fydd yn cael ei gyflwyno er mwyn cwblhau gradd Meistr mewn Ymchwil. Yn ogystal, bydd yn anfon adroddiad o'r canlyniadau i Grŵp Cynefin. Efallai y bydd rhannau o'r canlyniadau yn cael ei baratoi ar gyfer eu cyhoeddi fel erthyglau wedi'i golygu mewn cyfnodolion ysgolheigaidd. Os dymunwch gael gweld y canlyniadau bydd linc i'r holl gyhoeddiadau yn cael ei roi ar wefan Prifysgol Bangor - *Social Value Hub.* Ni fyddwch yn cael ei enwi mewn unrhyw adroddiad na chyhoeddiad sy'n deillio o'r astudiaeth hon. Bydd holl ddata yr ymchwil yn cael eu ddinistrio unwaith y bydd yr ymchwilydd wedi cyflwyno ei thraethawd ymchwil (erbyn diwedd 2021).

Pwy sy'n trefnu a chyllido'r ymchwil?

Myfyrwraig MRes yn Ysgol Gwyddorau lechyd Prifysgol Bangor. Mae hi'n trefnu'r ymchwil ar y cyd gyda'i goruchwylwyr o Ysgol Gwyddorau lechyd Prifysgol Bangor, Gwenallt Consulting a Thîm Mentrau Cymunedol Grŵp Cynefin.

Mae'r ymchwil wedi'i gyllido gan Ysgoloriaethau Sgiliau Economi Gwybodaeth Dwyrain 2 [KESS2 East].

Pwy sydd wedi adolygu'r astudiaeth?

Adolygwyd yr astudiaeth hon gan Bwyllgor Moeseg Academaidd Gwyddorau Gofal Iechyd a Meddygol Prifysgol Bangor.

Lle caf i ragor o wybodaeth?

Am fwy o wybodaeth neu i drafod unrhyw bryderon sydd gennych ynghylch yr astudiaeth hon, mae croeso i chi gysylltu gyda Gwenlli, Myfyrwraig MRes yn Ysgol Gwyddorau Iechyd Prifysgol Bangor. **Ffôn:** 07723642930

E-bost: sou9b8@bangor.ac.uk

'Rwy'n awyddus i gyfranogi yn yr ymchwil. Beth yw'r cam nesaf?

Os hoffech gael y cyfle i gymryd rhan yn yr ymchwil hwn gofynnaf i chi ddarparu eich manylion drwy glicio ar y linc i'r Microsoft Form sydd wedi'i gynnwys yma ac ar yr e-bost/post Facebook:

https://forms.office.com/Pages/ResponsePage.aspx?id=VUxHxiOpKk2b1OzjcUjbsiRL4J41_dJ FnZ5NthBf-idUMThTNFQ5VIFEWUIDOVpGVjMwR1RJRE9XQi4u

Mae'r ffurflen yn gofyn i chi nodi eich côd post, eich hoedran, rhywedd, hil, statws cyflogaeth dewis iaith a chadarnhau bod gennych fynediad at y rhyngrwyd yn eich cartref. Gallwch ddewis peidio ag ateb unrhyw un o'r cwestiynau os nad ydych yn dymuno gwneud hynny. 'Rwy'n gofyn am y manylion hyn er mwyn llunio rhestr o gyfranogwyr posib. Bydd y rhestr yn cael ei strwythuro mewn modd a fydd yn fy ngalluogi i ddewis sampl gynrychiolaidd ar hap i gymryd rhan yn y grwpiau ffocws. Os na fyddwch yn cael eich dewis ar hap i gyfranogi yn y grwpiau ffocws, byddaf yn dileu eich manylion o fy meddiant yn syth. Os byddwch yn cael eich dewis, byddaf yn cysylltu gyda chi gyda dyddiadau cyfarfod y grwpiau ffocws ac i dderbyn a recordio eich cydsyniad ar lafar. Mae'r ffurflen cydsynio y bydd yn rhaid i gyfranogwyr a gaiff eu dewis ar hap ei lenwi wedi'i gynnwys ar dudalen 5. Bydd yr holl ddata ymchwil yn cael ei ddinistrio am byth unwaith y bydd y traethawd Meistr trwy Ymchwil wedi'i gymeradwyo'n llwyddiannus (erbyn diwedd 2021).

Cymerwch eich amser i benderfynu os hoffech gymryd rhan yn yr astudiaeth

Appendix F: Participant consent form

English consent form:

Developing a conversation about Dyffryn Nantlle community needs to embrace well-being through social prescribing interventions.

Name of Researcher: Gwenlli Thomas

If you agree, please initial boxes

- 1. I confirm that I have read and understood the Participant Information Sheet dated 18/12/2020 version 3 for the above study and have had the opportunity to ask questions.
- 2. I understand that my participation is voluntary and that I am free to withdraw from the study at any time, without giving any reason, and without my legal rights being affected.
- 3. I understand that my personal details will be kept confidential.
- 4. I agree to my voice being recorded on an audio file.
- 5. I agree to take part in the above study.

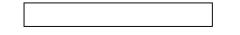
Name of respondent:

Date:

Name of person taking consent:

Date:

In case of any technical problems on the night with Zoom, could you provide your telephone number in the box below please?



Contact details: Gwenlli Thomas, MRes Student, Bangor University School of Health Sciences.

Email: ****@bangor.ac.uk

Phone number: **********

Welsh consent form:

Datblygu sgwrs ynghylch angen cymuned Dyffryn Nantlle i groesawu lles drwy ymyrraethau presgripsiwn cymdeithasol

Enw'r Ymchwilydd: Gwenlli Thomas

Os ydych yn cytuno, rhowch llythrennau cyntaf eich enw yn y bocsys

- Rwy'n cadarnhau fy mod i wedi darllen a deall y daflen wybodaeth ddyddiedig _____, fersiwn ___, ar gyfer yr astudiaeth uchod ac wedi cael cyfle i ofyn cwestiynau.
- Rwy'n deall fy mod yn cymryd rhan yn wirfoddol, ac fy mod yn rhydd i dynnu'n ôl ar unrhyw adeg heb roi rheswm, a heb i hynny effeithio ar fy hawliau cyfreithiol.
- 3. Rwy'n deall y bydd fy manylion personol yn cael eu cadw'n ddiogel a chyfrinachol.
- 4. Rwy'n cytuno i fy llais gael ei recordio.
- 5. Rydw i'n cytuno i gymryd rhan yn yr astudiaeth uchod.

Enw'r sawl sy'n cymryd rhan:

Dyddiad:

Enw'r sawl sy'n derbyn y caniatâd: Gwenlli Thomas

Dyddiad:

Rhag ofn y bydd problemau technegol ar y noson gyda Zoom, a fyddai modd i chi ddarparu eich rhif ffôn yn y bocs yma os gwelwch yn dda:

Manylion cyswllt:

Gwenlli Thomas, Myfyrwraig MRes, Ysgol Gwyddorau Iechyd Prifysgol Bangor. E-bost: ****@bangor.ac.uk Rhif ffôn: ********

Appendix G: Potential recruits' details form

A link to the Microsoft Form version that was shared on social media/over emails: <u>https://forms.office.com/r/VYNygm4qWy</u>

Fe'ch gwahoddir i lenwi'r ffurflen hon os oes gennych ddiddordeb cyfranogi yn y grwpiau ffocws. Gallwch ddewis peidio ag ateb unrhyw un o'r cwestiynau os nad ydych yn dymuno gwneud hynny. Mae'n cymryd uchafswm o 10 munud i gwblhau'r ffurflen.	You are invited to complete this form if you are interested in participating in the focus groups. You can choose not to answer any of the questions if you do not wish to. The form takes a maximum of 10 minutes to complete.
Gofynnir am y manylion hyn er mwyn llunio rhestr o gyfranogwyr posib. Bydd y rhestr yn cael ei ddefnyddio i dynnu sampl mor gynrychioliadol a phosib o gymuned Dyffryn Nantlle, i gyfranogi yn y grwpiau ffocws.	These details are requested in order to draw up a list of potential participants. The list will be used to draw as representative a sample of the Dyffryn Nantlle community as possible, to participate in the focus groups.
ffurflen hon yn cael ei arbed fel dogfen a fydd wedi'i chloi gyda chyfrinair a chaiff ei ddefnyddio i ddibenion yr ymchwil hwn yn unig. Bydd yr holl ddata yn cael ei ddileu yn dilyn ei gyhoeddi (erbyn diwedd 2021).	The data collected through this form will be saved as a password protected document and will be used for the purposes of this research only. All data will be deleted following publication (by the end of 2021).
Os byddwch yn cael eich dewis i gymryd rhan yn y grwpiau ffocws , bydd yr ymchwilydd yn cysylltu gyda chi gyda dyddiadau cyfarfod y grwpiau ffocws ac i dderbyn a recordio eich cydsyniad pellach ar lafar, gyda'ch caniatâd chi.	If you are selected at random to participate in the focus groups, the researcher will contact you to provide the focus group meeting dates and to verbally obtain and record your further consent, with your permission.
	oes gennych ddiddordeb cyfranogi yn y grwpiau ffocws. Gallwch ddewis peidio ag ateb unrhyw un o'r cwestiynau os nad ydych yn dymuno gwneud hynny. Mae'n cymryd uchafswm o 10 munud i gwblhau'r ffurflen. Gofynnir am y manylion hyn er mwyn llunio rhestr o gyfranogwyr posib. Bydd y rhestr yn cael ei ddefnyddio i dynnu sampl mor gynrychioliadol a phosib o gymuned Dyffryn Nantlle, i gyfranogi yn y grwpiau ffocws. Bydd y data a fydd yn cael ei gasglu drwy'r ffurflen hon yn cael ei arbed fel dogfen a fydd wedi'i chloi gyda chyfrinair a chaiff ei ddefnyddio i ddibenion yr ymchwil hwn yn unig. Bydd yr holl ddata yn cael ei ddileu yn dilyn ei gyhoeddi (erbyn diwedd 2021). Os byddwch yn cael eich dewis i gymryd rhan yn y grwpiau ffocws , bydd yr ymchwilydd yn cysylltu gyda chi gyda dyddiadau cyfarfod y grwpiau ffocws ac i dderbyn a recordio eich cydsyniad pellach

Adran 1 / Section 1

*Required.

.

Cadarnhewch yr isod cyn mynd ymlaen i weddill y ffurflen os gwelwch yn dda:

Rwy'n cadarnhau fy mod yn 18 mlwydd oed. Rwy'n cadarnhau fy mod wedi darllen y disgrifiad uchod ynghyd â chymryd amser i ddarllen y "Daflen wybodaeth i gyfranogwyr".
 Rwy'n awyddus i gymryd rhan yn yr ymchwil ac yn fodlon i'r ymchwiliwr dderbyn fy manylion a chysylltu gyda mi os caiff fy enw ei ddewis.

Please confirm the following before proceeding to the rest of the form:

□ I confirm that I am 18 year old. I confirm that I have read that I have read the above description as well as taking time to read the "Participant information sheet". I am keen to take part in the research and would be happy for the researcher to receive my details and contact me if my name is chosen.

Adran 2 / Section 2 – Amdanoch chi / About you.

- 1) Eich enw / Your name:
- 2) Y cyfeiriad e-bost a/neu y rhif ffôn yr hoffech i ni gysylltu gyda chi o hyn ymlaen? / The e-mail address and/or phone number you would like us to contact you from now on.

E-bost/E-mail: Rhif ffôn/telephone number:

3) Beth yw eich post côd? (ticiwch y bocs perthnasol os gwelwch yn dda) / What is your post code? (please tick the relevant box):

Gallwch nodi "byddai'n well gennyf beidio â dweud" os dymunwch / Please note "I prefer not to say" if you wish.

4) Ym mha flwyddyn a gawsoch eich geni ? (ticiwch y bocs perthnasol ticiwch y bocs perthnasol os gwelwch yn dda) / In what year were you born?? (please tick the relevant box):

Gallwch nodi "byddai'n well gennyf beidio â dweud" os dymunwch / Please note "I prefer not to say" if you wish.

5) Beth yw eich rhywedd? (ticiwch y bocs perthnasol os gwelwch yn dda) / What is your gender? (please tick the relevant box

Benyw / Female	
Gwryw / Male	
Di-ddeuaidd / Non-binary	

you wish to).	
Byddai'n well gennyf beidio â dweud / Prefer not to say	

6) Beth yw eich grŵp ethnig? (ticiwch y bocs perthnasol os gwelwch yn dda) / What is your ethnic group? (please tick the relevant box):

Gwyn / White	
Asiaidd – Arall / Asian - Other	
Du – Caribïaidd / Black - Caribbean	
Du – Affricanaidd / Black - African	
Du – Arall / Black - Other	
Cymysg: Gwyn a Du Caribïaidd / Mixed: White and Black Caribbean	
Cymysg: Gwyn ac Asiaidd / Mixed: White and Asian	
Cymysg: Gwyn a Du Affricanaidd / Mixed: White and Black African	
Bangladeshaidd / Bangladeshi	
Indiaidd / Indian	
Pacistani / Pakistani	
Tsieineaidd / Chinese	
Unrhyw grŵp ethnig arall, disgrifiwch os gwelwch yn	
dda.	
Any other ethnic group, please describe:	
Byddai'n well gennyf beidio â nodi fy ethnigrwydd.	
I would prefer not to specify my ethnicity.	

7) Statws gwaith (ticiwch y bocsys mwyaf perthnasol os gwelwch yn dda) / Work status (please tick the relevant boxes)

Rwy'n gyflogedig (rhan amser) I'm employed	
(part time)	
Rwy'n gyflogedig (llawn amser)	
I'm employed (full time)	
Rwy'n gyflogedig ond i ffwrdd o'r gwaith ar	
hyn o bryd.	

I am currently on leave from my paid	
employment	
Hunangyflogedig / Self-employed	
Rwy'n cadw neu'n cynnal tŷ.	
Keeping house or being home maker.	
Rwy'n ddi-waith ac yn chwilio am waith.	
Unemployed and looking for work	
Rwyf eisiau gweithio ond rwy'n ddi-waith	
oherwydd rhesymau iechyd.	
Wanting to work but unemployed due to health-related reason	
Rwy'n ddisgybl neu'n fyfyriwr.	
I'm a pupil or student.	
Rwyf wedi ymddeol.	
Retired.	
Arall, nodwch os gwelwch yn dda.	
Other, please state:	
Byddai'n well gennyf beidio â dweud/	
Prefer not to say.	

8) A fyddai'n well gennych gyfranogi drwy gyfrwng y Gymraeg neu'n Saesneg? (ticiwch y bocs perthnasol os gwelwch yn dda) / Would you prefer to participate through the medium of Welsh or English? (please tick the relevant box)

Cymraeg / Welsh	
Saesneg / English	
Byddwn yn fodlon cyfrannu yn Gymraeg neu	
Saesneg / I would be happy to contribute in English	
or Welsh.	

 9) A oes gennych fynediad at y rhyngrwyd yn eich cartref a dyfais i allu cymryd rhan mewn galwad Zoom (e.e cyfrifiadur, gliniadur neu dabled?) / Do you have internet access at home and a device to participate in a Zoom call (e.g computer, laptop, or tablet?)

Oes / Yes	
Nag oes / No	

10) Os hoffech gyfarwyddiadau ar sut i ddefnyddio Zoom a fyddai modd i chi gadarnhau y cyfeiriad e-bost/tŷ y dylem eu gyrru isod os gwelwch yn dda? / If you would like instructions on how to use Zoom could you please confirm the email / house address we should send them to below?

Adran 3 / Section 3

Diolch o galon i chi am ddarparu y manylion uchod ac am ddangos diddordeb mewn cyfranogi yn fy ymchwil. Bydd y manylion yr ydych wedi'i ddarparu yn y ffurflen hon yn cael ei gadw mewn dogfen electroneg a fydd wedi'i chloi gyda chyfrinair. Byddwn mewn cysylltiad gyda chi i adael i chi wybod a gawsoch eich dewis ar hap i gymryd rhan yn y grwpiau ffocws. Os oes gennych unrhyw gwestiynau pellach mae croeso i chi gysylltu gyda'r ymchwilydd, Gwenlli, drwy e-bostio <u>*****9b8@bangor.ac.uk</u>.

Thank you very much for providing the above details and for showing an interest in my research. Your provided details will now be stored in an electronic password protected file. I will be in touch to let you know whether you were randomly selected to participate in the focus groups. If you have any further questions, please do not hesitate to contact the researcher, Gwenlli, by e-mailing *********@bangor.ac.uk.

Appendix H: Focus group distress protocol

(Adapted from: Draucker, C B., Martsolf, D. S. and Poole, C. (2009) Developing Distress Protocols for research on Sensitive Topics. *Archives of Psychiatric Nursing*, 23(5), pp. 343-350.)

1) Distress	A participant indicates that they feel distressed (e.g turns their	
1) Distress		
2) Demond	camera off, starts crying, voice trembles).	
2) Respond	1) Stop the discussion.	
	 Ask if they feel able to carry on with the discussion. Participant will be reminded that they can send a private message to the researcher within the Zoom chat box if they don't wish to voice their concern in front of the rest of the participants. 	
	 If the participant feels able to carry on, the researcher will ask for permission to contact them after the Focus Group to discuss any concerns, before resuming the discussion. 	
	If the participant does not feel able to carry on, the researcher will ask for their permission to contact them after the Focus Group to discuss any concerns, before	
	inviting them to leave the Zoom call.	
3) Follow -up	Courtesy call to the participant (if participant consents) to discuss any concerns following the Focus Group. The researcher will also	
	refer the participant to the list of local well-being services created	
	by the Gwynedd Health and Wellbeing Partnership should they	
	wish to seek further support:	
	https://www.gwynedd.llyw.cymru/en/Residents/Documents-	
	Residents/Health-and-social-care-documents/Information-	
	booklet-looking-after-myself.pdf.	
	The researcher will offer to send the above link to the participant	
	over e-mail or post the pamphlet to them.	

Appendix I: Screenshots of Facebook posts to recruit focus group participants

Figure I1. Facebook post posted on the 18th/22nd/25th of January 2021:

Gwenlli Thomas ... Ionawr 22 · 🕄 *Please scroll down for English* Dros 18 ac eisiau cyfle i roi eich barn am y math o wasanaethau lles ydych chi eisiau eu gweld yn rhan o'r Prosiect Iechyd a Lles mae Grŵp Cynefin yn ei gynllunio yn Nyffryn Nantlle? Dw i'n chwilio am bobl o Ddyffryn Nantlle i gymryd rhan mewn grwpiau ffocws i drafod hyn ac a ydach chi eisiau i wasanaethau lles fod ar gael drwy bresgripsiwn cymdeithasol? Os ydach chi'n dymuno cael cyfle i fod yn rhan o'r drafodaeth, mae croeso i unrhyw un glicio ar y linc yma i roi eu manylion cyn y 5ed o Chwefror, os gwelwch yn dda. Cofiwch bwyso "Submit" ar y ddiwedd y ffurflen: https://forms.office.com/Pages/ResponsePage.aspx... (Os ydach chi eisiau mwy o wybodaeth am beth yw presgripsiwn cymdeithasol a beth fyddai cymryd rhan yn yr ymchwil yma yn ei olygu, cliciwch ar y linc yma: https://bangoroffice365-my.sharepoint.com/.../EQaX94Z6...) Mae croeso i chi gysylltu efo fi i holi unrhyw gwestiynau hefyd drwy e-bostio sou9b8@bangor.ac.uk. Bydd sampl mor gynrychioliadol â phosib o boblogaeth Dyffryn Nantlle yn cael eu dewis allan o bawb a fydd wedi darparu eu manylion. Diolch o flaen llaw! Are you 18 years old and want an opportunity to have your say on the kind of wellbeing services you would like to see as part of the Health and Well-being Project in the Nantlle Valley? I'm looking for people from the Nantlle Valley to take part in focus groups to discuss this and find out on behalf of Grŵp Cynefin whether you want well-being services to be available by social prescription. If you wish to participate in focus groups discussions, please can you provide your details by clicking on the following link before the 5th of February: https://forms.office.com/Pages/ResponsePage.aspx... (Further to the poster below, additional information about Social Prescribing and the research can be found by clicking on the following link: https://bangoroffice365-my.sharepoint.com/.../EV...) You're also welcomed to contact me for more information by emailing sou9b8@bangor.ac.uk. A sample as representative as possible of everyone in the Nantlle Valley will be selected at random from those who have completed the form. Thank you in advance!

Figure I2. Facebook post posted on 1st of February 2021:

Rhannodd Gwenlli Thomas ddolen. ... Chwefror 1 · 🕥 Mi fysa'n grêt cael mwy o bobl rhwng 18 a 30 mlwydd oed i ddod i drafod dyfodol Dyffryn Nantlle a'r math o wasanaethau lles ydych chi'n dymuno eu gweld yn rhan o'r Prosiect Iechyd a Lles. Mae hefyd dal croeso i unrhyw un sydd â diddordeb cymryd rhan roi eu henwau lawr. Linc i ddarparu eich manylion yma (dyddiad cau 5ed o Chwefror): https://forms.office.com/Pages/ResponsePage.aspx... Mwy o fanylion am yr ymchwil gyda Grŵp Cynefin yn yr erthygl DyffrynNantlle360 isod https://dyffrynnantlle.360.cymru/.../prosiect-iechyd.../ Llesiant Lleu It would be great to have more people between the ages of 18 and 30 come and discuss the future of the Nantlle Valley and the kind of well-being services you want to see as part of the Health and Wellbeing Project. Anyone interested in participating is also welcome to put their names down. Link to provide your details here (closing date is 5th February): https://forms.office.com/Pages/ResponsePage.aspx... More details about the research with Grŵp Cynefin in English: https://bangoroffice365-my.sharepoint.com/.../EV...

Figure I3. Posters included with each Facebook post:

Prosiect Iechyd a Lles Dyffryn Nantlle Cyfle i gymryd rhan mewn ymchwil

Mae Grŵp Cynefin eisiau gwybod a yw cymuned Dyffryn Nantlle eisiau gwasanaeth presgripsiwn cymdeithasol?

Mae Presgripsiwn Cymdeithasol yn wasanaeth sy'n rhoi'r opsiwn i ddoctoriaid teulu a gweithwyr gofal iechyd eraill (e.e. nyrsys ac ymwelwyr iechyd) gyfeirio pobl at wasanaethau yn y gymuned a allai wella eu hiechyd a'u lles (e.e grŵp ymarfer corff neu arddio.)

I ddarllen mwy am beth yw Presgripsiwn Cymdeithasol, cliciwch ar y linc i daflen wybodaeth ar y statws Facebook uchod.



- Bydd y grwpiau ffocws yn cyfarfod unwaith.
- Bydd pob cyfarfod yn para dwy awr.
- Bydd eich llais yn cael ei recordio yn ystod y drafodaeth.
- Bydd y cyfarfodydd yn cael eu cynnal gyda'r nos rhwng Chwefror ac Ebrill 2021.
- Cewch ddewis bod mewn cyfarfod Cymraeg neu Saesneg.
- Bydd y cyfarfodydd yn cael eu cynnal dros y we, drwy Zoom (os nad ydych yn siŵr sut i ddefnyddio Zoom, mi wnawn ni eich helpu).
- Bydd eich sylwadau yn helpu Grŵp Cynefin i ddeall pa fath o wasanaeth lles mae'r gymuned eisiau.

E-bostiwch Gwenlli am fwy o wybodaeth - sou9b8@bangor.ac.uk



Mae'r ymchwil wedi'i ariannu'n rhannol gan Gronfa Gymdeithasol Ewrop drwy ysgoloriaeth KESS2 Dwyrain.

Nantlle Valley Health and Well-being Project An opportunity to take part in research

once.

Grŵp Cynefin wants to know if the Nantlle Valley community wants a social prescribing service?

Social Prescribing is a service that gives GPs and other healthcare workers (e.g., nurses and health visitors) the option of referring people to community-based services that could improve their health and wellbeing (e.g., an exercise or gardening group).

To read more about what Social Prescribing is, click on the link to an information sheet on the Facebook status above.



• Each meeting will last two hours.

• Each focus group will meet

- Your voice will be recorded during the discussion.
- The meetings will be held in the evenings between February and April 2021.
- You can choose to attend an English or Welsh meeting.
- The meetings will be held over the internet, via Zoom (if you aren't sure how to use Zoom, we can help you).
- Your comments will help Grŵp Cynefin understand what kind of well-being services the community wants.

E-mail Gwenlli for more information - sou9b8@bangor.ac.uk



Appendix J: Focus group transcription coding frameworks

