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Background

- Chronic pain affects between 1-2.8 million people in Scotland and costs between 3 and 10% of annual GDP¹.
- The British Pain Society recommends multidisciplinary, cognitive behavioural pain management groups (PMP) as the gold standard treatment of choice for persistent pain. PMP's are cost effective, reduce health care consumption, medication use and onward referral to specialist services².
- Traditionally PMP's have only been offered to people who had failed prior medical interventions, however, recent research suggests a less intensive PMP, can be effective and cost effective if delivered at an early stage³.
- This project focused on utilising existing expertise and information assets in the specialist Lothian Chronic Pain service to work with GP's and colleagues in primary care to test the efficacy of a lower intensity, community based pain management group, as well as co-develop a pain pathway that spans primary and secondary care.

Aims of the Project

- To test out a lower intensity community PMP as a key part of developing a pain management pathway between primary and secondary care.
- To utilise the existing resources and expertise of the LCPS to increase access to pain management as a viable alternative to medication by developing a pain management pathway that offers a range of interventions for people with chronic pain.
- To establish the LCPS as the Development Hub to ensure all developments in pain management are well coordinated and evidence-based, ensuring good clinical governance and continuity of care.

Methodology

- 18 patients completed one of two 6-week pilot pain management programmes, developed by adapting material from the existing PMP programme.
- Data on symptoms of anxiety and depression (HADS), pain intensity and interference (BPI), work and social adjustment (WASAS) and pain self-efficacy (PSEQ) was collected pre-group, post-group and at 3 month follow-up. Opiate prescription data for participants and use of GP services was also collected and analysed, as well as qualitative data as to the acceptability of this development.

Outcomes

Patient Self-Reported Scores

13 patients attended at least 5 out of 6 group dates and provided completed data from pre and post intervention. These patients showed statistically significant improvements for measures of anxiety (HADS-A), depression (HADS D), work and social adjustment(WASA), and pain self efficacy (PSEQ).

This statistically significant improvement was also found to be maintained at 3 month follow up, with a continued improvement in Pain Self Efficacy. A statistically significant improvement was also found for patients' perception of pain interference (BPI) at 3 month follow up which was not found in post-group scores.

Comparing patients who attended more groups sessions found that patients who attended 5 or more group sessions, had significantly improved scores for anxiety, depression and pain self-efficacy than those who attended fewer sessions of the group programme.

When compared to the longer AAH PMP, patients who completed the shorter C-PMP showed similar improvements, although for some measures the AAH PMP was superior (Figure 3.). This indicates the need for both interventions and a need to clarify their particular benefits.

Opioid Prescription

The expected outcomes for patients not exposed to any pain management is for opioid prescription to remain at a similar level or gradually increase over time. Patients who attended the C PMP showed a general trend of reduction in opioid prescription post C-PMP intervention.

Interestingly, patients who were assessed but did not attend the C PMP had a significantly higher baseline level of opioid prescription than those who did attend the C PMP Pilot. This indicates more input may be needed to engage and support those on higher doses of opiates.

GP Attendance

Patients who attended at least one session of the C PMP used GP services significantly less than they had prior to the intervention.

Participants who attended 5 or more sessions of the C PMP pilot showed an even more significant reduction in use of GP services.

Pain Management Pathway

A proposed pain management pathway has been developed in conjunction with key stakeholders, which involves the expansion of the LCPS into a Trust wide resource with a "one stop shop" for referrals. (Figure 1.) This would need some "top up" resource due to the expansion of pain management options and integrating these interventions in to GP practices and primary care.

Figure 1: Proposed Expansion of Pain Management NHS Lothian

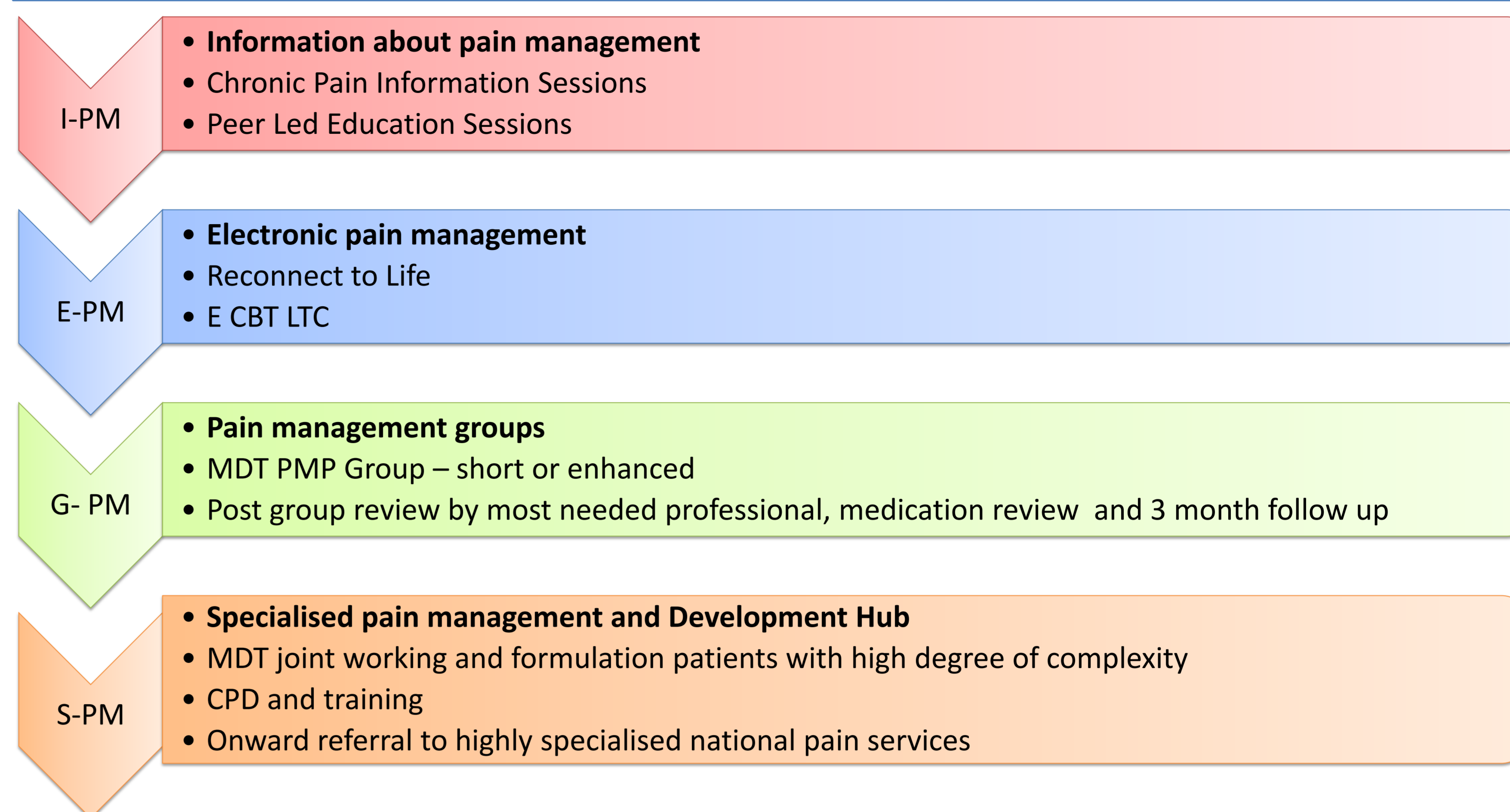


Figure 2: Patient and GP comments about the Community Pain Management Programme Pilot

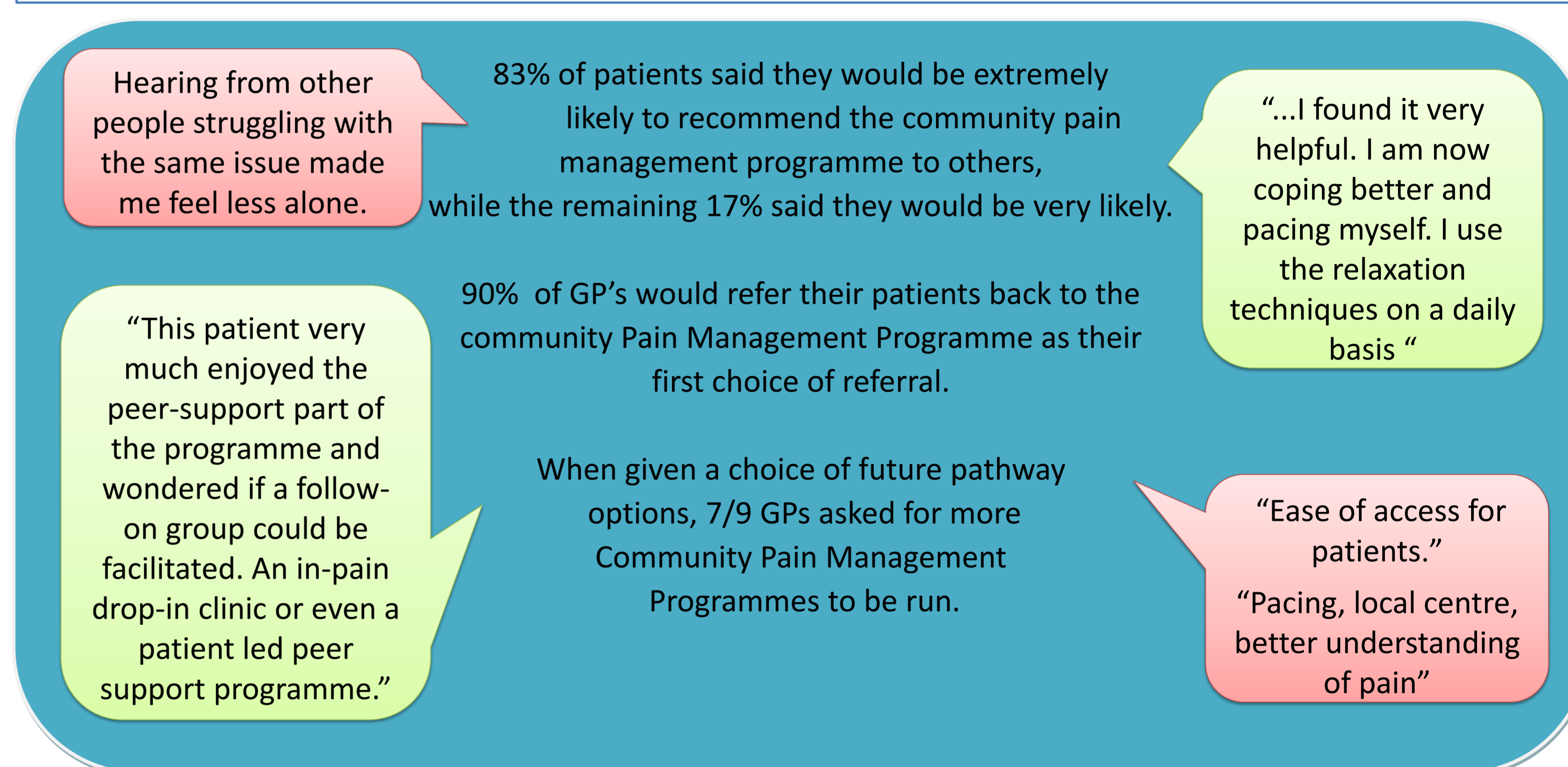


Figure 3: Comparing the outcomes of the C- PMP to AAH Specialised AAH PMP

	C-PMP	AAH PMP
BPI Interference Average, Pre-group	7.53	7.04
BPI Interference Average, Post-group	6.87	5.75
BPI Interference Average, Follow up*	6.41	N/A
HADS A Average, Pre-group	11.87	12.01
HADS A Average, Post-group	9.73	10.1
HADS A Average, Follow up*	10.25	N/A
HADS D Average, Pre-group	11.09	10.97
HADS D Average, Post-group	9.13	8.52
HADS D Average, Follow up*	10.18	N/A
PSEQ Average, Pre-group	19.85	24.3
PSEQ Average, Post-group	27.33	31.96
PSEQ Average, Follow up *	30.28	N/A

*BPI Interference= Brief Pain Inventory, interference with life measures ; HADS A=Hospital Anxiety and Depression Scale, Anxiety HADS D=Hospital Anxiety and Depression Scale, Depression ,SEQ=Pain Self Efficacy Questionnaire (assesses confidence people with ongoing pain have in performing activities while in pain)

Conclusion and what's next?

- Patients showed statistically significant improvements in managing their pain with less reliance on pain medication and GP appointments for pain management.
- Patients and GP's showed a high degree of satisfaction and acceptability for multidisciplinary CBT based PMP groups to be offered closer to home, as well as developing other PMP interventions that could meet to the needs of the diverse chronic pain population (Figure 2).
- Collaboration has been a key part of the success of this project.
- Early indications from a further test of change indicate that an expansion of the whole PMP pathway is preferable to just offering a lower intensity community based pain management programme, as there is a need to be able to offer a range of interventions and have an integrated care pathway for chronic pain. This model will be piloted in one area in 2019.
- Further tests of change are planned that include locally delivered pain management information sessions, a trial electronic pain management (e-cbt LTC) , and a specialist route for more complex patients.

References

- The British Pain Society. *Guidelines for Pain Management, Programmes for adults: An evidence-based review prepared on behalf of the British Pain Society.* : The British Pain Society; November 2013. 2.Mellor, R. Chronic Pain Project Group. Scottish Public Health Network (ScotPHN).Health Care Needs Assessment of Adult Chronic Pain Services in Scotland, (2018)