

Title: Self-management support activities in primary care: a qualitative study to compare provision across common health problems.

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Abstract

Objective: To explore the views of primary care teams **about the provision of** self-management support to patients with common health problems.

Methods: Semi-structured interviews were conducted with twenty-one members of the primary care team from thirteen general practices. Interviews were transcribed verbatim, and analysed using the 'Framework' approach.

Results: **Three categories and six sub-categories illustrating different self-management support activities across common health problems were identified from the analysis of interviews, and contributed to one major theme and one cross-cutting theme. Referral and signposting were frequently used to facilitate patient engagement with external services and resources. Practitioners faced some challenges in balancing medical management and psychosocial support and motivating patients to engage with self-management.**

Conclusions: **Primary care teams described providing a wide range of self-management support activities, but the pattern of use varied for different types of health problem. These patterns may have been influenced, in part, by general practices focusing upon achieving financially incentivised quality improvement goals.**

Practice implications: **To improve self-management support, practitioners need a digital repository of services/resources, motivational interviewing skills, an understanding of the optimum duration and pattern of consultations, and incentivised targets that match a biopsychosocial model of care.**

Keywords: Chronic disease; General practice; Long-term conditions; Medically unexplained symptoms; Mental Health; Primary health care; Qualitative; Self-care; Self-management; Self-management support

1. Introduction

Primary care is the first point of contact in the community for people with healthcare needs and provides a foundation for all healthcare systems [1]. The primary care team is instrumental in providing self-management support (SMS) for patients who present with long-term conditions (LTCs) that may originate from physical, mental or unexplained causes [2]. Countries with high quality primary care systems tend to have better population health outcomes and lower levels of avoidable hospital admissions [3].

Patients with LTCs account for 50% of consultations in primary care [4], which is likely to rise due to the increasing prevalence of LTCs [5]. Other common health problems, such as medically unexplained symptoms (MUS) and common mental health problems (e.g. depression and anxiety), also account for a sizeable proportion of primary care consultations [6, 7].

Global health policy emphasises the need for people with LTCs to be empowered to manage their own health and well-being [8, 9]. Providing SMS within communities and healthcare systems can encourage patients to engage in their self-care. Patients who are informed and activated tend to have better health outcomes, [10, 11] often with reduced rates of healthcare utilisation [12-14]. For these reasons, it is important that primary care teams can provide effective SMS that is tailored to patients' individual needs.

Many healthcare systems in Europe provide primary care with a small team comprising a General Practitioner (GP) and practice nurse, but there is a policy drive to move towards a larger team with a more varied skill mix [15]. This is partly due to a shortage of GPs and the realisation that many aspects of primary care can be provided by other health and social care practitioners at reduced cost [3].

In the UK, the composition of 'micro-teams' varies. The core team usually includes a range of health and social care staff such as GPs, specialist nurses, healthcare assistants and a practice manager [3]. However, some practices have included pharmacists, health psychologists and occupational therapists in their wider team. A newer role is that of the social prescriber; a non-medical role

which focuses upon the referral of patients to community voluntary services as an approach to enhancing physical and mental well-being [16].

A key role of the primary care team is to deliver interventions to support self-management. Such interventions vary in their efficacy across health conditions, but improvements are evident for psychological and role functioning, control of symptoms, and better quality of life [11, 13, 14, 17, 18]. However, despite best efforts, effective components of SMS interventions are not fully integrated into primary care. Reasons put forward to explain this include time constraints, limited resources, and a lack of SMS competencies amongst the workforce [11, 19-25].

Constantly evolving definitions and models for self-management have created a lack of clarity about precisely what SMS entails and how it should be implemented [26]. Despite a lack of consensus, it is widely **recommended** that SMS should be based on a biopsychosocial model of care [8, 27]. This holistic approach to care moves away from a focus on medical treatment alone and addresses psychological and social factors that are important to patients and can delay or prevent recovery [8, 27]. **This is important as person-centred care is central to primary care provision.** However, findings from international studies report that many GPs and practice nurses tend to approach SMS from a biomedical perspective and use a didactic communication style [19, 20, 28-30].

There are a handful of published studies that have classified SMS activities into useful taxonomies, which illustrate the range of SMS approaches that can support patients with common health problems [31-33]. However, more research is needed particularly as little is known about the range of SMS activities used within consultations and how these vary by condition.

This study, therefore, aimed to explore how multidisciplinary primary care teams provide SMS to patients **within a consultation** across three exemplar types of common health problems: physical LTCs; common mental health problems; and MUS.

2. Methods

2.1 Design

In this descriptive study, a series of face-to-face, semi-structured interviews were conducted to explore how the primary care team provide SMS in primary care settings.

2.2 Setting and participants

In the English National Health Service (NHS), Clinical Commissioning Groups (CCGs) plan and commission primary care services. General practices are community health services that are members of a CCG and provide primary medical care.

A purposive sample of health and social care staff was recruited from general practices within three CCGs in the Yorkshire and Humber region of Northern England. This region has 22 CCGs which serve a population of approximately 5.5 million. **Public Health England National General Practice Profiles [34] were used to stratify general practices by size based on the number of patients registered. General practices from this sample were invited to participate, via a gatekeeper, who was not directly involved in the research. Interested general practices either contacted the gatekeeper or the research fellow directly and all health and social care staff who conducted patient consultations were invited to take part.** This included GPs, nurses and health and social care workers (healthcare assistants and social prescribers).

2.3 Data collection

Individual in-depth, face-to-face, semi-structured interviews were conducted between May and September 2018. Participants were informed of the study purpose and provided written informed consent before the start of the interview. All interviews were audio-recorded and conducted in English by one researcher (EH) who had no prior knowledge of participants. A topic guide, including open-ended questions and probes, was developed from existing topic guides following a search of the qualitative literature on GPs' and nurses' views and experiences of SMS [19, 24, 28, 29, 35-37]. **In addition to the topic guide, an SMS activity inventory developed from the research literature and published SMS typologies/taxonomies [31-33] was used to further explore participants self-reported SMS activities (See supplementary file 1 for topic guide and SMS activity inventory along with a description of usage).** The topic guide was piloted with one researcher (FA) and modified accordingly. To facilitate analysis, initial ideas and themes were recorded in field notes. Data collection continued until no new ideas or themes emerged from field notes.

2.4 Data analysis

The audio recordings of interviews were fully transcribed verbatim and analysed using framework analysis to identify key themes. Framework analysis is a qualitative data analysis technique commonly used in applied health research, [38] consisting of several steps (Table 1). NVivo software (Version 12; QRS International Pty Ltd) was used to manage and retrieve the data.

Table 1. Data analysis using ‘framework analysis’

Framework analysis steps	Process
1. Familiarisation	The lead author (EH) listened to audio recordings, read and re-read transcripts and field notes and recorded memos as part of the initial familiarisation process.
2. Developing a thematic framework	The development of the thematic framework required several stages. Three transcripts were randomly selected and independently coded by the lead analyst (EH). Coding was both deductive and inductive, meaning that specific codes and categories were pre-selected based on the study objectives (i.e. deductive), whilst also allowing for open coding to generate new or unexpected categories (i.e. inductive). Following the initial coding process, the research team convened to refine deductive codes and discuss emerging codes, categories and themes. The fit of the preliminary framework to the data set was evaluated by the independent coding of a further three transcripts (EH, CB). Consensus regarding the refinement of the framework generated from codes, categories and themes was achieved through two additional meetings (CB, EH and FA).
3. Indexing and charting	The final thematic framework was systematically applied to all interview transcripts. Data from each participant was assigned to the relevant category and summarised in a chart, which included representative verbatim quotes.
4. Mapping and interpretation	The research team reviewed the charts, field notes, memos and aims of the study to identify common themes and patterns in the data and create interpretative categories and themes.

2.5 Methodological rigour

Several approaches to support the trustworthiness of the study were integrated within the study design, methods and data analysis process [39]. The credibility and dependability of the findings were enhanced by investigator triangulation. Three researchers participated directly in the analytical process, each bringing their own unique perspective **(EH works as a research fellow, CB and FA are registered nurses, researchers/educators. All have experience and/or training in qualitative research methods)**. Findings were also discussed with the wider research team **(clinical psychologist and occupational health researcher)**. The way that each perspective could potentially influence the data analysis was discussed during meetings to support an on-going process of reflexivity. Finally, a detailed account of the study methods supports the confirmability of the findings. The Consolidated Criteria for Reporting Qualitative Research (COREQ) [40] guided the reporting of this study (Supplementary file 2).

2.6 Ethical considerations

Study approvals were sought and accepted from the University of Huddersfield Research Ethics Panel and the NHS Health Research Authority (IRAS project ID: 230335).

3. Results

3.1. Sample characteristics

The final sample comprised 22 participants recruited from 13 general practices within three CCGs. One participant was unable to attend the interview due to time constraints. Therefore, 21 participants completed the interview in either a general practice consultation room (n=16), office (n=3), or the participant's home (n=2). Table 2 shows participants' characteristics. Most of the general practices were located in urban areas (69%) and served between 5,000 and 15,000 people. The mean (standard deviation) duration of interviews was 48 (8) minutes.

Table 2. Participant characteristics

Participant characteristics (n = 21)	Frequency (%)
Participants' job role:	GP: 12 (57%) Nurse: 7 (33%) Health and social care worker: 2 (10%)
Age (years)	25 – 35: 3 (14%) 36 – 45: 4 (19%) 46 – 55: 12 (57%) 56 – 65: 2 (10%) Mean (SD): 45 (7)
Gender	Male: 7 (33%) Female: 14 (67%)
Experience in role (years)	0 – 5: 3 (14%) 6 – 10: 4 (19%) 11 – 15: 5 (24%) 16 – 20: 3 (14%) Above 20: 6 (29%)

3.2. Self-management support activities within primary care consultations

Three categories and six sub-categories illustrating different SMS activities across common health problems were identified from the analysis of interviews, and contributed to one major theme (Figure 1). Enabling the individualisation of SMS activities emerged as a cross-cutting theme. A description of the different types of SMS activities used by participants are provided in Table 3.

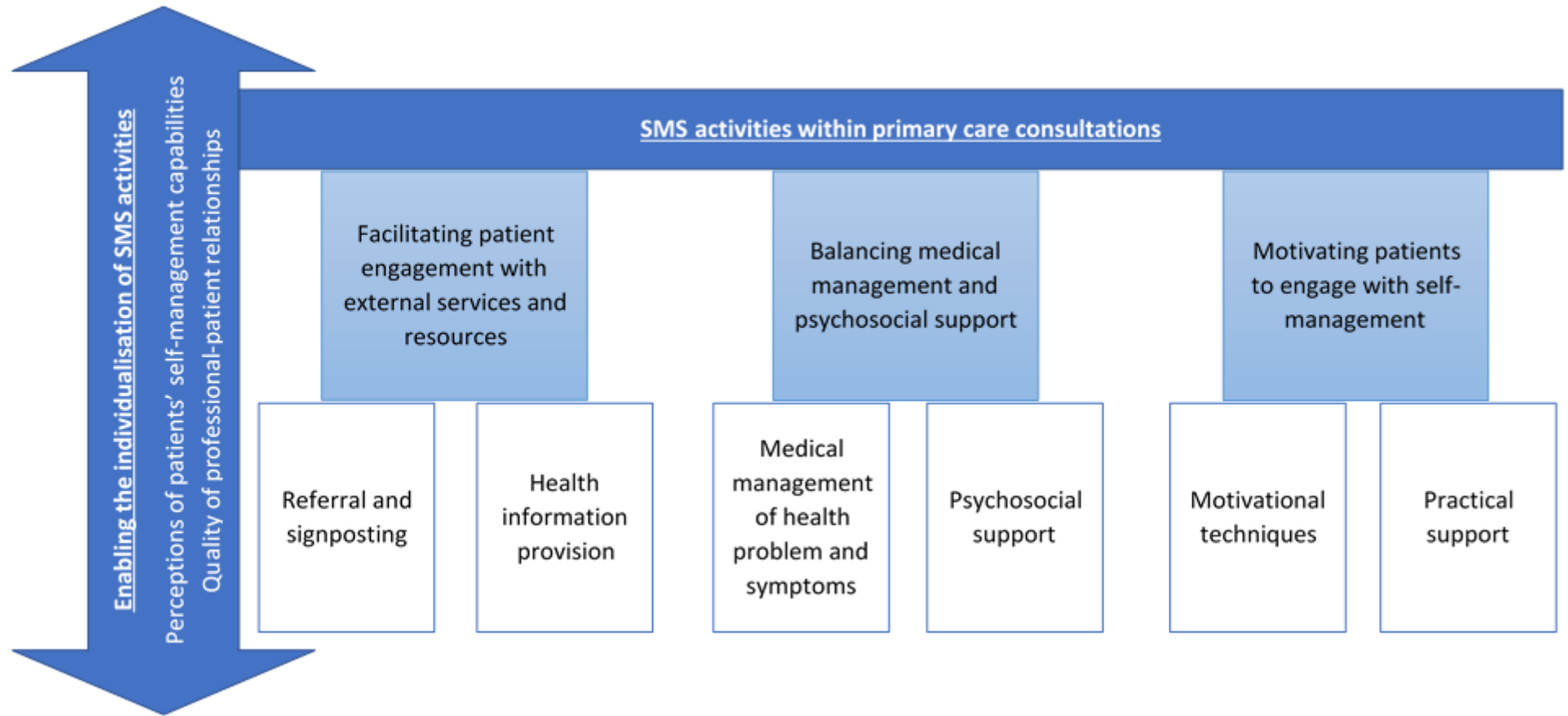


Figure 1. A diagram of themes, categories and sub-categories.

Table 3. Description of SMS activities provided by participants within primary care consultations

SMS activity	Description
Referral and signposting	Connecting (referral) or directing (signposting) patients to other health and social care staff, clinical and social services, information and self-help resources (e.g. health apps and websites) and peer and community support groups. Referral involves a formal process of connecting patients to other services (usually clinical). Signposting is an informal process and involves giving information to patients to enable them to access external, usually non-clinical, services and support. Also includes self-referral, which often requires patients to contact health and support services by telephone or the internet.
Health information provision	Health education through the provision of health information and advice, provided in different formats; verbal, written, visual and digital.
Medical management of health problem and symptoms	Controlling symptoms using medical approaches such as medication reviews, instigating diagnostic tests, monitoring physiological parameters and conducting patients' annual clinical reviews.
Psychosocial support	Patient-centred approach that explores and offers solutions to the psychological and social factors affecting patients (e.g. relationships, finances, employment). This includes in-depth questioning and emotional support (e.g. active listening, reassurance, empathy and validation).

Motivational techniques	Helping patients to follow a healthier lifestyle or adopt a different pattern of thinking using techniques such as goal-setting and motivational interviewing.
Practical support	Provision of tangible services and aids including equipment provision, vouchers, books, self-monitoring diaries, completing forms and teaching practical skills to help patients use specific health-related equipment.

3.2.1. Facilitating patient engagement with external services and resources

Participants' accounts showed that referral and signposting to external services and resources was the most common SMS activity used across all three exemplar common health problems. Health information provision was also featured frequently in participant narratives. For patients with physical LTCs, participants described signposting to condition-specific websites and providing advice about how to adopt a healthy lifestyle. In contrast, signposting for anxiety and depression mainly involved directing patients to online self-help booklets, phone apps, and a self-referral mental health service. For patients with MUS, participants appeared to use a 'trial and error' approach to find out which service would offer the most help for each patient, as one participant explained;

"Where have you been? What's the pain? Right, let's tick this off and then to the Pain Clinic or musculoskeletal to the physio." (Nurse 22)

Limited knowledge of **community services** (local, non-medical services and support groups) lowered many participants' confidence levels in providing SMS. Many participants felt that a 'signposting directory' of information resources and local clinical and non-clinical support services would help them to provide more effective SMS.

"I think one of the things that I don't feel confident with or that we're trying to address is maybe being aware of the stuff that's out there, the stuff that is out there that changes all the time, charities change all the time or come in a different guise, support groups change over time, community groups are ever changing." (GP 14)

Knowledge and availability of treatment guidelines, resources and external services for the exemplar conditions differed among participants. As a result, some participants found it easier to provide signposting to patients with physical LTCs.

"The difference between I guess the mental health and the long-term conditions, physical conditions, is that physical conditions is very structured. There's lots of guidelines that we can say these are the treatment programmes, these are the recognised advice for any respiratory, stop smoking, etc. I think the mental health side of things, there's probably less of that." (GP 14)

In contrast, other participants had greater knowledge of online resources and self-referral services for common mental health problems and therefore found it easier to provide signposting to these patients.

"I think with a mental health problem it would probably be more, as I say, it would be kind of almost universal that I would recommend the IAPT for anybody I was seeing for anxiety and depression. I think perhaps it would be less, I perhaps think of it less often for people with physical disabilities, you know, physical problems really." (GP 16)

Reliance on signposting suggests that participants perceived this activity as central to their SMS role.

3.2.2. Balancing medical management and psychosocial support

Participants' accounts suggest that providing psychosocial support is more challenging for some health problems than others. For physical LTCs, more focus was given to the medical management of the health condition and symptoms. In contrast, the provision of medical management and psychosocial support seemed more balanced for patients with common mental health problems and MUS. The way services were configured within the general practices helps to explain this finding.

SMS for patients with physical LTCs, (e.g. coronary heart disease, diabetes, asthma and chronic obstructive pulmonary disease) was largely provided during annual disease management clinics. Within these nurse-led consultations, physiological measurements (e.g. blood pressure and Body Mass Index) were recorded as part of the health assessment and entered into an electronic patient record (EPR) along with data from a comprehensive medication review and blood results. The EPR content was determined by general practices' contractual obligations and the financial incentives of achieving specific biomedical targets, as one participant explained;

"It will be your weight, it will be whether they smoke, it will be these sort of things that are measurables. What the Nurses will do is tick the boxes for that with regards to the Contract. So, part of our payments relate to how well we are doing there." (GP 9)

Prioritising the medical management of physical LTCs generally meant that limited time was available to provide psychosocial support. This was not always the case as one nurse reported that their consultation started with a discussion about psychosocial

factors affecting the patient before completing the EPR. This approach helped to build a good patient relationship and provide individualised support.

“So instead of thinking right, I’ve got a template, I’ve got all my QOF boxes to tick, can we find out what’s going on with them and it’ll almost, you know, get them to talk.”

(Nurse 17)

Outside of annual reviews, patients with physical LTCs were generally only seen in a consultation if they presented with an acute medical problem, which limited ongoing SMS, unless provided through other services. In comparison, patients with either common mental health problems or MUS seemed to be booked in for follow-up consultations to allow for more time to explore psychosocial factors. One participant explained that psychosocial support was better provided through a series of consultations;

“When people say I haven’t got time to explore the psychosocial side of things, well I would say well maybe you’ve had twenty-five appointments this year, you’ve had two hundred and fifty minutes, not ten minutes. Within that two hundred and fifty minutes there’s got to be time to be able to explore things in a different manner.” (GP 9)

SMS for patients presenting with MUS was generally provided by GPs, with the initial focus being on seeking a medical diagnosis. When a medical diagnosis was not identified the emphasis switched to exploring the psychosocial factors affecting the patient. There was much less emphasis on measuring physiological parameters, which contrasted with the SMS for physical LTCs. As one GP explained:

“I think you concentrate more on the symptoms rather than anything else, you know, how it’s affecting them. So, with other things, you tend to go through all the other things, don’t you, so you go through the blood pressure, smoking, weight, you go through that and you go through the medication, you go through health. Whereas I think with the medically unexplained symptoms, we’ll concentrate on really what’s bothering them, to see how we can manage that.” (GP 2)

However, several participants (mainly nurses) felt they did not have the expertise or time to provide SMS to patients with MUS.

“So yes, I do see them and then I don’t like seeing those patients because I feel like I can’t really help them. I’m not sure where else to go with it and you need longer than ten minutes.” (Nurse 1)

For any common health problem, providing emotional support (e.g. active listening, reassurance and empathy) was perceived as valuable to patients.

“So, I think that just sort of listening and acknowledging that people have problems is sometimes enough without actually having to prescribe for them or refer them or what have you and then, you know, people do seem to appreciate you can just see them regularly.” (GP 16)

Participants’ had different views about the availability of time, the provision of psychosocial support and the management of patients with MUS.

3.2.3. Motivating patients to engage with self-management

The use of motivational techniques such as goal-setting and motivational interviewing and offering practical support were activities mentioned by less than half of the participants at the start of their interviews. However, after referring to the SMS activity inventory, nearly all participants described providing aspects of these activities. There are several potential explanations for the initial omissions. Some participants may not have considered motivational techniques and practical support as SMS activities. Instead, they may have identified SMS activities that were more familiar to them. Alternatively, a different member of the primary care team may have been responsible. For example, arrangements for mobility aids were often provided by physiotherapists and occupational therapists;

“So, I don’t provide anything of that nature. I can refer to Occupational Therapy if I need to. I demonstrate, I teach them how to use inhalers and things like that. I demonstrate how to use blood glucose machines. So, I can do all those sort of things, but not give out equipment.” (Nurse 19)

Across the exemplar common health problems, participants described how they tried to motivate patients to engage with self-management activities, such as, self-monitoring symptoms, adhering to prescribed medication, and adopting a healthier lifestyle. For physical LTCs, more emphasis was given to motivating patients to

achieve the biomedical targets that were measured in annual disease management clinics (e.g. blood glucose, weight, blood pressure).

“So, say for example with diabetes again, we aim for x amount of reduction of their weight and do you know, let’s try and achieve this lowering of your blood glucose levels”. (Nurse 21)

Participants supported symptom monitoring and goal-setting activities for patients with physical LTCs by providing paper diaries and monitoring equipment (e.g. blood glucose, blood pressure, ECG monitors).

“We do like a palpitation service, so they’re like calls that you’ve got, they’re like a little handheld ECG, which talk to your phone. They go away with that for two months and send me all their ECGs and then I bring it back after two months. So, I do give equipment out.” (Health and social care worker 13)

It was not evident from participants’ accounts whether equivalent practical support was available for patients with common mental health problems and MUS. Perhaps this was because goal-setting for these patients tended to focus on the gradual increase in daily activities, rather than achieving the biomedical targets that were set for physical LTCs. In these situations, small achievable goals were set to help patients manage their symptoms and improve their quality of life.

“I do find setting small targets quite helpful. Say for example, people with really bad anxiety don’t leave their house. Well actually just go to the front door this many times in the next week, maybe sit on the doorstep for this many times in the next week and it’s about doing something that’s achievable and realistic.” (GP 12)

Other types of practical support such as providing personalised action plans (i.e. actions to take if symptoms worsen) seemed to be available for some LTCs (e.g. asthma or COPD) because of research-informed guidance.

“Asthma is different again, so again do personalised asthma action plans is a massive thing, came out the Asthma Death Study that we don’t do it nearly enough and so there are, there are lots of, so Asthma UK do a sort of one you can give out for people.” (Nurse 18)

Short consultation duration and limited expertise were identified as barriers to using motivational techniques across the three exemplar common health problems.

“I mean this motivational techniques, we don’t use so much because we don’t have time in General Practice. You use it a little teeny bit, erm, but not formally.” (GP 7).

Over half of participants reported using elements of motivational interviewing with patients, but most felt that their technique was informal and unstructured. This is unsurprising as only four participants had attended some form of training on this topic and even a couple of these participants were unsure if they were using the correct method.

“I’ve done courses on motivational interviewing and I think I do kind of do it. I think that’s just naturally how I’ve developed how I do it, but I don’t think I do it as the textbooks would necessarily.” (Nurse 18)

Motivational techniques were often perceived to be time consuming and other SMS activities were prioritised within a consultation.

3.3. Enabling the individualisation of SMS activities

This cross-cutting theme describes how participants’ perceptions of patients’ self-management capabilities and the development of high-quality professional-patient relationships, helped participants tailor SMS activities across common health problems. Several patient-related factors including age, ethnicity, educational level, first language, appearance and body language were all factors mentioned by participants that were cues to help to individualise SMS. Digital literacy and digital access were also identified as being important. Many participants gave older adults written information resources rather than signposting them to digital resources such as websites or Apps. Some participants, but not all, individualised the type of health information resource to match digital literacy/access rather than making assumptions based on age.

“I mean it, it tends to be more sort of individualised as opposed to specifics. I suppose the elderly, there are quite a few elderly that would be reasonably good about going online and looking stuff up. So, I would normally ask people if they have access to the internet and then if they do, then I’ll give them some websites or something to look at. If they don’t, then I’ll print the leaflets out.” (GP 16)

Participants used their perceptions of patients’ SMS capabilities to individualise support. This required a careful balance between using intuition to guide

choices about the most suitable SMS activities and communication style whilst avoiding making stereotypical assumptions.

“You’ve got to be careful because then you make judgements and the last thing you want to be doing is, because people, people surprise you all the time don’t they and you’ve got to be open to, open to that, always.” (Health and social care worker 6)

Participants explained that a positive professional-patient relationship based on mutual trust helped to facilitate constructive communication and the individualisation of SMS. Continuity of care, building patient rapport, and learning about the patient and their life situation helped to strength the quality of the professional-patient relationship, which was seen as a powerful moderator of effective SMS. Patients were more likely to listen and act on their advice when the relationship was positive, but when the relationship was poor SMS was perceived as less effective.

“The most effective thing, I’ve always found, in practice, is how much the person who is seeing you trusts what you say. If they see you and trust you, they’re going to listen to stuff that you say and where you signpost it. If you’re not careful, they just and if they don’t trust you and if they just see it, sometimes if they’re not careful, they just see it as a hand-off, I haven’t done anything, but I want you to just go and do. So, some of it is about that confidence and trust building ”. (GP 11)

The development of professional-patient trust was an important aspect of SMS.

4. Discussion and Conclusion

4.1. Discussion

To the best of our knowledge, this is the first study to explore the views of primary care teams about how SMS is provided across three common health problems. Primary care teams described providing a wide range of SMS activities to patients across all three common health problems, but the pattern of use differed for each. Referral and signposting were the most frequently used SMS activities to facilitate patient engagement with external services and

resources. Practitioners faced some challenges in balancing medical management and psychosocial support and motivating patients to engage with self-management.

In this study a productive professional-patient relationship was identified, in a cross-cutting theme, as an enabler of SMS. This finding supports research published by others that pinpoints the quality of the health professional-patient relationship as an important determinant of effective SMS [41, 42]. The quality of patient relationships influenced how well patient priorities were identified and SMS individualised across all three-exemplar health problems in this study. Providing emotional support (active listening and empathy) and not pre-judging patients' self-management capabilities were key in developing trust. Existing SMS taxonomies should be revised to reflect the need for additional time to be added within consultations to foster practitioner-patient relationships based on empathy and trust [31-33]. Ultimately, patients are more likely to listen to practitioner advice and engage with self-management within a positive relationship, regardless of the type of SMS activity [42].

Information provision is a common component of effective SMS interventions [11], and was frequently reported by participants in our study. However, health information provision alone will be ineffective unless further support activities are provided [43]. An international review reported that, on average, five different SMS activities were required to improve patients' health and well-being [11]. Participants in our study often combined information provision with referral and signposting to other clinical and non-clinical services and support groups/resources. Multiple options were provided to patients, which is a key part of shared decision-making and personalised care [44]. Many participants believed they would feel more confident in providing SMS if they were more aware of signposting options. This suggests that signposting was perceived as a key SMS activity. Focusing too much on providing this activity could potentially limit the effectiveness of SMS because it may not be the most effective SMS activity [11]. Moreover, the variation in primary care team's level of knowledge about signposting options could mean that patients may not be consistently made aware of appropriate support services, leading to reduced engagement in self-management [45]. Raising primary care team's awareness

of appropriate services and resources and the need to use a variety of SMS activities may lead to improvements in patient self-management.

There was a need to balance medical and psychosocial support. Sometimes administrative priorities within chronic disease clinics took precedence over the self-management priorities of patients. Nurses often focused upon measuring and recording physiological parameters, a finding reported in other studies [19, 29]. As a result, 'data collection' was often prioritised over psychosocial support. The emphasis on 'data collection' processes for patients with physical LTCs was not evident for patients with mental health problems or MUS, which is a novel finding. This may be explained by the contractual obligations of general practices in England, which receive financial incentives if targets set in NHS England's General Medical Service and Quality Outcomes Framework (QOF) are achieved [46]. **The targets focus heavily upon biomedical measures, which may unintentionally support a false dichotomy between physical and mental health. This may mitigate against comprehensive and patient-centred SMS; a view reported by others [47].** However, as described by one nurse in our study, chronic disease management clinics can be person-centred by restructuring the consultation to focus firstly on the patient's holistic needs before completing the QOF requirements. **Sometimes** practical support, lifestyle advice and goal-setting were focused towards helping patients with physical LTCs to achieve or maintain physiological targets reflected in the QOF. This meant that study participants were either more aware of, or there was greater availability of, practical support (such as action plans) for physical LTCs compared to the two other exemplar conditions.

The QOF targets for common mental health problems are clinical review within 10-56 days of a diagnosis of depression; no QOF targets exists for MUS [46]. This enabled some, but not all, members of the primary care team to prioritise other SMS activities during the consultation. Many participants used in-depth questioning to explore the biopsychosocial factors affecting their patients. Most participants directed patients with common mental health problems to local IAPT (Improving Access to Psychological Therapies) services [48]. This programme has been adopted by other countries [49, 50] and is effective in reducing depression and anxiety severity [51]. Sometimes patients are encouraged to self-refer to IAPT, which could adversely affect access [52]. In

cases where access has been difficult, practitioners could consider direct GP referral. Some participants lacked confidence and experience in providing support for people with MUS. Primary care teams would benefit from training to consolidate their communication and care management skills, for patients with MUS [53].

Study participants motivated patients to engage with self-management by providing self-monitoring equipment or using motivational techniques such as using action plans, goal-setting and motivational interviewing. The latter approach was not always fully implemented due to a lack of time, skills and/or confidence, factors consistently reported by others [2, 19, 22, 24, 29, 37, 54]. Some participants mitigated against time constraints by viewing SMS as a process planned across multiple consultations, rather than a one-off appointment. An international meta-review of SMS interventions for patients with Type 2 diabetes reported that effective interventions were complex in nature and required over 10 hours of contact time [55]. However, for this to work in practice, patients need longer appointment times and the opportunity to see the same named member of the primary care team to improve care continuity. This is not always a consistent feature across UK primary care. GP consultation times in the UK are currently 10 minutes, which is considerably less than other countries e.g. 20 minutes in the USA [1]. Current UK policy aims to increase consultation duration to 15 minutes by 2030 [56]. To set UK primary care teams up to succeed in SMS, we suggest that the length of consultations should be increased, sooner rather than later. Increasing opportunities for patient consultations with other members of the primary care team should also be encouraged.

This study has some limitations which should be considered. Participants were recruited from one region in England **and only a small number of health and social care workers volunteered to participate in the study. Therefore, participants' accounts may not reflect overall practice.** Health conditions often co-exist, for example, many people with physical LTCs also have mental health problems [57]. Further research is required to explore how SMS can effectively be provided for patients with multiple co-existing common health problems, and to explore patients' preferences on SMS provision.

4.2. Conclusions

A wide range of SMS activities were used in primary care consultations for three common health problems, but the pattern of use varied. For patients with physical LTCs, assessing physiological parameters often took precedence regardless of patient priorities. Similarly, there was less emphasis on the provision of practical support for patients with common mental health problems and MUS. These patterns may have been influenced, in part, by a service delivery that focused upon achieving QOF targets. The quality of the practitioner-patient relationship was seen as central to effective SMS. Time constraints and a lack of knowledge, skills and confidence in knowing what community resources were available and how to implement motivational interviewing impacted on SMS provision.

4.3. Practice Implications

A digital repository of available community services and additional training in motivational interviewing would support practitioners and enable them to increase their confidence and skills in SMS across common health problems. A lack of consultation time was a common obstacle to SMS but it's unclear what the optimum duration and pattern of consultations should be. Healthcare commissioners should consider setting targets for the management of physical LTCs that better reflect a biopsychosocial model of care. Greater awareness of practical support initiatives, such as self-monitoring diaries and action plans for people with common mental health problems and MUS is also recommended.

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Conflict of interest statement

The Authors declare that there is no conflict of interest.

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Supplementary files

Supplementary file 1

Interview topic guide

Introduction

Brief introduction to study. Recap on informed consent. Reassurance that responses will be confidential and no 'right' or 'wrong' answers.

Background

1. Could you tell me a bit about your role in the team of health professionals working at your general practice?
2. On a typical day, what proportion of patients do you see that have long-term conditions, mental health problems or medically unexplained symptoms?

Main questions

3. Within a consultation how do you help patients to get involved in looking after their health?

Probe questions:

- What types of activities do you use to support self-management?
- Differences in management between mental and physical health conditions?
- How do you manage your consultations for patients with medically unexplained symptoms? Any differences in self-management support compared to patients with long-term conditions and mental health conditions?
- Can you tell me about how your approach to supporting self-management changes from when you first see a patient to when they perhaps come to see you on a monthly basis?
- Can you tell me about how you decide what self-management support activities to use for each patient?
- Do you have a sense of what activities may be better for different situations or patient conditions?
- How confident do you feel in supporting patients?

Participants are shown a list of self-management support activities, which includes referral to other services, provision of information/advice, practical support, monitoring and feedback, motivational techniques.

- Have you used any of these self-management approaches during your consultations?
4. In thinking broadly about your practice, and the different health professional roles within your team, which health professional do you think is best placed to provide effective self-management support?

Probe questions:

- Why have you identified that particular health professional role? (Explore ideas about experience, necessary skills/knowledge, and available resources).

Participants are shown the list of self-management support activities

- Would you say that some staff members are better placed to use certain approaches than others? Why?
5. Thinking about continuing professional development, have you had any training on self-management support?
 6. If you were able to attend a training course about self-management support or were given an education resource, what do you think should be included? (Explore knowledge, skills, use of technology).

Closure

We are almost at the end of the interview.

7. Before we finish is there anything else that we have not covered that you would like to say about providing self-management support for patients in your practice or more generally?

Thanks very much for your time.

Inventory of SMS activities

At the start of each interview, participants were asked to describe how they provided SMS within a consultation for patients with physical long-term conditions, common mental health problems and medically unexplained symptoms. Towards the end of each interview, participants were shown the SMS activity inventory and asked if they had used any of the listed approaches. In this way, the match between participants self-reported SMS activities and those identified in the literature were compared.

Overarching activity

Examples

- **Referral to external services:**
 - Secondary care (hospital & community care)
 - Social care
 - Local, non-clinical services (via social prescribing)
 - Primary care-based health services

- **Provision of information/advice:**
 - Verbal & written explanations and instructions
 - Information leaflets
 - Signposting
 - Self-help resources

- **Practical support:**
 - Equipment provision
 - Reminders for health checks & appointments
 - Teaching specific skills (e.g. shoe horn, inhaler)

- **Monitoring and feedback:**
 - Remote monitoring
 - Clinical review
 - Diary for self-monitoring

- **Motivational techniques:**
 - Goal-setting
 - Action/care planning
 - Coaching
 - Framing of health information
 - Implementation intentions
 - Motivational interviewing

Supplementary file 2: COREQ check-list

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group? Emma Harris	Page 5, section 2.3
2. Credentials	What were the researcher's credentials? E.g. PhD, MD Emma Harris, PhD	Page 1, title page
3. Occupation	What was their occupation at the time of the study? Research Fellow	Pages 5 and 8, section 2.3 and 2.5
4. Gender	Was the researcher male or female? Female	N/a
5. Experience and training	What experience or training did the researcher have? Training in qualitative research methodology.	Page 8, section 2.5
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement? No, besides e-mail/telephone communication to arrange the interview date.	Page 5, section 2.3
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research Participants were given a study information leaflet prior to taking part in the study, which detailed the reasons for conducting the study.	Page 5, section 2.2 - 2.3
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic No conflict of interest identified.	Page 23, Conflict of interest statement

Domain 2: study design		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis Descriptive qualitative study using semi-structured interviews.	Page 4, section 2.1
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball Purposive sampling.	Page 5, section 2.2
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email General practice managers and GPs were approached via e-mail to support participant recruitment.	Page 5, section 2.2
12. Sample size	How many participants were in the study? 21 participants	Page 8, section 3.1 and Table 2
13. Non-participation	How many people refused to participate or dropped out? Reasons? 1 participant dropped out due time constraints.	Page 8, section 3.1
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace Interviews were completed in either a general practice consultation room, office, or the participant's home.	Page 8, section 3.1
15. Presence of non-participants	Was anyone else present besides the participants and researchers? No, inferred as individual, face-to-face interviews.	Page 5, section 2.3
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date The sample consisted of healthcare staff in primary care.	Page 8, section 3.1 and Table 2
<i>Data collection</i>		
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested? A semi-structured topic guide was pilot tested and an inventory listing self-management support activities was	Page 5, section 2.3 and supplementary file 1

	used during the interview.	
18. Repeat interviews	Were repeat inter views carried out? If yes, how many? No	Inferred on page 5, section 2.3
19. Audio/visual recording	Did the research use audio or visual recording to collect the data? Interviews were audio recorded.	Page 5, section 2.3
20. Field notes	Were field notes made during and/or after the interview or focus group? Following the interviews, field notes were completed to record emerging ideas and themes to facilitate analysis.	Page 5, section 2.3
21. Duration	What was the duration of the interviews or focus group? Mean (standard deviation) duration of interviews was 48 (8) minutes.	Page 8, section 3.1
22. Data saturation	Was data saturation discussed? Data collection ensued until data saturation was reached.	Page 5, section 2.3
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction? No	N/a
Domain 3: analysis and findings		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data? Three researchers conducted the analysis.	Pages 7 – 8, table 1 and section 2.5
25. Description of the coding tree	Did authors provide a description of the coding tree? Yes, theme, categories and codes shown in results.	Page 9, section 3.2 and Figure 1
26. Derivation of themes	Were themes identified in advance or derived from the data? Categories and themes developed from the data using framework analysis.	Pages 6 – 7, section 2.4 and Table 1
27. Software	What software, if applicable, was used to manage the data? NVivo software.	Page 6, section 2.4
28. Participant checking	Did participants provide feedback on the findings? No, inferred in data analysis and methodological rigour sections.	Pages 6 – 8, sections 2.4 – 2.5
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant	Pages 13 – 19, sections 3.2 – 3.3

	number Yes, anonymous quotations were presented.	
30. Data and findings consistent	Was there consistency between the data presented and the findings? Yes, there was consistency between the data and the findings	Pages 13 – 22, sections 3.2, 3.3 and 4.1
31. Clarity of major themes	Were major themes clearly presented in the findings? Yes, one main theme, three categories and one cross-cutting theme were identified and reported.	Pages 9, section 3.2 and Figure 1
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes? Participants gave different perspectives, which are presented throughout the findings section.	Pages 9 – 19, sections 3.2 – 3.3