1

Research Article

Shared Medical Appointments for Multimorbidity: Harnessing the Relational

Maria Kordowicz^{1,2}, Duncan Moss³, Saul Bloxham⁴, Elizabeth Edwards-Smith⁵, Charles Edward Parry-Jones⁶, Juliet Rayment⁷, Samuel Vaughan⁸

 City Institute of Higher Learning, Canada; 2. Community and Health Research Unit, University of Lincoln, United Kingdom; 3. Clinical Psychology Department, University of Plymouth, United Kingdom; 4. School of Sport Health & Wellbeing, Plymouth Marjon University, Plymouth, United Kingdom; 5. Evalesco Consulting, United Kingdom; 6. Peverell Park Surgery, United Kingdom; 7. Centre for Maternal and Child Health Research, City, University of London, London, United Kingdom; 8. Health and Wellbeing Clinic, Plymouth Marjon University, Plymouth, United Kingdom

Background: Shared medical appointments (SMAs) involve a clinician seeing more than one patient at a time and are often thought of as advantageous in terms of saving human and financial resources and may be especially helpful in multimorbidity management in primary care. SMAs are typically rated highly by both patients and the clinicians delivering them.

Aim: The aim of the study was to explore staff and patients' views about SMAs, in particular the dynamics and relational processes underpinning their experiences of the SMAs.

Design and Setting: The study utilised qualitative inquiry within a general practice setting.

Method: Focus groups were carried out with staff and patients who had been involved with an SMA pilot in general practice.

Results: Results stemming from thematic analysis suggest that the holistic care and space for relational processes provided by SMAs underpin the satisfaction of patients, GPs, and the wider primary care team.

Conclusion: SMAs offer an opportunity for both patients and GPs to have an enhanced experience of managing chronic multi-morbid health conditions.

Correspondence: <u>papers@team.qeios.com</u> — Qeios will forward to the authors

Introduction

Shared Medical Appointments (SMAs) consist of a clinician seeing more than one patient simultaneously within an allocated timeslot. SMAs have not only been promoted as a means of saving time and resources in practice^{[1][2]}, particularly around multimorbidity care^[3], but also as offering the space to harness group dynamics for improved patient engagement and care (e.g. ^[4]).

According to the National Institute for Clinical Excellence, 'Multimorbidity matters because it is associated with reduced quality of life, higher mortality (...) health services use (including unplanned or emergency care)^{15]}. The aim of SMAs is to improve the care for people with long-term conditions over and above standard care, offering a unique model compared to one-to-one appointments, with the aim of improving quality of life for patients. Further, SMAs offer scope for inter-professional collaboration, drawing on its benefits, such as a reduction in professional isolation and an increase in morale at work for general practitioners^[6].

In the standard model of care, patients are referred to existing services that are well-established but inflexible^[7]. Evidence from previous studies suggests that the system of 'one problem; one ten-minute appointment' does not adequately support people living with long-term, complex conditions with multiple, debilitating symptoms, including chronic pain^[8], as well as being more likely to cause staff fatigue and burnout^[9]. Typically, pharmaceutical solutions such as opioid painkillers are an understandable solution to chronic pain within the confines of the standard system, within which it may be challenging to support patients to implement long-term, sustainable lifestyle changes^[10]. Harris and colleagues^[11] claimed that SMAs bring a range of benefits such as learning from other group members, promoting self-management and building trust between patients and health professionals over time.

A general practice in England, partnering with Marjon University and Evalesco Consulting, funded by The Health Foundation, piloted the use of SMAs as an alternative to traditional GP consultations. Due to local patient need and demand, the focus of the groups was initially on chronic pain management (all SMA patients were prescribed opioid medication), though all invited patients had comorbidities of two or more long-term physical and/or mental health conditions. Only one invited patient declined. The SMAs were facilitated by an interprofessional team consisting of a GP, a health and wellbeing practitioner and a practice administrator, with the support of a Clinical Psychologist who provided psychoeducation for the patients and reflective sessions for the clinicians. Groups of up to eight patients had an appointment at the same time which lasted for two hours, and the topic of the session was typically patient-led. Each SMA patient attended an average of 4.6 shared medical appointments during the pilot. Three-weekly SMAs were held for three cohorts.

Relational group dynamics and processes within SMAs are thought to play an important part in patient engagement with the sessions, as well as adherence to health behaviour change. There are documented benefits of the group process on patients' ability to manage their chronic pain, as well as an increase in activity levels^[12]. Within the well-established practice of group psychotherapy, as well as in psycho-education groups, relational group processes are often viewed as the catalyst for the client's transformational experience, through the development of shared empathy and fostering connection among group members^{[13][14]} and normalisation of their experience^[15]. Our evaluation research sought to understand how relational and interprofessional facets of the SMAs were perceived by both patients and staff and whether they were viewed as having an impact on the effectiveness of the SMAs and, if so, how.

Method

Data collection took place at the general practice. Qualitative methods were employed in order to gather the perceptions of the staff and patients about the SMAs as part of its evaluation. Qualitative approaches have been used widely to explore the perspectives of healthcare professionals and patients and have been proven to be an effective data collection method (e.g. ^[16]). Data sources consisted of 19 reflective voice notes taken by the SMA facilitators at the end of each session, along with one exploratory interview with the Clinical Psychologist to shape focus group questions and one staff and one patient focus group transcript.

The invitation to participate in the focus groups was offered to all 24 SMA patients, clarifying that the group would be led by an independent researcher. There were 18 patients and one patient relative present at the focus group. Most of the patients had been using the SMAs since their inception, with a handful who had just joined a new group and were one or two sessions in.

The second focus group consisted of the staff who had delivered the SMA intervention, including management, academic, operational, clinical and support staff from the GP practice, Evalesco Consulting and Plymouth Marjon University. A patient representative also took part in the second focus group. Seven participants joined the staff focus group.

The focus groups were facilitated by MK. Before voice recording of the groups began, the purpose of the study was explained to the participants and verbal consent was sought for focus group participation. The participants were assured that they could move around during the focus groups and leave the room if needed without asking for permission. It was emphasised to the patient participants that they were not being asked to discuss their specific health conditions unless they wanted to.

The patient participants were encouraged to speak freely and told that their specific contributions would be anonymised in any resulting publications and would not be directly attributed when feeding back the findings to the SMA facilitators.

The focus groups were organised around a series of questions pertaining to knowledge of the assumed benefits and limitations of SMAs, as well as the project implementation team's areas of interest regarding the success or otherwise of the work. However, the facilitator left space for free association and for the discussion to flow to reveal unexpected areas for enquiry and for all participants to have a chance to speak. The pre-prepared questions were as outlined in Boxes 1 and 2:

-	
•	Tell me what your shared medical appointments are like
•	What did you think when you were first approached to take part in them? How did this come about?
•	How satisfactory, or otherwise, have you found them?
•	How easy are the sessions to access?
•	Have they helped you and, if so, how?
•	Have you seen your GP less one-to-one?
•	Are there times when shared medical appointments would not be suitable?
•	Do they mean you get more or less time with a doctor/healthcare professional?
•	What is the pace like?
•	What does it feel like when new people join? How long will you continue using the group for?
•	How would you describe the quality of care you receive through shared medical appointments?
•	Have the shared medical appointments increased or decreased your healthcare choices?
•	What about your mental/physical wellbeing?
•	Have you learned more about your health? How confident are you in using what you've learned? Would you say
	you are now better at self-managing your condition?
•	Do you go about your life more easily?
•	What are your thoughts on peer support and learning from other patients?
•	Have you had any concerns about being seen in a group, e.g. confidentiality, privacy, etc.?
•	Has the experience of an SMA helped you manage your pain? Given you a greater sense of control? Have you
	learned more about your medication? Has this led to a medication reduction? What does this mean to you?
•	Have you seen an impact on other group members? How would you describe it?
•	What sorts of issues does the group address?
•	How long would you like the groups to continue for? How could the groups be improved?
•	Do you prefer the group to be facilitated by the same people or different people each week? Does a GP always
	need to be there? What about a wellbeing practitioner? Could patients run the group by themselves?

Box 1. Patient Focus Group Questions

•	How did you become involved in the project?
•	What are the advantages of SMAs for clinicians? For patients?
•	What are the disadvantages of SMAs for clinicians? For patients?
•	Do the SMAs lead to improved clinical outcomes?
•	How are patients selected for the group?
•	Has the project improved your productivity and, if so, how?
•	Has repetition in your work reduced as a result of the SMAs?
•	Have you seen one-to-one repeat GP visits reducing?
•	Are SMAs cost-effective?
•	Is the length/number of SMAs appropriate?
•	How do you encourage peer support in the group?
•	How do you manage new joiners?
•	How do you manage those at different stages of change?
•	Do you get to know your patients better in one-to-one appointments or in SMAs?
•	Is the current staff mix right for the SMAs?
•	What have you found challenging?
•	What have you learned about group dynamics?
•	Is the psychological input for both the SMA facilitators and the patients important?
•	Has it been useful to capture reflective notes? Have these been used for formative improvement?
•	How do you support one another in running the SMAs, both the facilitators and the wider team?
•	Would you like to see SMAs continue in the practice?
•	Could the SMAs be rolled out more widely and, if so, how?
•	What has your key learning been?
•	What is needed for your own development?

Box 2. Staff Focus Group Questions

The patient group was stopped at one hour and forty minutes when no new ideas emerged and it would have affected the comfort of the participants to keep the group going. The staff group lasted one and a half hours with a natural comfort break taken after an hour. MK immersed herself in the data by repeatedly listening to the recordings and taking notes in order to identify recurrent ideas using codes, which were then organised into overarching themes along with illustrative excerpts.

During the process of analysis, the six-step guidelines developed by Braun and Clarke^[17] were applied by MK. These suggest that the following iterative steps are undertaken to achieve analytical rigour and to allow for meaningful claims to be made:

- 1. Familiarising oneself with the data
- 2. Generating initial codes
- 3. Searching for themes
- 4. Reviewing themes
- 5. Defining and naming themes
- 6. Producing the report.

The analysis was also developed through discussion with a qualitative researcher (JR), in order to reduce bias through a further objective view. The analysis took on an inductive/deductive hybrid^[18] whereby the evaluators' prior knowledge of health systems shaped the theme interpretation and discussion, yet their definition was led by the synthesis of participant responses.

Results

The overarching themes and key areas of interest are presented with illustrative quote excerpts to convey the commonalities across the three data sources. 'Pp.' is shorthand for patient focus group participant and 'Sp.' for staff focus group participant.

Holistic care at the centre of SMA acceptability

Conventional ten-minute GP appointments limit patients to discussing one concern per appointment. In contrast, Shared Medical Appointments offered time for participants to explore all of their symptoms with the same clinician:

'If you think about it as well, for the four different things you would have to have four different appointments. So in that way it is time saving.' (Pp. 3)

'If you think about it in those two hours you have so much information.' (Sp. 7)

Having more time within appointments was one of the strongest benefits of this model of care for people living with complex conditions. It allowed patients to discuss their experiences and collaboratively negotiate changes to their care, including their key concern of reducing medication safely, in a way they had found difficult in the conventional system:

'You never got any [medicine] reviews until this actually happened. Any time I got it reduced, I never actually got asked whether I can cope with it, and now I am being asked if I can cope with it. So now I have managed to reduce it down. So knowing the fact that he's actually there (...) and seeing if it works without having to wait months for an appointment.' (Pp. 13)

Having more time also meant that clinicians appeared less likely to try and 'fix' a problem quickly with medication. Instead, there was much perceived benefit in the SMA groups being jointly facilitated by the GP and the health and wellbeing practitioner to offer support to make holistic changes that may be difficult to achieve within a ten-minute appointment. These changes were then supported through repeated group meetings every three weeks:

'I realised there was a need here to help patients in a different way. We felt we needed to do something different, to have more time, to allow them to help each other more, to also introduce non-medical interventions a bit more (...). You have more space and time which allows you to think about something and come back to it, in a way which you don't get in a consultation.' (Sp. 1) 'Being able to go back to the gym again has been a godsend to me. I have actually been taught a bit of mindfulness which I now do at home. (...) I think it has been the best thing I have ever tried to be honest, knowing that there are other things you can do.' (Pp.13)

This way of working was also new to patients and appeared to help them view their conditions and their management differently. SMAs showed them ways of living well with pain, rather than focusing on eliminating it entirely, and to approach mental and physical health holistically:

'They want somebody to fix them. And I think some of the groups have changed from that to OK actually this is where I am at the moment and there are things that I can do that are enjoyable and fulfil me and it's not all about the pain.' (Sp. 5)

'Rather than the blinkered "you're here for one thing and nothing else matters", of course everything is connected, your mental health, your physical health, diet.' (Pp. 3)

Harnessing the relational to address patient needs

As a group process, SMAs aimed to address both the clinical and social needs of participants, bringing people together to help reduce feelings of isolation and improve their resilience. The individuals we spoke to described the impact of SMAs very much in terms of relationships—those between patient-peers and between patients and clinicians—with the relational supported through several elements:

Continuity of care

SMAs supported continuity whereby the same group saw the same practitioners for the duration of the project. Despite the innovative nature of this model of care, one participant compared it to 'old-fashioned doctoring', which would have also involved the same continuity that was important to those with long-term conditions:

'If you have a long-term condition the [standard] system doesn't work. You need continuity of care, you need old fashioned doctoring. The system is just set up to deal with acute conditions and to tick a box. This is why the group is so useful.' (Pp. 3)

Patients also described their relief at not having to re-tell their story at each medical appointment, as was usually the case, especially when seeing a different or a locum GP:

'And you see the same doctor. This is very important, especially for people who have multiple problems. I usually waste a whole appointment trying to explain all my conditions to a new doctor.' (Pp. 4)

Equality and empowerment

Continuity of care, through SMAs, offered a chance to build ongoing relationships, but also made them more equal. SMAs gave patients the opportunity to learn more about their own condition and encouraged a collaborative approach to managing care:

, (...) we combine elements of disciplines and make it patient led, rather than telling people what to do. We do this in partnership and try to facilitate people doing this their own way as they often have answers to their own issues. They are their own experts in their own lives.' (Sp. 6)

Relationships that might otherwise have been quite formal or even paternalistic were described in terms of 'friendship':

'It's all the other stuff; it's not just sit down and see a doctor (...) it is almost like having a friend telling you.' (Pp. 14).

Staff colleagues described the positive influence of the health and wellbeing practitioner in the groups, who was used to working to empower patients to manage their own conditions:

'the approach feels "real life" and accessible, more so than perhaps a purely biomedical approach. Over time, we hope that patients take on a greater responsibility for their conditions and work on what they can change.' (Sp. 4)

Peer support

One aim of SMAs was the use of peer-to-peer support to help reduce feelings of isolation and improve resilience. This group process appeared central to the programme's success, giving patients opportunities to share and learn from others and not just rely solely on their GP.

The group offered suggestions and solutions to managing symptoms, which were especially valuable when patients felt 'stuck':

'From a personal point of view you often sit there in consultation and you don't have all the answers to give to someone, so having it in a group it's easier to empower people to come up with their own solutions more than in a 1:1 setting. Peers can sometimes chip in with solutions.' (Sp. 1) 'I had a breakdown (...) and from a mental health perspective knowing that you are sitting at a table with other people who are going through similar things you don't feel like you are the only person going through it. So it has settled me (...) and knowing that there are ways and means.' (Pp. 9)

Social support and emotional wellbeing

The group offered social connection and a routine for people who were otherwise quite isolated:

'the human connection between patients and the whole group, that sharing is crucial to all life and without that we cannot lead fulfilled lives.' (Sp. 7).

'It is nice to see others with similar conditions as you feel less isolated and it makes you feel like you are not on your own with it, as often it can be quite debilitating' (Pp. 8) For some participants, this was one of the only connections they had with other people in their day-today lives:

'I often don't see anybody for weeks on end, me. Especially in the Winter I just don't see people. I have seen more people coming to this in the last few weeks than I have done in the last six months.' (Pp. 4)

'When I leave I cannot wait for the next one. It gives you something to focus on. You do not feel alone. Someone is sharing the problem with you. (...) It's the banter, the no judgement, it is really good, (...) we have a laugh. You get that nowhere else; you forget about it for a couple of hours, you focus on someone else. Family doesn't always understand, you tend to wear a mask [but] (...) here you can just be your normal self.' (Pp. 16)

Clinicians' working relationships

The SMAs not only benefited patient relationships but had many advantages for clinicians' working relationships too. GPs usually work alone during clinic, and the change to joint working was welcome, also bringing clinical benefits for patients:

'It is important to have two people facilitating these, as sometimes when difficulties have come up, we have had a bit of a chat about it, should we do something differently or have a change of plan. The way one works normally as a clinician can be quite lonely or isolating and you can be on your own with things, and often you want to have a chat with a colleague and there isn't anyone around and often you don't have that time.' (Sp. 1)

'I think it has had a positive impact on our own mental wellbeing and almost being able to unload a little bit (...) when we articulate uncertainty and discuss it between the two of us, it's almost as if we are unburdening a little bit and there is that shared recognition.' (Sp. 6)

In particular, working in an interprofessional team gave GPs alternative insights into treatment and a rare opportunity to reflect, collaboratively, on their practice and clinical decision-making:

'I think quite a few times we have been thinking similar things and [had] we had just left at the end of the session, we wouldn't have discussed them, but often [in discussion] at the end of the session we saw that we had similar feelings.' (Sp. 6) For the health and wellbeing practitioner, working with a GP offered them legitimacy and then better treatment acceptance from the patients they were working with:

'Sometimes the problem I have is convincing people I know what I am talking about. Because I am non-medical, I don't have that caché that a GP has, that kind of inbuilt power that people see. (...) If a GP tells you to do something, people tend to do it. (...) The fact that I am not a medical professional myself, I have to win people over (...) [but the GP] being there from the start gave me legitimacy which made it easier for me.' (Sp. 6)

The process of devising, setting up and facilitating the group had brought an embedded reflexive element to their work that influenced everyone involved, further enabled by the input of a clinical psychologist into supporting the staff facilitators, as well as by offering sessions in mindfulness to the patients:

'I feel that the whole group was interested in and committed to being reflective in the whole process. So there was an interest in the group. (...) This is hard to quantify, but I think it is that capacity and that quality that I think really affects the process of a group like this.' (Sp. 5)

Discussion

Summary

Our evaluation has found that by using an innovative mode of appointment delivery in an interprofessional context, SMAs encouraged more holistic, multifaceted support for people experiencing multimorbidity and pain. Of particular focus has been the exploration that much of this innovative support emerges from relational elements, elements that may be hard to replicate in the 10-minute, one-to-one appointment, and arguably even more so within a strained, pandemic-recovery primary care context.

Our findings indicate that these relational elements feature for both patients and the professionals involved. For patients, this includes the opportunity to share an empathic and normalising space with people who understand what it can be like to live with chronic health issues. For professionals, it includes the opportunity to work in a collaborative context, sharing decision-making, increasing reflexivity and reducing professional isolation. We also note that this shared professional space was also facilitated by a broader 'steering' group that created a supportive and reflective atmosphere which arguably helped scaffold the actual clinical appointments.

Strengths and limitations

Our evaluation study focused on the 'soft' qualitative facets of how SMAs were experienced by staff and patients and therefore appropriately utilised qualitative methodology to gain these person-centred understandings. It would also be of interest to evaluate SMAs on the basis of cost/benefit to the practice and to the wider system. We did not look at objective patient outcomes and did not follow up the patients to assess whether SMAs had an impact on their condition and its management longer term.

At the time of writing, the SMAs were pivoting to online delivery, and it is important to understand the role technology may play in mediating group dynamics, mutual support and 'presence', especially given the more embedded GP virtual access as a result of past pandemic restrictions.

Comparison with existing literature

There are parallels to be drawn between our findings and literature about the benefits of group dynamics (e.g. ^{[12][19][20]}). Indeed, Heyworth and others^[21] found that patients rated SMAs as more satisfactory than treatment as usual and identified effective clinician/patient communication within SMAs as one of the modes underpinning quality care.

Where we add to knowledge is by highlighting the role of relational processes in SMAs in general practice for both patient and staff satisfaction. Relational group process, studied widely in psychotherapy, emphasises inter-subjective relating between individuals and the group, as well as the impact of mutual influence. Our findings indicate that the presence and influence of others helped reduce isolation for both patients and staff, helping to nurture a more holistic approach and understanding of pain and multimorbidity. Mutual empowerment achieved through the reflective and reflexive space offered by the SMA (typically difficult to achieve within the time constraints of traditional GP appointments) is a well-documented feature of psychotherapeutic groupwork^[22].

In the context of multimorbidity management and interprofessional working, and in line with Dysvik and Stephens' work on group-based chronic rehabilitation^[23], SMAs allowed for dialogue, challenging patient and professional power asymmetries, and crucially reduced isolation for both patients and staff. During a time of low morale and burnout within the healthcare professions and the need for team-based support as they undertake pandemic recovery^[24], it may be that SMAs are a timely mode of care delivery to improve staff engagement.

Implications for practice

It was clear from our findings that the social and relational elements of the group were just as important to patients as the clinical care. Shared experience, friendship and a routine contributed to their wellbeing. This, along with the focus on education and empowerment, helped them learn to manage their own conditions. These groups were targeted at those living with chronic pain but have the potential to be used for a variety of other chronic conditions. SMAs not only had benefits for patients but also for facilitators. The opportunity for shared working, reflection, connection and new skills was valued by health professionals.

The difference between SMAs and standard care is, fundamentally, in what drives the care being offered. The standard primary care participants had experienced was *service-led*: the system was fixed and patients were referred to whatever pre-existing services might best suit them. In contrast, shared medical appointments were patient*-needs-led*. The extra time gave service users the chance to explain their own individual needs, and facilitators could respond to the needs of the group holistically over time during regular appointments, upholding patient-centredness and continuity of care.

To conclude, SMAs offer an opportunity for patients, GPs, and health & wellbeing practitioners to have an enhanced experience of managing chronic multi-morbid health conditions, along with a broader opportunity to encourage reflexive and collaborative work—harnessing the 'relational' across the board.

Statements and Declarations

Funding

The SMA pilot was funded by The Health Foundation through Innovating for Improvement.

Potential Competing Interests

DM, SB, EP–J, EE–S & SV were part of the team implementing the SMAs. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Ethics

This study was conducted in accordance with the Declaration of Helsinki. As a service evaluation of an existing clinical service, formal ethical approval was deemed not required by the Health Research

Authority. Approval for the evaluation was obtained from the practice governance lead. All participants received a participant information sheet and gave written informed consent to take part in the focus groups and for their anonymised data to be used for publication. They were informed that their contributions would be anonymised and that, while confidentiality within the group could not be fully guaranteed, all participants were asked to respect one another's privacy. Data were securely stored and accessed only by the evaluation team.

Data Availability

The datasets generated and analysed during the current study are not publicly available as they contain information that could compromise participant privacy.

Reporting Guidelines

The authors followed the COREQ (Consolidated criteria for reporting qualitative research) guidelines in the preparation of this manuscript.

Author Contributions

- MK: Conceptualisation, Methodology, Investigation, Formal Analysis, Writing Original Draft.
- JR: Formal Analysis, Writing Review & Editing.
- All authors contributed to the work and approved its final version.

References

- [▲]Menon K, et al. (2017). "Shared medical appointments may Be Effective for Improving Clinical and Behavi oral Outcomes in Type 2 Diabetes: A Narrative Review." Frontiers in Endocrinology. 8:263. doi:<u>10.3389/fend</u> <u>0.2017.00263</u>.
- 2. [△]Noffsinger EB (2009). The Physicals Shared Medical Appointment Model: A Revolutionary Access Solution for Private Physical Examinations. New York, NY: Springer. doi:<u>10.1007/b106441_5</u>.
- 3. [△]Farmer C, Fenu E, O'Flynn N, Guthrie B (2016). "Clinical assessment and management of multimorbidity: s ummary of NICE guidance." British Medical Journal. **354**:i4843.
- 4. [△]Hunter LJ, Da Motta G, McCourt C, Wiseman O, Rayment JL, Haora P, Wiggins M, Harden A (2018). "Better t ogether: A qualitative exploration of women's perceptions and experiences of group antenatal care." Wome n and Birth. 32(4):336–345. doi:10.1016/j.wombi.2018.09.001.

- 5. [△]National Institute for Health and Care Excellence (NICE) (2016). "Multimorbidity: Assessment, Prioritisatio n and Management of Care for People with Commonly Occurring Multimorbidity." National Institute for H ealth and Care Excellence. PMID <u>27683922</u>.
- 6. [△]Busari J, Moll F, Duits A (2017). "Understanding the impact of interprofessional collaboration on the qualit y of care: a case report from a small-scale resource limited health care environment." J Multidiscip Healthc. 10:227–234. doi:10.2147/JMDH.S140042.
- 7. [△]Kordowicz M, Hack-Polay D (2021). "Community assets and multimorbidity: a qualitative scoping." PLoS ONE. 16(2):e0246856.
- 8. [△]Hood-Medland EA, White AEC, Kravitz RL, Henry SG (2021). "Agenda setting and visit openings in primar y care visits involving patients taking opioids for chronic pain." BMC Fam Pract. 22(1):4. doi:<u>10.1186/s12875-</u> <u>020-01317-4</u>.
- 9. [^]Flaxman P (2015). "Letters: the 10-minute appointment." British Journal of General Practice. **65**(640):573– 574. doi:<u>10.3399/bjgp15X687313</u>.
- 10. [△]Trouvin A-P, Attal N, Perrot S (2022). "Lifestyle and chronic pain: double jeopardy?" British Journal of Ana esthesia. 129(3):278–281. doi:10.1016/j.bja.2022.06.006.
- ^{a, b}Subramaniam V, Stewart M, Smith J (1999). "The development and impact of a chronic pain support gro up: a qualitative and quantitative study." Journal of Pain and Symptom Management. 17(5):376–383. doi:<u>10.</u> <u>1016/S0885-3924(99)00012-3</u>.
- ^Billow RM (2017). "Relational Group Psychotherapy: An Overview. Part II: Relational Models of Group Pro cess." Group Analysis. 50(2):135–158. doi:10.1177/0533316417699730.
- [^]Comstock D, Duffey T, St. George H (2010). "The Relational-Cultural Model: A Framework forGroup Proces s." The Journal for Specialists inGroup Work. 27(3):254-272. doi:<u>10.1177/0193392202027003002</u>.
- 15. [△]Finucane A, Mercer SW (2006). "An exploratory mixed methods study of the acceptability and effectivenes s of Mindfulness-Based Cognitive Therapy for patients with active depression and anxiety inprimary care." BMC Psychiatry. 7(6):14. doi:<u>10.1186/1471-244X-6-14</u>.
- 16. [△]Pope C, van Royen P, Baker R (2002). "Qualitative methods in research on healthcare quality." Qual Saf He alth Care. 11(2):148–152. doi:<u>10.1136/qhc.11.2.148</u>.

- 17. [^]Braun V, Clarke V (2006). "Using thematic analysis in psychology." Qualitative Research in Psychology. 3
 (2):77–101.
- [^]Fereday J, Muir-Cochrane E (2006). "Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development." International Journal of Qualitative Methods. 5 (1):80–92. doi:<u>10.1177/160940690600500107</u>.
- 19. [△]Hayhoe B, Verma A, Kumar S (2017). "Shared medical appointments." BMJ. **358**:j4034. doi:<u>10.1136/bmj.j403</u> <u>4</u>.
- 20. [△]Bartley KB, Haney R (2010). "Shared medical appointments. Improving access, outcomes and satisfaction f or patients with chronic cardiac disease." J Cardiovasc Nurs. **25**(1):13–19. doi:<u>10.1097/JCN.0b013e3181b8e82e</u>.
- 21. [△]Heyworth L, Rozenblum R, Burgess JF Jr, Baker E, Meterko M, Prescott D, Neuwirth Z, Simon SR (2014). "Inf luence of shared medical appointments on patient satisfaction: a retrospective 3-year study." Ann Fam Me d. 12(4):324–30. doi:<u>10.1370/afm.1660</u>.
- 22. [△]Erskine RG (2013). "Relational Group Process: Developments in a Transactional Analysis Model of Group P sychotherapy." Transactional Analysis Journal. **43**(4):262–275. doi:<u>10.1177/0362153713515179</u>.
- 23. [△]Dysvik E, Stephens P (2010). "Conducting rehabilitation groups for people suffering from chronic pain." Int J Nurs Pract. 3:233–40. doi:<u>10.1111/j.1440-172X.2010.01825.x</u>.
- 24. [△]Walton M, Murray E, Christian MD (2020). "Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic." Eur Heart J Acute Cardiovasc Care. 9:241–247. doi:<u>10.1177/2048872</u> <u>620922795</u>.

Declarations

Funding: The SMA pilot was funded by The Health Foundation through Innovating for Improvement. **Potential competing interests:** DM, SB, EP–J, EE–S & SV were part of the team implementing the SMAs. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.