

Nature-based social prescribing for connectedness and mental well-being:

A realist evaluation of staff's experiences of the project.

Interim Report

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Introduction & background

Social prescribing has been defined in Wales as 'connecting citizens to community support to better manage their health and wellbeing' (Rees et al, 2019; WG, 2022), although various models and definitions of social prescribing exist (Kimberlee, 2015; SCIE, 2020). Wales has developed a cross-sectional model of social prescribing that is integrated with existing community and statutory services (Public Health Wales, 2018; Wallace et al., 2021). It uses holistic and person-centred methods (Pringle & Jesurasa, 2022) to help empower individuals to recognise their own needs and strengths, and to connect with their communities for support with their health and well-being (WG, 2022).

In 2019, a 2-year realist evaluation research project was undertaken by Wrexham Glyndwr University (WGU), in partnership with the University of South Wales, Coleg Cambria and third-sector organisations. The project primarily aimed to understand the underpinning theory of how, why, for whom and to what extent the model of social prescribing used in WGU worked (Wallace et al, 2022a,b). A secondary aim of the project was to translate what was learnt for use across the higher- and further education sectors via a replicable model of social prescribing, to enhance student well-being, build resilience, and promote new ways of working and supporting students. WGU received funding from the Higher Education Funding Council of Wales (HEFCW) to build on this previous work (Wallace et al., 2022a, b) to develop a nature-based social prescribing intervention for their students.

The use of nature-based activities and interventions (NBIs) has become increasingly prevalent within social prescribing (Brag & Leck, 2017; Howarth and Lister, 2019; Shanahan et al., 2019). The referral to such activities builds upon the earlier concepts of referral for exercise or diet-based interventions (Patel et al., 2011). NBIs is an umbrella term for interventions that use nature-based organisations to support individuals to become physically and mentally healthier through contact with nature and spending time in natural or semi-natural environments (Newstead et al., 2023). NBIs include interventions such as green referral, blue referral, care farming, therapeutic horticulture and ecotherapy. NBIs include activities that fall under the umbrella of 'green referral' (Newstead et al., 2023) such as conservation activities, nature walks, gardening & therapeutic horticulture, and care farming (taking part in normal farming practices for health, socialisation and education) (Husk et al., 2018; Robinson et al., 2020). NBIS also include activities such as surfing, swimming or kayaking (Hope et al., 2022; Gibbs et al 2022; Wilkie et al., 2022) that fall under the umbrella of 'blue referral' (Newstead et al., 2023). Evidence suggests that NBIs provide a means to engage different populations to benefit social and community cohesion (Gonzalez et al, 2010), reduce inflammation (Van den Bosch and Bird, 2019) and can result in significant positive mental and physical health benefits (Bakolis et al, 2018; Li, 2009; McEwan et al., 2019; Sarris et al., 2019; White et al., 2019).

The link between social prescribing and green health is an important aspect which Wrexham Glyndwr University (WGU) and the University of South Wales (USW) want to develop further. The project used a co-creative approach which provided opportunities for students to find ways to feel more socially connected and be part of their university community, the wider community and the natural environment. The programme incorporated the establishment and delivery of various activities, events and physical changes to the university campuses, with the aim of evaluating:

- How nature-based social prescribing can be used as a tool to enhance student wellbeing and address students' connectedness
- How green spaces on campus can be further developed to improve or meet students' needs

Evaluation of the project utilised a mixed methods approach that includes: a scoping review, social return on investment, an exploration of 'what matters' to stakeholders', Group Concept Mapping and a Realist Evaluation. This document provides an interim report on the Realist Evaluation method (Wong & Papoutsji, 2016). This Realist Evaluation also aims to inform the 'programme theory', developed in prior research (Wallace et al., 2022a,b), that articulates why and to what extent the nature-based social prescribing works for this group, how students access the interventions, what forms they take, and when they are accessed. The initial programme theory (Wallace et al., 2022a) informed the development of a WGU Social Prescribing model that could be scaled for implementation within other Welsh Higher Education Institutions and beyond.

Method

The Realist Evaluation described within this report was conducted between December 2023 and January 2024 and reexamines the initial programme theory in the context of information gained through semi-structured interviews of staff from WGU. The online, semi-structured interviews were conducted with staff (n = 6) who encountered and/or had various roles to play in the establishment and delivery of a nature-based social prescribing programme. Interviews were audio recorded, transcribed verbatim and anonymised. In total 52 pages of transcript were examined. Interview participants included individuals employed in the roles of:

- Student Advice and Guidance
- Inclusion Services and Disability Support
- Student Support Navigation
- Web Development

A process for ethical approval was established for each component of the project. This was sought and secured primarily by the USW, Faculty of Life Sciences and Education low-risk ethics panel and then at WGU ethics committee.

Findings to Date

This realist evaluation builds on the findings of a previous Realist Evaluation (Wallace et al., 2022a) that sought to understand the underpinning theory of how, why, for whom and to what extent (impact) a new and innovative model of social prescribing in WGU worked. The previous work developed a series of transferrable principles for use across the HE sector and an initial programme theory. The timeframe for delivery of the project and issues around the recruitment of students following their engagement with the nature-based social prescribing model have limited the findings to date to the semi-structured interviews of staff members (n = 6). Work will continue to examine the experiences of students who engaged with the nature-based social prescribing offerings of WGU.

The Higher Education Model of Social Prescribing (Wallace et al., 2022a) identified a total of 24 transferrable principles (Appendices) that sat within the five key elements of the model (Figure 1):

1. A student-centred pathway
2. An accessible gateway
3. A skilled facilitator
4. Trusted safe credible resources
5. A healthy setting.

Each part of the model including its 24 transferrable principles were iteratively drawn from the various components of the evaluation. Findings from this Realist Evaluation are examined in accordance with the subcategorization of the previously developed principles.

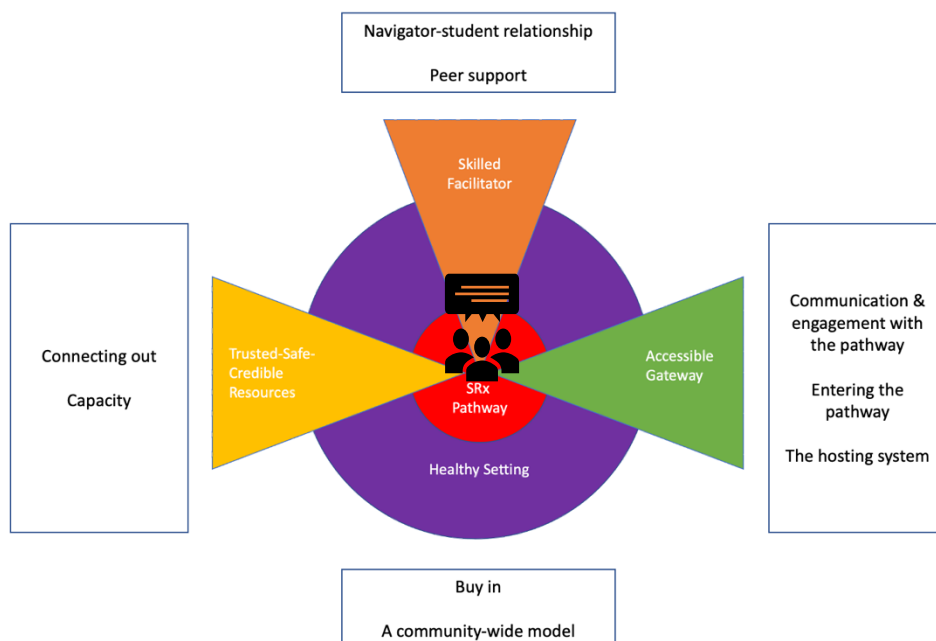


Figure 1: The Higher Education Social Prescribing Model (Wallace et al., 2022a)

1. A student-centred pathway

Staff interviews highlighted the importance of:

- multiple points of engagement to ascertain what activities and changes the students would like to see, including follow-up engagement to get more in-depth direction on generic suggestions.
- the benefits they hoped to see from the activities and changes they suggested.
- what they enjoyed, what they would like to see again / more of, and what they would like to see done differently.

One CMOC that sits under the theme of 'Student-led development' was produced.

Student-led development	CMOC: Engaging students in the process of identifying what activities and environmental changes they would like to see within the university (C), improves staff knowledge of the activities and changes students would like to see and how they expect to benefit from those changes (M), which results in the development of activities and environmental changes within the university that reflect student input (O).
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P2: "we've obtained kind of like students feedback and obviously like from the GCM initially we've taken that information and gone right 'this is what they've asked for, how can we implement that in different events or different activities'"

P2: "its been led by the students who are doing the work attending the university and seeing it in their surroundings on a daily basis....so its been really good getting the insight from students ... putting on an event knowing that people have actually requested it"

P2: "its been interesting in terms of like the team work and how we've all come together and been able to get kind of like that student engagement and feedback and then actually implement it and put the plan down"

2. An accessible gateway

Staff interviews provided evidence of the importance of staff working collaboratively and disseminating information via multiple methods (e.g., leaflets, posters, newsletters, emails, Students Union, Campus Talk, Social media posts, videos playing on university screens and speaking to students) to:

- Maximise awareness and engagement of both students and staff.
- Reduce barriers to engagement, e.g., anxiety regarding participation.
- Ensure that suggestions to attend and/or engage with activities or events are appropriately pitched to individuals.

The most effective method of communication and engagement was identified as staff members going around campus and speaking to students face-to-face about the activities and events. The conversations seemed to be most effective at piquing student interest and reducing anxiety about what engagement may entail.

Two CMOCs that sit under the theme of 'Communication & engagement with the pathway' were developed.

Communication & engagement with the pathway	CMOC: Staff aiming to maximise awareness and engagement for students (C), disseminate information via multiple methods (M), so that students (and staff) are more aware of what activities/events are available and what engagement with them would entail (O).
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P1: *"there's a lot of like leaflets around like advertising the individual events, like aromatherapy, candle making sessions...so staff and students are aware of the activities...so they are advertised quite well in that building and through like the campus newsletters and things like that for students"*

P2: *"anyone we've spoken to we've asked if they've wanted information about kind of like future events, and if they have then we send them regular emails to kind of like update with what's coming up so they don't miss out on anything...so we are not just kind of like relying on for example, like social media to get information out"*

P2: *"so its having kind of like that open and honest conversation with them explaining who I am, explaining a bit about the project ... explaining it in a simple manner but one that's kind of like attractive to them as well...so its not just like you have to do this and this"*

P2: *"we've promoted the events on multiple platforms, so we've accessed kind of like our social media, the newsletters that students and staff receive, accommodation newsletters...we've physically gone onto campuses and verbally spoken to individuals about the events that have been held"*

P2: *"more often or not, they either follow back up with kind of like an email to check in to say 'when was it that you said it was on again' or 'is there anything else'"*

P2: *"we've answered any questions that anyone has had at all. If there's been any specific requirements of support, whether its an event, getting to an event...we've supported that, so for many of the events have kind of like been held at our other campus in Northop, we've on occasions provided transport for students to allow them to get there.....we've supplied kind of like all the equipment of they needed anything specific"*

P3: *"the way we advertise things, we are quite creative, we understand our students.....our student cohort are more mature students so we don't really post on like TikTok or something, its FaceBook or Instagram cos that's what our students use"*

P6: *"just going out, speaking to the students and saying what's going on and then kind of explaining things a little bit more, has been the best way of getting communication out there....means you can send as many emails as you want but I think just having a person to speak to and explain like why we are doing this, has been the most successful."*

P6: *"Campus Talk has been used, so that is a monthly email that gets sent out by our marketing team, that has been used....but I think primarily the thing that has got students involved has been staff members going out and speaking to students"*

Communication & engagement with the pathway	CMOC: Staff who have a good awareness of what activities/events are occurring on campus (C), can suggest specific activities/events to students (M), for improvements to students' wellbeing (O).
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P4: "some of those staff who work within my area, who maybe kind of seeing some of the benefits for the students in terms of...cos they're aware of what's on offer for example and they may suggest to the students well actually if you get involved with this, this may also help you with your wellbeing as well"

P4: "so obviously with the Social Prescribing Project and now the Green Social Prescribing Project as well, there's more opportunities for us to look at where you know we could potentially, not just within my own team xxxx for support but within the wider teams as well to support those students....whether that be kind of like nature based activity, or any other kind of support activities for example support with wellbeing and mental health."

P4: "so its kind of pitching what would work and what might not necessarily work for some of those students as well...depending on what they are presenting and their level of need I guess, of you know where they are and where they may want to participate in an activity for example."

There were also several suggestions to help improve awareness and engagement in the future.

Suggestion 1: Publishing a long-term schedule of activities/events would make it easier for both staff and students to plan their engagement.

Suggestion 2: Running fewer activities over a longer period of time may reduce barriers to engagement for neurodivergent students by preventing information overload.

Suggestion 3: Adverts for future engagement opportunities could incorporate feedback from previous attendees to give students a greater insight into what they can expect if they take part in the activity/event and the benefits of engagement.

Suggestion 4: A peer mentor programme for students could aid engagement and connectedness.

P1: So the only things that I can say like to perhaps improve upon it in the future, is for information purposes....so there were a lot of individual sessions...but they were all separate pieces of information rather than it being a schedule of 'these are things that you can join in on', I think that would be really helpful for students to be able to plan when they can attend things, and you know pick whichever activity appeals to them most"

P1: "if you had a course over a few weeks your confidence would perhaps grow in those sessions, if you know you've learned a little bit more in the time in between and you're a familiar with other students or staff members on it, it could be more active engagement rather than just listening"

P1: "it would be helpful to either have fewer activities over like a longer amount of time....because information overload is quite a common thing and particularly within our university we have a high proportion of students who are neuro-diverse and having all of these individual activities rather than one thing that they can develop, I think can perhaps be a barrier for students, particularly if they've got communication needs and don't know who's going to be in the sessions and that kind of thing"

P2: "going forward, it would be really good to kind of like have a monthly timetable of certain events ... so they know for example, they can do five different things once a month, and then it happens January through to July for example....and having those sessions put on, and the time and everything the same each month so then there's no alternations, no confusion for students and having that continuation and that like regularity of support and the opportunities for students because we'd get to know students on a different level, but also that they would have that connectedness, they might build different friendship groups because they are attending a different session that they potentially wouldn't attend"

P6: "so students being paired up with students to help combat that isolation or that loneliness or just with our cohort we have a really high number of mature students...a lot of students are re-entering education but they're also can struggle with like confidence and not feeling that they're in the right place...so I think if there was a mentor programme

where students could be linked up with fellow students to do kind of low level wellbeing activities but just to provide that support and advice from a fellow student...I think that would be really good”

3. A skilled facilitator

The interviews highlighted the importance of the roles of Student Support Navigators and Student Advice and Guidance Assistants in facilitating engagement with the activities and events offered by WGU. These roles were key to:

- Breaking down barriers between staff and students
- Fostering a more open dialogue with students
- Increasing awareness of what activities and events were available and what they entailed
- Highlighting the benefits of attendance and engagement and increasing confidence to allow students to engage.

One CMCO that sits under the theme of ‘Staff – student relationship’ was developed.

Staff - student relationship	CMOC: Open and honest conversations with students about the nature-based social prescribing offerings, through engagement at university support services, around campus and at events (C), increase familiarity between staff and students (M), resulting in a more open dialogue that improves engagement of students and their connectedness to staff and other students (O).
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P2: “it feels like more of a community...so we’ve hosted an event that was specifically for kind of like our accommodation students and a group of them did an activity together and a few of those students have then come on to further events, so we get to know them”

P2: “if you are walking down the corridor and you see a student you know, not through the services but through the projects, they like openly talk to you, they chat and ask and its more kind of like breaking those barrier”

P2: “its having that regularity for students as well and kind of familiarity of them knowing who’s hosting it, getting to know us as people as well as not just kind of like the support staff...so then we are more approachable and it kind of breaks down that barrier for students accessing support as well....[we] are more approachable to be able to access any support or ask a question and not feel silly for asking a question.”

P2: “if I’m just walking around campus wherever I’m going and students that have either been on the sessions or they’ve spoke to me about the sessions, they are kind of like approaching me to say ‘hello’ and what not, and they seem more open to kind of like asking questions or enquiring about different things.....whereas I feel many students who haven’t been on the interventions and met me as a person kind of thing, they don’t....they look at you and then they like walk away once they see that you’re a staff member kind of thing, so its breaking that barrier down between the students”

4. Trusted and safe credible resources

No evidence was collected that fell under the umbrella of trusted and safe credible resources.

5. A healthy setting

The interviews highlighted the importance and impact of activities/events and the physical improvements to existing outside spaces for both staff and students for:

- Facilitating connectedness to others and the environment.
- Learning skills and building confidence
- Taking time out and improving their wellbeing

Five CMCOs that sit under the theme of ‘Connectedness and wellbeing’ were developed.

Connectedness and wellbeing	CMOC: Having an array of activities/events on the different campuses (C), allows staff to attend around their schedule (M) and make connections they wouldn't ordinarily make (O).
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P1: “what I really enjoyed was all the staff helping out, so within our university we’ve bought an old horse box to make like a juice bar for students to use, but staff were encouraged to help paint it and you know make it all look nice....and that in itself, although it wasn’t a scheduled activity, it was really nice because you were with people outside as well”

P2: “The relaxation room and stuff at times we’ve been able to use them as kind of like members of the public I’d say and not kind of like work colleagues....and I know that there have been quite a few staff attending the events that we’ve hosted through kind of like through their own choice, we’ve not said like ‘they have to’ and what not.....and they found it really useful that they’ve been able to have that time to switch off and kind of like its not their job role....and its not kind of like part of what they need to be doing, they just chose to do it.”

P3: “its about like student wellbeing and connectiveness and using like these green spaces and social activities outside, or try to base them outside....as a way to create a more.....just create a more connected campus I guess, cos we are all quite separated in our own sort of teams and activities that we do on a day to day basis....but I think this is to kind of bring people together that you wouldn’t usually meet”

Connectedness and wellbeing	CMOC: Having an array of activities/events on the different campuses (C), means that students can make connections outside of the classroom (M), which allows them to build different friendships, learn different skills and build confidence (O).
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P2: “I’ve had the experience where people come into university, attend their lectures and then leave....and then go back to like their normal life outside the university....whereas I feel its so valuable for many students and I feel like it would have been valuable for me to be able to have that connection or to have an activity that wasn’t related to kind of like your academic studies, so then you could then build different friendships, learn different skills, kind of like build your

confidence and your ability to kind of like increase like self-esteem and what not, so I feel like its invaluable to a lot of our students and the fact that so many students have come to kind of like more than one event, it shows that there's a need for it"

**Connectedness
and wellbeing**

CMOC: Physical improvements to existing outside spaces (C), make the spaces more usable and pleasant to utilise (M), which increases feelings of connectedness (to others and nature) and wellbeing for both staff and students (O).

P1: "we have pods now which are in like some of the open spaces where you can sit and you can work there, or talk with colleagues there, regardless of the weather and that's quite nice in itself, you're like 'I don't have to be at my desk to work hard'"

P1: "it definitely has changed like the physical environment with for example the pods that students or staff members can use as like either meetings or have their lunch out there, so I have noticed a lot of changes around the campus and I think it has the impression that we care about the campus as well, rather than just 'oh there's a bit of grass over there', its like 'ooh what you can do with it', and I think that is very positive for students as well you know just actually taking care of the environment that they are in...so I would say that it has quite a significant impact on the physical space of the campus, and seeing as well that they are actually being used more by students is really positive...like its very difficult to get into the pods a lot of the time, cos there's like groups of students working on a project together"

P1: "the environments change quite a lot, there's like a lot of plants and things growing around...I didn't expect that to make you feel so nice....so even when you are just walking from one building to the other for a meeting, just being in a space that's cared for is really nice, it makes you feel quite fuzzy.... I didn't expect that to be honest, I thought it was just like 'oh, we'll put this space here and people can use it if they want', but actually just looking at the space, not necessarily even using it has a positive impact."

P3: "they've got like sitting areas and they've got these pods to create a place for someone to you know, do their studying whilst still being connected to like the wifi and having somewhere warm to sit though its kind of outside, its like a bubble....without actually having to face the elements of North Wales in winter"

P3: "like the green space is in between the buildings so its kind of like a square and its in the middle....when I was a student here you kind of forget that's there...but now they are doing things with it and they've got more things

there....like they've got the pods, the benches, just like drinks trailer thing....there's more of an incentive to go and actually see what's happening there...and see what new developments they've put in place....so really its just kind of reminded me they are there, so I can use these spaces on campus"

P4: "actually being able to see the benefit and actually seeing where that money has been spent on campus to support the wellbeing and you know staff are using the facilities as well....and it is nice here, we've got some lovely pods which we've got in our quad area and we can just go and have a meeting in there, it does just sometimes make you feel better than just being stuck in the office...so I think you know, I've taken my team in there and we were like 'oh this is lovely'"

P5: "if you say 'let's go to the pods' everyone knows what you mean, everyone knows it those little cubes in the middle garden...yeah, I think we'd be like 'yeah, but its ok cos its got internet and its got heating and it'll be dry', they are the big selling points"

Connectedness
and wellbeing

CMOC: Having an array of activities/events and improvements to natural spaces on the different campuses (C), allows staff and students to take time out from academia (M), which allows them to temporarily switch off, reduce stress and improve their wellbeing (O).

P1: "I would describe it as like an introduction to different things that you can do that are either mindful or you are learning how to engage with the environment around you more"

P1: there's this pressure isn't there to always like work hard and you know not take breaks and you know be productive all the time, but from those sessions you kind of think actually 'does having like a twenty minute walk over my lunch break impact me that much, in fact does it make me more productive in the afternoon cos I've had a break and I've had like a change of scenery', so I'd say that's one thing"

P1: "activities like that encourage a lot of self-reflection, and that most of the time its always a good thing I would say....so even if you only attend one session, you might notice something in your like daily routine that you can either tailor or change a little bit, that will serve you well in the future"

P2: "we've got like outside pods, so they can be outside in a different environment that's not a classroom or the library, and they can sit with their friends and they can do group work, they can do their assignments, they can read and its kind of like having that connectedness"

P2: "even like one of the academic staff who saw the dogs for like five minutes before they went said that it 'changed her whole mood for the day'"

P2: "so when the relaxation room was on, it allowed students to be in a room in the university that was completely different to anywhere else they would have been and have that experience and then obviously the dogs on campus,

many students either have pets at home which allows them to kind of like have that familiarity and the connection from home but also allows them to relax and be close to the animals and not think”

P2: “everyone says when you think of self-care its like ‘go for a massage’ or ‘go for like a bubble bath’ and its kind of like ‘yes that might be nice’ but its allowing yourself to kind of like be out of that kind of like your daily life....so when the relaxation room was on, it allowed students to be in a room in the university that was completely different to anywhere else they would have been and have that experience”

P3: “it kind of allows you to or escape outdoors really...have another place to think about things, and it just puts things into perspective really....you know when you are sat there, you get caught up in your work, you just need a minute just to think things over....I think going outside, well for me anyway its something that helps”

**Connectedness
and wellbeing**

CMOC: Staff having an input into and awareness of the project (C), through meetings and regular emails (M), leads to increased feelings of trust, inclusion and of being listened to.

P5: “So we go sent out all staff email with a bit of information about it and then there was also a thing there where you could fill in a questionnaire and then there was at least one follow up questionnaire, possibly two....sort of looking at some of the different ideas that people must have given in the first sort of bit of research, and asking what things people thought would be best....I took part in those questionnaires and then there’s been the university newsletter they sent out, where they’ve let people know about what they’ve implemented, like the pods and sensory garden”

P5: “its something that they’ve added that is not necessarily just for the students but also for the staff, and university....they sometimes do a lot of things that are for the academic staff but not necessarily for operational staff, like that do all the behind the scenes admin and stuff, cos they do lectures for academic and that...so it was kind of nice to see something come that was for everyone”

P4: “I had quite a lot of joint meetings with those who have been responsible but you know in terms of....perhaps you know I had inputs particularly with some of the interventions for the Green Social Prescribing Project”

Conclusion

This Realist Evaluation forms part of a mixed methods approach to examine how nature-based social prescribing can be used as a tool to enhance student wellbeing and address students' connectedness, and how green spaces on campus can be further developed to improve or meet students' needs. It examined evidence from semi-structured interviews in the context of the initial programme theory (Wallace et al., 2022a) which informed the development of a WGU Social Prescribing model, and the accompanying principles.

The Higher Education Model of Social Prescribing (Wallace et al., 2022a) identified a total of 24 transferrable principles (Appendices) that sat within the five key elements of the model. In total nine CMOCs were developed, of which only one aligned with the previously developed principles. We have therefore suggested 4 additional principles for this particular model of nature-based social prescribing, discussed below.

- One CMOC was identified that sits within 'A student-centred pathway' under the theme of student-led development. And which provides support for principles 1 and 3 (Appendices).
- Two CMOCs were developed that sit within 'An accessible gateway' under the theme of 'Communication & engagement with the pathway'. These CMOCs only loosely aligned with two of the previously established principles 8 & 10 (Appendices).

Suggested additional principle 1: Develop a culture in which staff with a student-facing role have a good awareness of what activities and events are being offered by the university and what participation in these activities/events entails, and are able to disseminate this information by various methods, and maximise opportunities to engage students in dialogue about the various activities and events and what engagement with them entails.

- One CMOC was identified that sits within 'A skilled facilitator' under the theme of 'staff-student development', acknowledging that the facilitator role for this particular social prescribing model extends beyond the role of student navigator. This CMOC, while touching on the two previously established principles (16 and 18, Appendices) did not sit comfortably under either.

Suggested additional principle 2: Reducing barriers between staff and students, though staff engagement in activities/events and open dialogue is key to the effective engagement of students with the pathway.

- Five CMOCs were developed that sit within 'A healthy setting' under the theme of 'Connectedness and wellbeing'. These CMOCs did not align with any of the previously established principles for the Higher Education Model of Social Prescribing (Wallace et al., 2022a).

Suggested additional principle 3: Working co-productively with staff from within the university results in increased feelings of trust, inclusion and of being listened to.

Suggested additional principle 4: The hosting of various activities/events and the improvements to natural spaces at the university have a positive impact on connectedness and wellbeing for both staff and students.

This evaluation highlights that while the student navigator position plays an important role in the success of implementing a nature-based social prescribing programme within a university, all staff who have contact with students can contribute to the dissemination of information, signposting and reducing barriers to engagement. The evaluation also highlights that engagement with the nature-based social prescribing programme has benefits to students, regarding wellbeing and connectedness (both with others and with nature). However, the provision of freely accessible activities/events and the improvements to natural spaces in the university extends those same benefits to the academic and supporting staff of the university. Findings also indicate that including staff outside of the project at various stages of the project implementation has a positive impact on staffs feelings of trust, inclusion and of being listened to, potentially increasing their perceptions of connectedness to the university and other staff members.

It should be noted that the Higher Education Model of Social Prescribing (Wallace et al., 2022a) outlines a model in which students access social prescribing interventions through 'an accessible gateway' with a 'skilled facilitator who adopts a holistic approach within a meaningful relationship. This relationship is based on a 'what matters' conversation which then leads to a co-produced solution for the student to take forward. The programme of nature-based social prescribing implemented at WGU employs a more fluid form of engagement in which activities and events are hosted at the various campuses of the university and engagement of both staff and students can occur through the pathway described above as well as spontaneously. Additionally, the previous model did not account for the impact of improvements to natural spaces in the university.

We, therefore, suggest that the original programme theory for the Higher Education Model of Social Prescribing be modified to account for these differences. However, the extent of the modification would best be delayed until data collection has been completed. As with any review, what is desired needs to be balanced with what is feasible within a given timeframe. The time frame for implementation of the programme and collection of the data was challenged by engagement from stakeholders. The small sample size for this Realist Evaluation and the lack of student insight limit the conclusions that can be made.

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The 24 transferrable principles of the Higher Education Model of Social Prescribing which is comprised of five key parts; a student-centred pathway, an accessible gateway, skilled facilitator, trusted safe credible resources, a healthy setting:

A student-centred pathway: the importance of student engagement at the outset of the model development in order to form a rich and sustainable relationship centred approach.

- **PRINCIPLE 1:** Starting the service development process with a method that differentiates between the student voice and staff perception of student need, may give confidence to students that their needs will be met.
- **PRINCIPLE 2:** Validated individual student outcome measures in addition to core data items should be identified and agreed at the beginning of service development, so that information informs student centred service development and delivery.
- **PRINCIPLE 3:** Acknowledging the diverse needs of the student, in addition to entering into a co-productive relationship with students will increase a sense of trust and encourage student participation throughout the pathway.

An accessible gateway

Communication and engagement, the pathway was influenced by the way in which staff and students received the information. They expressed a lack of understanding about the concept of social prescribing and the model which led to confusion and frustration. The findings demonstrated the importance of regular, repeated information and awareness raising amongst all stakeholders to help embed knowledge and recollection of the provision.

- **PRINCIPLE 4:** The provision of clear accessible guidance, and training delivered in a range of formats that includes information about the new model, its purpose, and the terms used within social prescribing.
- **PRINCIPLE 5:** Ongoing provision of guidance, training and awareness raising of the model targeted towards all stakeholders and via a range of outlets and formats [a process not an event].
- **PRINCIPLE 6:** Training and workshops provide better opportunities for staff to learn about the model and the pathways, rather than an abundance of information shared via other outlets. For example, email, and one-to-one or group training and inductions may be more effective to help ensure effective understanding and ongoing engagement with the model.

- **PRINCIPLE 7:** Developing systems such as live tutorials, staff buddying/peer support to help ensure that the model and its overall utility are clearly communicated and understood [increased confidence in application of the system and the benefits of the model].
- **PRINCIPLE 8:** Developing a culture in which all staff with a student facing role maximise opportunities to engage in ‘what matters’ conversations and make onward referrals to social prescribing where appropriate.
- **PRINCIPLE 9:** Ensuring that all assets and support services can be located via a single gateway will maximise accessibility, contributing to a more holistic experience for pathway users.

Entering the pathway

Mixed experiences amongst students when entering the social prescribing pathway further highlight the importance of providing information, training, guidance and awareness raising regarding both the model itself and accessing/using the system.

- **PRINCIPLE 10:** Provide clear accessible guidance (delivered in a range of formats) for using the system and the routes into the service.
- **PRINCIPLE 11:** Consider the co-development of ‘reasons’ for referrals and information/guidance with students – what type of information (and what it looks like) that would best suit them.
- **PRINCIPLE 12:** A prompt turnaround from referral to contact was a key feature of students’ experience of the service. Consideration as to how sustainable short turnarounds are, and the expectations of students to be seen quickly needs to be carefully managed. The student data report (Annex E) highlights numbers of students entering the service were lower than anticipated. If the service continues to grow and larger numbers of students enter the pathway and receive a social prescription, consideration needs to be given regarding how this will be managed.
- **PRINCIPLE 13:** Blended delivery offers accessibility, choice. Considerations about how this is managed include digital poverty/internet accessibility, and ensuring that online or physical, discussions take place privately and cannot be overheard and the student feels ‘safe’.

The hosting system

Our findings indicate that positive experiences of usability of the social prescribing platform by WGU staff was compromised by the requirement to continue using the existing Customer Relationship Management (CRM) system, resulting in duplication of time and effort. In addition, a lack of feedback and information following a referral meant uncertainty and was thought to affect the ability to monitor the new model and its impact.

- **PRINCIPLE 14:** Clear parameters need to be defined regarding the scope and function of the hosting platform in order to manage stakeholder expectation and reduce duplication of effort.
- **PRINCIPLE 15:** The software/social prescribing system used should provide feedback to the referrer regarding the student's overall progress within the system.

A SKILLED FACILITATOR

Navigator-student relationship

The development of a high-quality relationship between student and navigator emerged as being absolutely key; facilitating an open and honest dialogue being crucial to the co-production of a meaningful social prescription.

- **PRINCIPLE 16:** Cultivating meaningful relationships grounded within reciprocity are key to effective engagement with the social prescribing pathway.
- **PRINCIPLE 17:** The 'What Matters' conversation is integral to the social prescribing process and affords the opportunity for the prescriber and student to co-produce a solution that is tailored to their individual needs.
- **PRINCIPLE 18:** A holistic approach to social prescribing in which signposting to services forms only one part of the provision, builds reassurance and increases engagement with students.

Peer Support

The fact that peers may have encountered similar situations themselves emerged as a mechanism leading to increased empathy and sharing of successful solutions.

PRINCIPLE 19: Using peer volunteers will effectively leverage the knowledge and experience of other students, but robust training and support structures must first be set in place.

Trusted safe credible resources

Connecting Out

The data in this report indicates that 'connecting out' may have been curtailed by issues such as Covid 19, and an absence of pre-existing relationships between those in the university and wider community – one positive corollary of this study is that these connections are now beginning to be made.

PRINCIPLE 20: Connecting out and establishing trusted-safe-credible services with the wider community, offers greater choice and independence for students, knowledge of available provision [students and staff) and sustainable support.

Capacity

The current issues regarding access to mental health services (Senedd Cymru, 2021) were reflected in the pathway developed here, with a significant volume of students presenting at a point of crisis. As a consequence, there was limited engagement by those with lower-level wellbeing issues (the originally perceived users of the service).

- **PRINCIPLE 21:** The scope of the pathway must be fully defined at inception; maximising efficacy for appropriate users whilst mitigating psychological pressure for those undertaking the navigator role.
- **PRINCIPLE 22:** Clear alternative referral routes must be in place for those presenting with higher levels of acuity.

A healthy setting

Buy-in

The work undertaken to incept and further develop the WGU model has indicated the importance of achieving buy-in if one is to effect meaningful collaboration and co-production with stakeholders from within and beyond the university.

PRINCIPLE 23: Working co-productively with partners from within and beyond the organisation from inception generates deeper insight into the purpose of the pathway, and results in the development of a shared vision for the service that all stakeholders have bought into.

A community-wide Model

To fully maximise and realise the benefits of social prescribing, our findings demonstrate recognition of the need to situate WGU and connect the new model to its local community.

PRINCIPLE 24: When developing a sustainable model of social prescribing for students, it is imperative to consider the wider context – both in terms of asset availability and congruence with the wider political and strategy drivers.