1) What plans are there to link in with VCSE / providers referenced in bid?

Through my role as Health Promotion Lead within the MSK Physiotherapy team I have very good relationships with Active Lifestyles Team, Health Improvement Team and MORElife. Depending on patients' personal goals we will be able to refer through to these programmes via the usual referral routes. As with some of our patients in our pilot year, their goals have been related to more social integration and mood, for these patients we have referred them to local social prescribers via their GP. After speaking with the Active Lifestyles and Salford Social Prescribing team, due to our low referral numbers no changes to the existing pathway have been made.

2) After attending the 12 week programme, will there be any signposting / plans in place to ensure physical activity is maintained?

There is a well established model for 12 week supervised exercise within Salford which meets NICE guidelines for the management of Peripheral Arterial Disease (PAD) delivered by the cardiac rehabilitation team. It is yet to be determined as to whether supervised exercise in active foot disease will be effective but, at present, it excludes patients from accessing this type of intervention. We have been liaising with this team to align our efforts with their already established success. Following on from our discussions with them we will aim to follow patients up after the initial 12 weeks at 6, 9 and 12 months during the funded project time. This will allow us to collect meaningful data for ongoing developments.

Diabetic foot ulceration accounts for £900million per year, equating to almost 1% of the NHS budget. There is a 50% mortality rate associated with a diabetic foot ulcer through cardio vascular disease and by demonstrating that exercise can be beneficial and more importantly, not consequential in terms of foot health, then we would hope to demonstrate clear value in investing in this type of therapy for patients. By using the wearable activity trackers, we envisage developing innovative ways of remote monitoring being explored through the duration of this project and it would be hoped that this could lead to a sustainable model for patients and clinicians going forward.

3) What feedback did you receive from the 10 patients involved in the pilot? Were any changes made following feedback?

We have been experimenting with what data and feedback to collect over the last year. We have consulted associated literature and with the existing similar cardiovascular PVD rehab programme to establish various relevant measures (height, weight, BMI, 5STS, PHQ9, self-reported days of activity).

Initially we trialled using the Diabetes Self-Management Questionnaire (DSMQ) but stopped using this after feedback from several patients that it was too long and repetitive.

We also trialled using the timed up and go (TUG) and 6 metre walk test (6MWT) as they are well validated physical fitness outcome measures, however, for our actively

ulcerated patient group and the environment we work in they were unsuitable and unreliable. Therefore, we switched to the five sit-to-stand test (5STS). Patients reported this was simple and quick to perform and enjoyed seeing this as part of their prescribed exercise program and seeing themselves improve was motivating.

Due to a lack of funding to our pilot year we have been using self-reported measured to track activity levels, however, the literature around activity based behaviour change highlights the massive risk of bias here. The funding will allow us to provide simple activity trackers so we can collect accurate data and use these to motivate and goal set with patients. We have been adapting and using smart phone apps, however, this has not been appropriate/feasible for all patients and has not provided consistent data.

We have been creating a workbook to go alongside our treatment sessions. Whilst creating this, the patients gave their feedback on wording, use of images, preference on layout of the exercise progamme and calendar. We used colleagues in different departments to provide objective feedback and made the advised changes. After learning that the general literacy age for Diabetics in Salford can be between 7 – 9 years old, we used a friend working in primary school to help us adapt the language and layout to suit this. The feedback from the patients was that it was much clearer and easier to follow than our original efforts. This work is ongoing and the first 3 months of the funded year will be used to take this to print.

Alongside our outcome measures we have collected verbal feedback on different aspects of the pilot year sessions. The general themes collated include: enjoying learning about their condition, feeling like they have more control, understanding how exercise can help them, feeling more independent, and improved mood.

Due to these patients being complex and multifactorial, physical activity levels are not always everyone's main concern. One 35 year old patient did not wish to engage with the circuits-based exercise programme, instead, we chose to use the NHS 'Active10' app to monitor his walking efforts and he was already meeting the physical activity guidelines. We pride ourselves on being patient-centred and after SMART goal discussions it became apparent that his low mood around his condition was related to his footwear and his appearance in social situations. Due to the collaborative nature of the Diabetic Foot MDT we easily referred him through to orthotics to complete his treatment with them.

Patients who have so far been through the pilot clinics at Salford Royal Hospital have given positive feedback and have self-reported increases in activity levels. Due to the close links with the wider MDT, this in turn has seen an increase in the patients' concordance with all aspects of their treatment plans.

One particular success story from the pilot involves a 50 year old male who started the programme in a wheelchair and only leaving his home for hospital appointments now regularly walks on his street and has met with social prescribers in a local coffee shop to discuss ongoing goals. He reports that he is feeling more positive about his health than he has for some time and has enjoyed the social interactions he has missed out on for so long whilst managing his active diabetic foot disease.

Similarly, a 56 year old male who has been with he diabetic foot service for many years became one of our first pilot patients. He began the programme going 5 minute seated cardio exercises 3 times a week and progressed to adding a 30minute gym weights session being able to deadlift 20kg.

Finally, a 60 year old female electric scooter user goal was to be able to walk up and down the stairs. She previously spent most of her day being sedentary and did not believe she could safely engage in exercise. She is now completing 3 strength and balance circuit sessions at home alongside 2 pilates sessions per week and is completing a full flight of stairs up to 3 times a day. We are following her up in 3 months time with the goal of referring through to the Active Lifestyles Team to consider doing her pilates in a group environment. This patient commented that she feels like she has had a new lease of life and feels like she can now do something everyday to help herself, rather than being totally reliant on the podiatry service.

4) In the sustainability section, reference is made to wider services such as social prescribing / HIP - how will these form part of the project?

We use a person-centred approach rather than a 1 size fits all. We spend time with the patient's going through what their personal goals are and refer onwards as and when appropriate. As this is a usual part of my MSK clinical job there is minimal work to be done here. Currently, our low numbers of patients mean there is little need to set up new pathways. We may well find, as we grow our project, that the social prescribing need is greater than we have originally found and new referral pathways directly from our clinic can be easily set up as has been done for my colleagues in MSKCATS service in recent years. Currently, we are writing to the GP to facilitate this and we have had no issues thus far. In terms of the HIP/Active Lifestyles, once the patient's ulcers are fully healed we are referring them via the usual referral process with a supporting email to outline the patients history and any restrictions to their mobility/weight bearing. With higher patient numbers there may be scope to set up a similar branch/referral pathway and upskill the Active Lifestyles team similar to that of the CANmove arm of the progamme (specifically for those with a history of Cancer) but this will be further into the future and is not planned to be included in our funded year.