Highlighting alcohol use in medication appointments with clinical pharmacists: the CHAMP-1 mixed methods research programme

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Keywords: Alcohol, Pharmacist, Medications review, Brief intervention, Prevention, Primary care

This report contains transcripts of interviews conducted in the course of the research, or similar, and contains language which may offend some readers.

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Abstract

Background

Brief interventions have been the cornerstone of alcohol prevention in the NHS, but there are important limitations to the underpinning evidence-base and implementation has been problematic. We completed the first community pharmacy brief intervention trial and found no effect. A different approach was needed. This programme proposed to integrate attention to alcohol clinically within existing pharmacy service delivery, supporting pharmacists to discuss alcohol as a toxic psychoactive drug in the contexts of potential impacts on treatments, conditions and health.

Aims

The aims were to: (1) work with pharmacists and patients to design and evaluate an intervention that develops the health and wellbeing role of pharmacists in relation to alcohol consumption, specifically within the context of an existing medication review service; (2) engage with policy makers throughout the duration of the programme about the intervention and wider systemic and workforce development needs for the pharmacy profession.

Design and methods

Methods incorporated reviews, qualitative observational and interview studies, co-produced intervention development and process studies, and a cluster pilot randomised controlled trial. During the programme, national policy decisions moved NHS commissioned medication reviews from community pharmacy into newly created Primary Care Networks of general practices, in the form of a new service, the Structured Medication Review. With funder approval, we adapted the programme and the intervention to the general practice setting. This included early studies of Structured Medication Review implementation, and feasibility study of using primary care datasets for evaluation purposes.

Setting

Community pharmacies initially, and subsequently general practice.

Participants

Pharmacists and medication review patients

Interventions

The Medicines and Alcohol Consultation was developed to support pharmacists to integrate attention to alcohol within routine medication reviews.

Results

The programme comprised three phases, reflecting major, unanticipated changes in the organisation of NHS medication review services, and thus to the research plan. Phase 1 developed the intervention with patients and community pharmacists, informed by the conceptual work, reviews, observational and interview studies. Feasibility studies established the planned trial methods, and the external cluster pilot trial met main trial progression criteria for rates of recruitment and follow-up. In Phase 2, now in general practice, we studied how national policy was being translated into practice, in order to understand contextual factors influencing the early implementation of Primary Care Networks and the Structured Medication Review, including substantial COVID-19 related delays. Interviews with senior staff, clinical pharmacists and patients indicated that Structured Medication Review practice had fallen short of the original person-centred policy vision for the service, and clinical pharmacist role development in Primary Care Networks was limited. The quality of national Structured Medication Review data was uncertain. In such circumstances, it was decided that it was not possible to undertake a definitive trial. In Phase 3 the Medicines and Alcohol Consultation programme was delivered to a cohort of 10 clinical pharmacists in general practice, with data from pharmacists, patients, practice development coaches and audio-recordings triangulated. Progress towards more skilful, person-centred practice was observed for the pharmacists who completed the programme, with acknowledged limitations. This was particularly the case for alcohol itself. The local policy and service contexts were examined in an Integrated Care System stakeholder interview study that laid bare major challenges to be faced in addressing alcohol.

Limitations

The programme has comprised predominantly qualitative studies within the North East and Yorkshire region, so transferability to other regions is not known.

Conclusions

Pharmacists can be supported to increase skilfulness in working clinically on alcohol with patients. Workforce development and systemic pressures make this more difficult than it needs to be. The idea that alcohol should be regarded as a drug, to be discussed alongside prescribed medications, is foundational for clinical pharmacists. The new thinking about how health care professionals more broadly talk about alcohol with patients has been articulated as a new paradigm, Brief Interventions 2.0, for advancing future research.

Future work

Implications for future work on alcohol are far reaching. Advancing Brief Interventions 2.0 requires interventions to focus on personal health and social contextual factors, entailing much broader discussions of the place of alcohol in peoples' lives. This means avoiding the pitfalls of focusing on stereotyped notions of problem drinking. It requires a systemic, strategic approach to prevention. The Medicines and Alcohol Consultation is a starting point for this agenda, which we will advance in debate and new research.

Study registration

ISRCTN57447996 (pilot trial)

Funding

This project was funded by the National Institute for Health and Care Research (NIHR) Programme Grants for Applied Research programme and will be published in XXX Journal; Vol. XX, No. XX. See the NIHR Journals Library website for further project information.

List of Abbreviations

ARRS	Additional Roles Reimbursement Scheme
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
BI	Brief Intervention
CP	Clinical Pharmacist
GP	General Practitioner
ICS	Integrated Care System
MRCF	Medication-Related Consultation Framework
MAC	Medicines and Alcohol Consultation
MUR	Medicine Use Review
DES	Directed Enhanced Services
NMS	New Medicine Service
OARS	Open questions, affirmations, reflective listening, and summarising
PPI	Patient and public involvement
PPPG	Pharmacy Professional Practice Group
PAG	Policy Advisory Group
PCN	Primary Care Networks
PCPEP	Primary Care Pharmacy Education Pathway
PSC	Programme Steering Committee
RCT	Randomised controlled trial [check if necessary]
SMR	Structured Medication Review
VTC	Variation to contract

Plain English Summary

Alcohol causes harms to individual drinkers and to other people, but is not well dealt with in healthcare services. This is partly because alcohol is a difficult subject for practitioners and patients to talk about. To address this problem, we developed a new way for pharmacists to include alcohol when discussing medications with their patients. This aims to help people make more informed decisions about their drinking, because even small amounts of alcohol can have important adverse effects on treatments and on health.

We first worked closely with patients and pharmacists in community pharmacies on how and when alcohol should be discussed during medication reviews. Using findings from interviews and workshops, we developed the new approach, conducted a successful pilot study and prepared to do a large study to test if this approach worked. Then the main NHS medication review service delivered by pharmacists was moved to general practice. We had to change our research plans. We studied local NHS leader, patient and pharmacist perspectives of the organisational changes. We then adapted the ways we prepared pharmacists to discuss alcohol with patients, after further major delays caused by the COVID-19 pandemic. In the final year of our programme we trained 10 pharmacists to discuss the effects of alcohol on medications and health with patients. With permission, we audio-recorded some discussions and spoke with pharmacists and patients to help us better understand how they felt about these discussions. We learned that the new approach was well received by patients. Pharmacists also valued the changes to their practice, and told us they need ongoing support to discuss alcohol with their patients.

We concluded that new ways of thinking and talking about alcohol are needed across the NHS. We now have a better understanding of how this can work with pharmacists. Discussions of alcohol should not just be about how much someone drinks. Other aspects of alcohol consumption, how it affects treatments and conditions, and its role in people's lives are meaningful topics that can be discussed. Thinking about alcohol as a drug, alongside the drugs prescribed for treatments, is a useful place to start.

Scientific summary

Background

Alcohol harm is an important public health problem which widens health inequalities. Reducing alcohol consumption to reduce harmful impacts requires public health policies to increase price, and reduce the accessibility of alcohol and the social acceptability of heavy drinking. These policies are challenging to implement, and individual level, brief interventions (BI) in routine health service contacts are recommended. BIs target drinking directly and have been the cornerstone of alcohol prevention. Yet, the underpinning evidence has important limitations: primary care trials demonstrating efficacy do not translate well into conditions of routine clinical practice and recent large NHS pragmatic trials show no benefit. Our previous randomised controlled trial of an alcohol intervention within the community pharmacy setting also found no effect. We concluded that a different approach was needed, moving away from targeting alcohol as a standalone topic, and paying attention to the reasons why people attend community pharmacies in the first place. We sought to optimise the alcohol contribution to health and well-being within the core pharmaceutical care role itself. Integrating attention to alcohol within existing pharmacy service delivery focuses discussion on the properties of the drug itself, implications for specific conditions, and related prescribed medication interaction and adherence issues.

Aims and objectives

The aims of this research programme were to:

- Co-produce with the pharmacy profession and with patients, and evaluate in a definitive trial, an intervention that develops the health and wellbeing role of community pharmacies in relation to alcohol consumption, specifically within the context of established pharmaceutical services.
- To engage with policy makers to help implement this intervention if shown to be effective, and/or to contribute to decision-making about the wider systemic and workforce development needs involved in extending the health improvement role of community pharmacies.

Description of methods and findings are organised into three phases, reflecting changes to the programme detailed below.

Phase 1: Intervention development in community pharmacy

Methods

Phase 1 comprised six studies, as originally planned for the programme:

1) a scoping review of the NHS community pharmacy medicine review service literature;

2) ethnographic observation of medicine review practice;

3) semi-structured interviews with people taking medication for long term conditions;

4) intervention co-design workshops with patients and pharmacists;

5) an exploratory intervention delivery study; and

6) an external cluster pilot randomised controlled trial with an embedded process study.

Key findings

The review identified consultations to be short, with limited engagement with patients and their health problems. Observations and interviews confirmed current practice to be a checklist style of delivery, with alcohol only briefly mentioned if not avoided altogether. The intervention, the Medicines and Alcohol Consultation (MAC), was developed iteratively from component study findings. Conceptualising alcohol as a drug, the MAC explores possible connections with the conditions for which medicines are prescribed and issues of adherence and medicines optimisation. Proficiency in core consultation skills was identified as needed to enable pharmacists to introduce and discuss alcohol confidently and in a non-judgemental fashion. Preparing pharmacists to deliver the MAC incorporated audio recorded consultations used to facilitate in-depth reflection and discussion of pharmacists' actual practice.

The pilot trial investigated planned study procedures to inform progression to a definitive trial. Intervention pharmacists (n = 5) received the programme to deliver the MAC in medicine reviews, with the control pharmacists (n = 5) providing medicine review services as usual. Almost all of the 54 eligible patients (94%; n=51) consented to participate, and 92% (n=47) of these patients were followed-up at 2 months. The process study explored the challenges involved for the participating pharmacists. They found engagement in the programme to be rewarding and the trial procedures acceptable.

Changes to the original research plan

Several major changes to the programme were required due to circumstances beyond the control of the research team. During the pilot trial, the main NHS medication review service in community pharmacy was decommissioned, and replaced with a new service model, the Structured Medication Review (SMR). This was to be delivered by a largely new clinical pharmacist workforce in Primary Care Networks (PCNs). The original programme aims remained intact, as we adapted the MAC to the new setting with a view to a definitive trial.

Phase 2: Transfer to general practice

Methods

Phase 2 comprised five studies:

1) a review and analysis of national policy documentation associated with the introduction of PCNs and the SMR;

2) semi-structured interviews (n=12) with senior PCN staff to explore the issues for primary care;

3) a longitudinal study of emerging clinical pharmacist roles (10 new clinical pharmacists interviewed three times and 10 existing clinical pharmacists interviewed once);

4) recruitment feasibility and semi-structured interviews with SMR patients (n=10); and

5) a prescribing and SMR policy evaluation feasibility study.

Key findings

PCNs and SMRs were implemented at speed and based on limited evidence. The COVID pandemic placed practitioners and services under additional pressure. This raised questions about clinical pharmacists' preparedness for practice development, and emphasised that support for pharmacists in developing their roles and acquiring more well-developed person-centred skills were key for the intended benefits of SMRs to be realised. Factors moderating implementation locally included: the presence of pre-existing collaborative structures, "pro-pharmacy" PCN leadership and senior pharmacist input into PCN decision-making. PCNs required time to fully form and develop the new clinical pharmacy roles, whilst integrating the new workforce.

Clinical pharmacists were developing SMR practice in this challenging context. Patient-facing skill acquisition competed with organisational pressures and remote working during the COVID pandemic. Templates used to structure SMRs undermined the intended shared decision-making nature of the new service. Pharmacists established in general practice were clear about the clinical practice requirements of the new medication reviews. Alcohol was either avoided in consultations or introduced only in units of consumption terms, without further exploration. Pharmacists had typically not considered alcohol as a drug within their clinical practice, but were interested in the MAC approach, with some recognising the linked need to enhance their consultation skills.

At that time of the recruitment feasibility study, most SMRs were delivered by telephone, necessitating revisions to the ethical approval to incorporate approaches to patients, ascertainment of eligibility and informed consent in-person and by phone. The study confirmed that our approach was appropriate. Patients reported that their experiences of what were called SMRs were in fact brief ad hoc medication reviews. The idea of the SMR, as described in the policy specification, was highly attractive to patients, as was the possibility of including alcohol in the ways developed in our intervention. The feasibility of using OpenPrescribing data to construct linked PCN datasets for modelling purposes was broadly confirmed. However, the utility of national SMR data was problematic, as other types of medication reviews were coded as SMRs.

Further changes to the research plan

As SMR implementation had been delayed substantially by the COVID-19 pandemic, and in light of study findings on SMR delivery, after careful consideration it was judged by the funder to be not feasible to conduct a definitive trial. As we had adapted the intervention to this setting through the conduct of these studies, we extended the programme for 12 months. We studied MAC delivery in the general practice contexts instead, whilst also examining the broader primary care, NHS, policy and scientific contexts.

Phase 3: Programme extension into the final year

Methods

Two studies were conducted in this final year of the programme:

1) we delivered the MAC programme for the first time in primary care to 10 clinical pharmacists. Data sources included observations of the two MAC training workshops, peer support groups, coaching records and coach interviews, audio recordings of SMR consultations (n=19), interviews with pharmacists pre and post the programme, and interviews with patients (n=10);

2) semi-structured interviews with senior ICS stakeholders (n=14) within the North East and Yorkshire NHS region.

Key findings

<u>MAC delivery study</u>

All pharmacist participants enjoyed and found value in the individually tailored coaching and face to face workshops, even though the content challenged their ideas about their own practice, and about alcohol. A range of external factors impacted engagement with the programme, such as holidays, illness and other workplace demands that required prioritisation. SMR numbers were lower than expected, in part because contractual changes in the NHS removed financial incentives for practices to conduct SMRs. Three pharmacists did not compete the programme. Those who did complete were highly positive about it, and said they would recommend it to others.

All started the programme with abstract concepts of person-centred practice, without previously having the opportunity to work on practice development using audio-recordings of actual clinical practice. This entailed a very different experience to previous training, involving simulated practice scenarios in workshops without feedback from coaches, the limitations of which were clear to the pharmacists. All participants found some benefit in the programme, including the non-completers.

Informed by exposure in workshops to a range of underpinning micro-skills required for person-centred communication, the pharmacists worked with coaches on refining skills to allow patients more space and time to raise their own concerns. This generally meant the pharmacist learning to talk less and listen more. After progressing from initial self-consciousness, use of audio recordings enabled the pharmacist to focus on how exactly what they were doing influenced patients' responses in consultations. All who listened to their recordings found them highly illuminating. Changes to clinical practice were observed closely, and progress occurred in highly individualised ways, with those starting the programme with greater foundational skills more able to make most progress.

Confidence in talking about alcohol was low initially and improved, but remained a challenge throughout. Lack of role clarity was an issue; pharmacists found it hard to avoid direct advice-giving, and to think about how to be helpful otherwise. There was evidence of progress, and also of limitations, in recognising and seizing upon opportunities to discuss alcohol in meaningful ways during consultations, linked to medications, conditions and patient concerns. Crucially, framing alcohol as a drug gave the pharmacists legitimacy and increased confidence to raise alcohol, and they recognised the value to patients of linking this particular drug to others prescribed. Continued practice development is anticipated, for example with one peer group meeting after the programme ended, though not for all participants.

ICS stakeholder study

We examined alcohol in NHS contexts in two contrasting ICSs, one of which had strategically prioritised alcohol. Interviews also included views on current primary care practice relating to alcohol, and the MAC approach. Financial constraints, pressure on services and evolving organisational structures generated enormous demands on the system, particularly in primary care, and in these circumstances, alcohol was not a priority on the ground.

All interviewees recognised that this was unsatisfactory, and leaders from both ICSs wanted more upstream, prevention-orientated interventions. For the ICS with an alcohol strategy, workforce engagement was key to raising the profile of alcohol harm as an issue, as part of concerted efforts to 'win hearts and minds' of health professionals. Reframing alcohol as a drug of relevance to clinical care resonated with stakeholders. They recognised that alcohol needed to be regarded differently if progress was to be made. National policy shortcomings left public health leaders feeling hampered in implementing evidence-informed prevention ideas.

Conclusions

The contemporary NHS is a challenging environment in which to develop and scientifically evaluate innovations in new service delivery based on training clinical pharmacists in patient-centred skills. Alcohol has long been a difficult issue for health services to address, and that is why the enhancement of clinical skills is a key focus. The programme has demonstrated that working with practitioners to integrate attention to alcohol in everyday

clinical work, by developing clinical skills and reframing alcohol as a drug are promising for pharmacists, and likely also for other professions. This involves exploring alcohol and health more deeply and widely, even at seemingly low levels of consumption. It also entails not having as a primary orientation the identification of some people as problem drinkers, and by implication, others as non-problematic, for whom discussions are not warranted. CHAMP-1 originated in the BI literature. The original paradigm is no longer fit for purpose and we have proposed BI 2.0 as an alternative. This suggests that much broader content is needed to help people to think differently about, and to discuss, the place of alcohol in their lives and in wider society, in ways that are congruent with the work of health services. Programme findings will inform NHS decision-making on pharmacist roles, the future of medication reviews, and the emerging agenda for system wide perspectives on alcohol as a clinical and population health challenge and how it may be addressed.

Study registration

ISRCTN57447996 (pilot trial)

Funding

This project was funded by the National Institute for Health and Care Research (NIHR) Programme Grants for Applied Research programme and will be published in XXX Journal; Vol. XX, No. XX. See the NIHR Journals Library website for further project information.

Synopsis

Background to the programme

Alcohol is an important public health problem which widens health inequalities.[1] Reducing alcohol consumption requires public health policies to increase price, limit accessibility and marketing and challenge the social acceptability of heavy drinking.[2] Whilst effective, these policies are challenging to implement, and the World Health Organisation has also recommended individual level interventions in routine health service contacts to help people who drink in a hazardous and/or harmful manner to reduce their alcohol intake.[3] Attention has recently been drawn in the UK to the need to develop interventions for older adults who are hazardous or harmful drinkers.[4-6] This need exists alongside wider policy imperatives to better manage multiple long-term conditions in the context of an ageing population.[7-9] Alcohol consumption, even at modest levels, complicates existing health problems, so effective interventions that reduce drinking may generate wider health benefits.[6]

Brief advice and counselling interventions to reduce alcohol consumption have been conceptualized as "brief interventions"(BI).[3, 10] These target drinking directly and when delivered in primary care have been the cornerstone of the alcohol prevention paradigm for 40-50 years.[11] Important limitations to the large BI literature have not been addressed.[10, 12] Findings of randomised trials demonstrating efficacy do not translate well into conditions of routine clinical practice; more recent large trials conducted in naturalistic conditions in the NHS show no benefit.[10] We completed the only previous trial of a brief interventions within the community pharmacy setting worldwide, which produced a convincing null finding.[13] Like us, other leaders in the field have also concluded that a new paradigm for BI is needed for research, policy and practice.[14, 15] This was the starting point for CHAMP-1.

We decided that an entirely different intervention design, more firmly rooted in the pharmacy setting itself, was needed, giving attention to the reasons why people attend particular healthcare settings in the first place. Rather than asking pharmacists to take on a new public health role, and delivering the same intervention as delivered in other contexts, we located the new intervention approach within the core pharmaceutical care role itself. This was achieved by integrating attention to alcohol clinically within existing pharmacy service delivery, avoiding targeting only the self-regulation of hazardous and harmful alcohol consumption, such as was evaluated in our trial.[13] A core concept for this approach is that alcohol should be regarded as a toxic and addictive drug, causing direct harms to health and making existing health problems worse, thereby broadening the context for raising alcohol in clinical consultations.[16] This entails that it be discussed alongside prescribed medications, for reasons of medication safety, effectiveness and adherence. Thus, it not only legitimises pharmacists raising the subject with patients, but is also recognized as good clinical practice with anyone who consumes alcohol. This is particularly so for older people who are prescribed multiple medications for chronic conditions.[16]

Our culture does not support honest conversations about alcohol. Stereotypical ideas and misconceptions abound, so pharmacists are wary of raising alcohol.[17] To do so requires skill. Person-centred consultation skills can be used to appropriately manage clinical enquiry, and to create a safe discussion climate in which both participants feel more comfortable with

this subject being raised and explored. The use of such skills should also enhance the quality and effectiveness of medication reviews more broadly.

The CHAMP-1 research plan

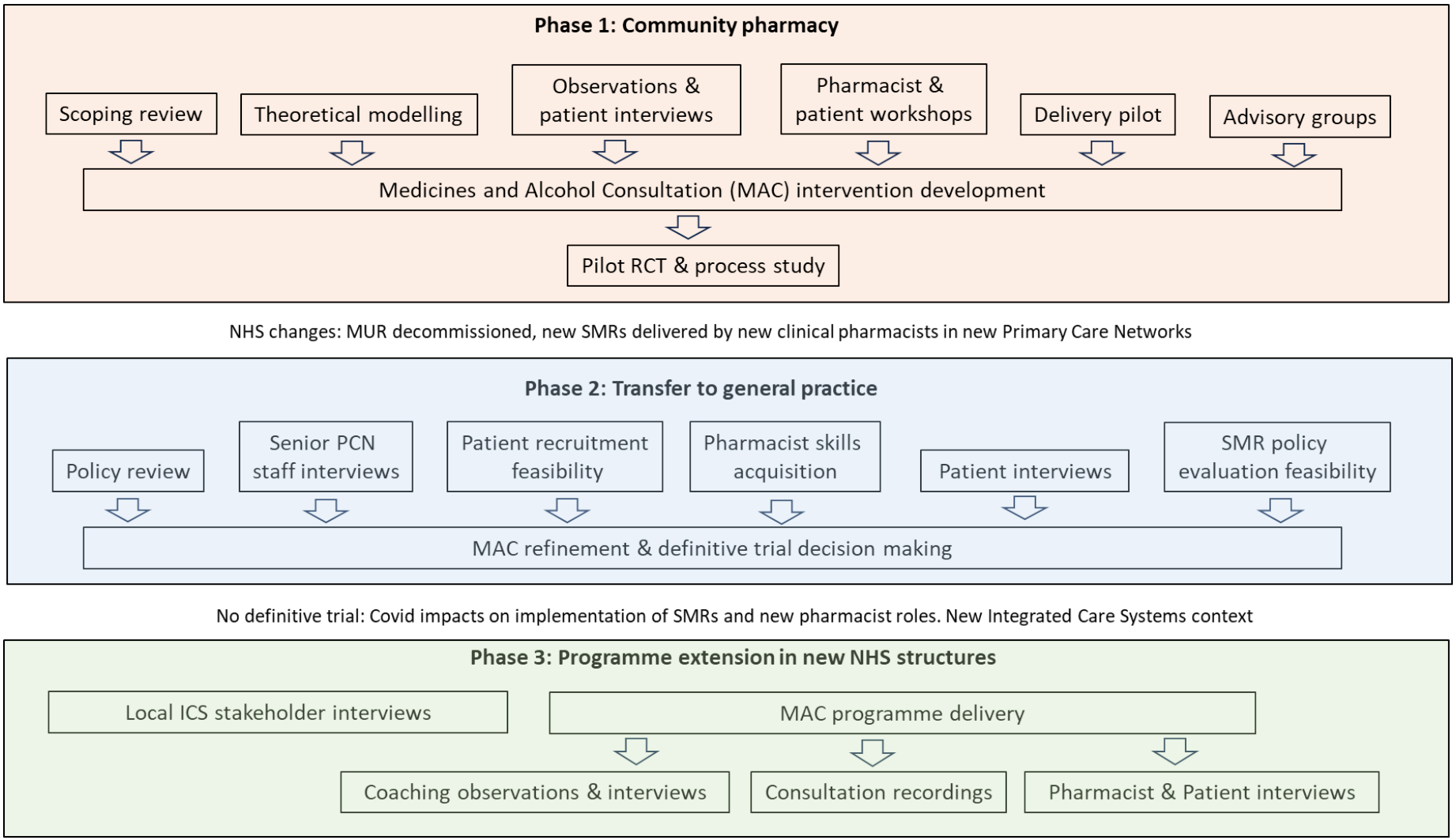
CHAMP-1 commenced in Jan 2018 and was initially funded for 5 years. The aims of the programme were to: (1) co-produce with the pharmacy profession and with patients, and evaluate in a definitive RCT, an intervention discussing alcohol within medication appointments; and (2) engage with policy makers to support implementation and contribute to decision-making on extending the health improvement role of community pharmacies (and later, clinical pharmacists; see below). All fieldwork was conducted in Yorkshire and the Humber and the North East of England. Details of the original objectives, workstreams and governance arrangements are provided in *Appendix 1*.

Changes to the original research plan

Circumstances beyond the control of the research team necessitated several changes to the programme (see diagram below). A detailed account of the revisions is provided in *Appendix 2*. This report is organised to reflect the three phases of the programme, as it was delivered and summarised in *Figure 1*: (1) intervention development in community pharmacy; (2) transfer of medicine review services to general practice; (3) programme extension to deliver the intervention to new NHS structures.

During the conduct of the Phase 1 pilot trial, a national policy decision was made to move NHS commissioned Medication Use Reviews (MURs) from community pharmacy. A new service model was introduced, the structured medication review (SMR), to be delivered in Primary Care Networks (PCNs) by a greatly expanded workforce of clinical pharmacists based in general practice.[18] This decision, while favourable to our vision for alcohol, created major challenges to our intended programme of work. We moved the research programme into the entirely new setting of general practice, and undertook a series of studies to adapt our evolving intervention accordingly in Phase 2. Implementation of the new SMR service was delayed by the COVID-19 pandemic,[19] then largely delivered by phone after it was rolled out.[20] These changes meant that it was not possible to conduct the planned definitive trial of the Medicines and Alcohol Consultation (MAC) intervention we developed within this award. Instead, we extended the programme for 12 months (Phase 3) in order to study closely the implementation of the MAC with clinical pharmacists, whilst also examining the broader primary care practice, NHS, policy and scientific contexts.

Figure 1: CHAMP-1 programme structure



PHASE 1: Intervention development in community pharmacy

Community pharmacy medicine review services

At the time of the grant award, all community pharmacies in the UK were contracted by the NHS to deliver a range of 'advanced' services including MURs and the New Medicine Service (NMS).[21] MURs were intended to improve patients' understanding of their medicines and adherence, particularly among those with chronic conditions, and to reduce medicines wastage.[21] The NMS is still provided and supports people with long-term conditions and newly prescribed medication improve their medicines adherence as well as to support patients make decisions about their treatment and self-management.[22] These services were the original target for our intervention, as incorporating alcohol appeared in line with the services remit.

Intervention development study methods

The starting point in the grant application was to co-produce an intervention that provided pharmacists with information, and the skills to discuss the effects of alcohol on medications, adherence and the management of long conditions. This was to be located within the existing Medication-Related Consultation Framework (MRCF).[23] Existing pharmacist training, consultation skills models and guidelines were to be drawn on for this new purpose. We have published accounts of the subsequent iterative development of the MAC intervention as a four stage process, up to the point of preliminary evaluation in a pilot RCT, informed by early study findings, conceptual discussion within the team and consultations with practitioner and advisory groups.[24, 25] We draw upon these reports and other published outputs to summarise the intervention development process here, with more detail provided in *Appendix 3*. Component studies were:

- A scoping review of the MUR and NMS literature
- An ethnographic observational study of medicine review practice (nine pharmacists at five community pharmacies)
- Semi-structured interview study with 24 people taking medication for long term conditions who drank alcohol regularly
- Workshops with patients (n=14) and pharmacists (n=7) seeking to explore the acceptability and feasibility of the evolving intervention and how it could be improved.
- A pilot intervention delivery study with seven pharmacists in order to examine intervention implementation, research procedures, and the experience of the intervention for both pharmacists and patients.

Results overview

The CHAMP-1 research programme completed the planned formative pre-trial developmental work in the community pharmacy setting to schedule. We had developed a novel intervention, the Medicines and Alcohol Consultation (MAC), which was co-produced with patients and with pharmacists,[25] also drawing on the findings of the review,

observational and interview studies.[24, 26-31] These had revealed MUR and NMS practice to be far from the person-centred ideal: the services delivered were brief and structured in a checklist fashion. Discussions were often avoided. The first version of the MAC focused on existing consultation skills and practice, information on interactions between alcohol and medications, enhanced consultation skills exercises, clinical scenario case studies, and support for continued professional development. Most content was planned to be delivered online, supported by a paper-based MAC guide, one-to-one support calls and opportunities for peer support. Co-design workshops with patients and pharmacists provided enthusiastic support for the alcohol as a drug idea, but pharmacists were concerned about finding time to access all of the online materials and expressed preferences for more substantial in-person delivery of training and support.

We revised the content accordingly, introducing two in-person training days to underpin the other programme elements, and weekly individual practice support site visits and telephone calls, to include discussion of audio recordings of MAC consultations. We undertook initial feasibility testing of an abbreviated version of the MAC (Version 2) and piloted the research methods (see *Appendix 3*). Our experiences echoed the earlier observational studies that medicine review consultations were almost entirely pharmacist led and adopted a checklist style of delivery. We also observed that intervention pharmacists had unexpected levels of unmet need in becoming proficient in the core consultation skills underpinning MAC delivery. These included asking open questions, making affirmative statements, reflective listening and summarising as the key microskills. The clear conclusion was that greater attention to the process of person-centred consultation skill acquisition was needed before pharmacists would be able to introduce and discuss alcohol confidently and proficiently in the way we had envisaged.

After subsequent revisions (Version 3), and input from patient and pharmacist advisory groups, Version 4 of the MAC was designed as programme of practice development support. This placed greater emphasis on training pharmacists in the fundamentals of *how* to skilfully raise the subject of alcohol within MURs or the NMS, and explore carefully in a person-centred way, possible connections between alcohol consumption, the conditions for which medicines are prescribed and issues of medicines use and adherence.[24] To this end, and throughout the programme, the audio recorded consultations have proven to be invaluable in facilitating in-depth reflection and discussion of pharmacists' actual practice rather than their subsequent accounts of it. The detailed data therein, afforded close attention to the development of technical mastery of the microskills, and how patients were responding to pharmacists during consultations.

External cluster pilot RCT

This phase of the programme concluded with an external cluster pilot RCT to investigate planned study procedures to inform progression to a definitive trial, including refinements of the intervention. Three published outputs are summarised here.[32-34] Ten community pharmacies in Yorkshire and Humber were recruited, with a pharmacist from each who regularly conducted MURs and NMSs. Randomisation and outcome data collection was

undertaken by the University of York Trials Unit. Intervention pharmacists (n = 5) received the programme to deliver the MAC in MUR/NMS consultations, with the control pharmacists (n = 5) providing these services as usual.

The target population was patients aged 18 and over attending routine MUR/NMS consultations, who reported consuming alcohol at least twice per week during screening. Patients were not eligible if they had received treatment for alcohol in the past 12 months.

Pharmacists in both arms asked consecutive MUR or NMS patients (in the pharmacy private consultation room) about taking part in a study of about how pharmacists discuss patients' health and wellbeing in medicines reviews. If interested, patients completed a brief screening form which included a single item alcohol screening question embedded in other health and service utilisation questions. Those eligible were provided with a study information statement and completed an informed consent form. Existing alcohol service referral pathways were available for patients.

Participants were followed up at two-months by telephone interview. The candidate primary outcomes for the definitive trial were: total weekly UK units (8 g of ethanol per unit) of alcohol consumption in the week prior to follow-up; patient confidence in medications management using the PROMIS Self-Efficacy for Managing Medications and Treatment scale (6 item version). We also assessed recruitment, attrition, and follow-up rates as progression criteria for the definitive trial. We found that almost all eligible patients (94%) consented to participate, and 92% of these patients were followed-up at 2 months. We published a summary of actions undertaken to achieve this high response rate.[35] Although not powered to examine intervention effects, we did find between-group differences on both primary clinical outcomes of alcohol consumption and confidence in medication management that may be expected to be statistically significant in a full trial. We thus concluded that it would have been feasible to conduct a definitive trial of the MAC in community pharmacy, had decommissioning of MURs during the pilot trial not occurred.

Process study

An embedded qualitative process evaluation involved interviews with the MAC pharmacists, patient interviews, observations of training days and audio recordings of consultations (with patient consent).[32] Paying detailed attention to actual consultation practice was new to the pharmacists and they found it challenging at first. However, those who engaged most actively with the programme valued the feedback during the training days from facilitators and patients, as well as the discussions of developing practice with the MAC support staff. Both components were valued as having influenced consultation practice positively. We observed improved use of person-centred consultation skills within workshops, without being able to study their use in time pressured and transactional practice environments.

We also found the trial procedures to be acceptable to the participating pharmacists.[34] Few had previous experience of involvement in research, and so found the research training and support provided helpful. Instances where pharmacists deviated from the recruitment

protocol were identified early, but there were some useful adaptions made to usual routines and interactions with patients to accommodate the research.

Conclusion

The research programme made good progress, generating outputs and a novel intervention ready to trial. We also took opportunities in Phase 1 to develop and promote understanding of the nature of the problem being addressed in high profile editorials and other short papers, with consideration of the prospects for the general practice setting a prominent part of the thinking that developed at that time.[10-12, 16, 36-41]

PHASE 2: Transfer to general practice

Early preparations for the CHAMP-1 main trial were underway when a major NHS policy decision was made independently of the programme to move commissioned medication use reviews from community pharmacy into newly created PCNs (see above and *Appendix 4* for key dates and documents). This meant ending MURs in community pharmacy, which we had concluded was to be the primary service targeted for intervention delivery, as the NMS yielded too few patients at a particular moment on the patient care pathway at which there were other priorities. The new SMR service to be introduced was to be delivered by a largely newly recruited workforce of clinical pharmacists working in general practice. These pharmacists, many of whom were recruited from community pharmacy, were funded by the Additional Roles Reimbursement Scheme (ARRS). Introduced in 2019, ARRS enabled PCNs to claim reimbursement for the salaries (and some related costs) of new roles within the multidisciplinary general practice team.

NHS England published an SMR specification, which identified target groups of people to be prioritised: in care homes; with complex and problematic polypharmacy, specifically those on 10 or more medications; on medicines commonly associated with medication errors; with severe frailty; who are particularly isolated or housebound or who have had recent hospital admissions and/or falls; using potentially addictive pain management medication.[42] Longer consultations of 30 minutes duration were specified, underpinned by shared decision-making principles. The risk of alcohol interactions with medicines was recognised explicitly. These developments thus enhanced the potential for contribution of this research programme to this new NHS service, and more broadly on knowledge of how alcohol prevention can be integrated with medicines-focused work.

Despite such significant changes to the pharmacy, general practice and medicine review landscapes, the original programme aims remained intact because the long term contribution envisaged by this research remained to be fulfilled; the ‘C’ preceding pharmacy in the CHAMP acronym title was simply changed from ‘Community’ to ‘Clinical’. At that time, prior to COVID, we still believed it would be possible to conduct a definitive RCT, and agreed with NIHR a further formal trial progression checkpoint. Before getting there, however, in this new phase of the programme we first needed to investigate how national PCN and clinical pharmacy policy was being translated into local practice, to develop

understanding of the contextual factors that influenced the early implementation of the SMR and other patient-facing pharmacy services in primary care. In short, we needed to do the preparatory studies that situated the evolving MAC intervention within this new NHS context.

Phase 2 methods

Details of methods and findings of the Phase 2 studies are available in *Appendix 5*. In summary, the component studies of this phase of research were:

- A review and analysis of national policy documentation associated with the introduction of PCNs and the SMR
- Semi-structured interview study with senior PCN staff to explore perceptions of the policy changes in primary care relevant to the introduction of the new SMR service
- A longitudinal study of the emerging pharmacist roles, SMR practice, views on alcohol, professional development and person-centred skills acquisition
- A SMR patient recruitment feasibility study
- Semi-structured interview study with SMR patients to explore views and experiences of receiving the new service
- A prescribing and SMR data availability and policy evaluation feasibility study

The COVID pandemic meant that we were unable to conduct two originally planned preliminary ethnographic studies of SMR practice and instead we conducted two review studies,[43, 44] with NIHR agreement. These were of qualitative research on perceptions of one's own alcohol use, and validation studies of instruments measuring individual practitioner person-centred consultation skills and behaviour. Both are described in *Appendix 5*.

Results overview

Policy developments and senior PCN staff perspectives

We first reviewed the development and implementation of PCN and SMR policy;[18] it was already clear that delivering SMRs to the original policy specification was going to be challenging. PCNs and SMRs had been introduced quickly, with limited opportunities for consultation, alongside rapid recruitment of clinical pharmacists under ARRS. The pandemic delayed SMR implementation by six months, but when eventually started in October 2020, pressures on recruitment and service delivery were still pronounced, raising important questions about the readiness of pharmacists to deliver the new service and develop their roles in newly formed multi-disciplinary primary care teams.[18] These concerns were reinforced by interviews with Senior PCN staff,[45] who described considerable variations in PCN policy implementation. More time and support to fully form the new PCN clinical pharmacy roles was needed, with much resting on existing collaborative structures and the involvement of pharmacists in decision making processes. In part reflecting the delays to

implementation, we concluded that the feasibility of using national SMR data for evaluation purposes was doubtful at that point in time.

Pharmacist and patient perspectives

We investigated the experiences of training, skills, role and organisational development of a cohort of new clinical pharmacists (n=10), with three interviews each between September 2020 and February 2022) and compared these experiences with pharmacists already working in general practice (n=10, one interview each).[20, 46, 47] SMRs were not yet a priority in PCNs and provision was ad hoc. The new clinical pharmacists had yet to adapt their practice to the broader clinical scope of SMRs in general practice, with many struggling with the intended holistic person-centred approach, resulting in the adoption of generic templates to guide SMR delivery. Pharmacists already working in general practice were more prepared for, and comfortable with, the greater complexity of SMRs compared to other types of medication reviews, and compared to their less experienced counterparts.

The new workforce of clinical pharmacists recruited via the ARRS were enrolled on the 18 month Primary Care Pharmacy Education Pathway' (PCPEP). Although the PCPEP training provided a basic knowledge base, remote working during the pandemic had limited opportunities for patient-facing contact, and so development of the skills needed for person-centred medication reviews had not advanced as it might have done otherwise. Alcohol was either not raised at all, or addressed solely in terms of calculating units of consumption, sometimes with advice to reduce drinking. Thinking about alcohol as a drug was a new idea to most of the pharmacists, but they responded favourably to this concept and, of particular importance to the programme, its clear relevance to SMR practice.

We explored patient (n=10) experiences of SMR consultations who reported them to be brief medication enquiries that paid scant attention to alcohol.[48] However, considering alcohol as a drug impacting on their medications and conditions changed the way in which some patients thought about their own drinking, and they welcomed the possibility of including alcohol in SMRs in the ways developed in our intervention.

Adapting the MAC for clinical pharmacists in primary care

These findings informed refinements to the MAC, adapting content and delivery to the primary care setting (Version 5). Importantly, practice development was now conceptualised as a coaching process rather than an enhancement with an alcohol focus of existing training on person-centred skills. This meant that practice development work was explicitly tailored to meet the needs of individual pharmacists as far as possible, to accommodate their varying experiences, skills, learning needs and organisational contexts. We prepared a coaching manual (see *Supplementary Material 1*) to guide practice in building supportive working relationships with pharmacists necessary for the acquisition, development, and application of key consultation microskills. This required a working alliance that centred on discussion of the complexities of discussing alcohol in SMRs, including the challenges being faced. The manual provided a framework for flexibly structuring coaching calls with individual pharmacists during the programme. After the early

weeks the key focus was on discussions of audio recorded SMR consultations (with patient consent). The process allowed for the flexibility to discuss newly arising practice issues by inviting pharmacists to set the agenda for each call. Weekly coaching team meetings were designed to share individual pharmacists' progress. The emerging practice development issues across the group as a whole were to be reviewed, informing refinements to workshop planning, now integrated with the coaching programme content.

The range of MAC resource materials developed for the Phase 1 pilot trial was also revisited and adapted to the SMR and primary care contexts, alongside the strengthening of the coaching component. Three notable changes were made. Most of the additional resources were to be provided by email in bundles at strategic points during the programme (including at the start), rather than being distributed in one block as a hard copy pack. We also extended the programme to 10 weeks, scheduling the second workshop for week 7, and introducing audio recording of consultations earlier, to allow more time for pharmacists to embed the MAC into SMR practice before tackling more advanced consultation skills in the second workshop. Finally, we directly facilitated arrangements for peer groups in the second workshop, but the actual content of the peer sessions was then left to pharmacists to decide and organise themselves. An overview of the 10 week programme is provided in *Supplementary Material 1*, and each MAC component and links to detailed content where available are shown in *Table 1*.

Table 1: MAC Intervention components

Component	**Description**
Practice development training days	Day 1 to focus on core person-centred consultation skills acquisition (e.g. asking open questions), using the MAC in consultations, and preparing a practice development plan. Day 2 explored key issues identified in using the MAC in practice, more advanced person-centred skills and case studies.
Guide to the MAC approach	A paper-based summary of the structure of the MAC and approach to planning the conduct of consultations. Six steps to flexibly organise the consultation to be responsive to patients and explore possible connections between alcohol consumption, use of medicines and health.
Learning support resources	Case studies, information about alcohol and specific medications, and practice development exercises
Coaching calls	Individually tailored weekly practice development support by the MAC support team. Audio recording of consultations (with patient consent) was used to facilitate discussions of practice development and experiences of using the MAC.
Peer support	Voluntary invitation to engage in peer support (buddying in pairs and group discussions over WhatsApp).

Conclusions

Overall, these studies demonstrated just how profound the policy and COVID-19 related influences on general practice were for the process of intervention development. At the time of writing, SMR implementation has yet to match the original policy vision of an invited, holistic, shared decision-making service. The anticipated clinical pharmacist role development has left practitioners more conscious of their need for support, including of person-centred consultation skills. Many had struggled to adapt their community pharmacy style of practice to the complexities of medicines management in the general practice context. In parallel, and as a result of the careful development work, our ideas and intervention content resonated with practitioners. For example, framing alcohol as a drug could help shift the focus of consultations from notions of 'patients with alcohol problems' to problems caused for many patients by alcohol, that the pharmacist had an important role in addressing.

We sought the variation to the contract required to conduct a main trial. We were explicit about the risks and challenges involved in this situation. This was declined by NIHR, and with the benefit of hindsight, this decision has proven to have been correct.

We were also mindful of on-going NHS policy developments and their potential impacts on services and the CHAMP-1 programme during this period. Integrated Care Systems (ICSs) had been developing in preparation to becoming formal legal entities (under the Health and Care Act 2022). By providing collaborative and localised health service planning and commissioning, ICSs aim to improve population health, tackle inequalities, enhance productivity and support social and economic development. At the same time, PCNs had already been reporting pressures to minimise the duration of SMRs in order to manage backlogs, when new funding incentives were introduced to the Network Direct Enhanced Service (DES) contract in 2022.[49] This had raised fears that striving to achieve SMR targets would hasten a tendency to prioritise quantity over quality.[50] Significant changes to the contractual framework for general practice have become regular occurrences, and can be expected to continue in the future. Only one year later, financial incentives for SMRs were removed.[51]

PHASE 3: Programme extension in new NHS structures

Although the MAC coaching programme is well-suited to integration with the intended national SMR service specification, there is substantial variation in how this is delivered in practice locally, and there are also other patient-facing services for which the MAC is also useful. Phase 2 of the programme demonstrated how the contexts of service delivery in primary care are complex, dynamic and challenging. This impacts on how these consultations occur in routine practice and SMR service delivery that departs considerably from the national vision is widespread.

With a trial no longer possible, and with a no cost one year extension to the programme (see *2*), we followed updated MRC complex interventions guidance[52] to implement the MAC in general practice for the first time, while investigating the local NHS and policy contexts which might be expected to influence intervention delivery. Specific objectives were to:

- Explore multi-stakeholder views on clinical pharmacy roles and practice relating to alcohol within the emerging context of the ICS infrastructure
- Deliver the MAC programme and study in depth how clinical pharmacists engage and acquire person-centred skills in practice, including alcohol-specific and other challenges faced, and how practice changes or does not
- Examine how patients participate in and respond to alcohol discussions within SMRs

MAC programme delivery study

Introduction

This was our first opportunity to deliver the MAC in general practice. The aim was to examine the delivery of the MAC intervention from the perspectives of participating clinical pharmacists, patients receiving SMRs, and the MAC coaching team. The programme provided individually tailored practice development coaching to enable pharmacists to skilfully engage with patients, to help them think through whether drinking affects their medication use, conditions and health, in a person-centred manner. The 10 week programme began on February 27th 2023, following the weekly schedule (described in *Supplementary Material 1*). The two in person training workshops were conducted in York on March 9th and April 27th. Telephone calls with the coaching team were scheduled each week, to discuss evolving practice and issues raised.

Ten clinical pharmacists from the Yorkshire and North East regions were recruited to the study, selected from an existing pool of PCNs/pharmacists previously contacted by the research team and who were relatively advanced in the implementation of SMRs. All potential participants completed an online survey about their SMR practice and were called by the research team to elaborate on the nature of the study and to confirm commitment to full involvement in practice development and research activities, including attendance at training workshops on specific dates. All selected pharmacists were provided with written information about the study and provided written consent to participate. Various sources of data were collected and are summarised below.

Data collection

Pharmacist interviews

Audio-recoded interviews were conducted immediately pre and post the MAC programme on pharmacists' views about their own alcohol-specific and wider SMR practice within their particular GP practice and PCN context. The pre-programme interview explored perceived gaps in alcohol knowledge and skills and their expectations of the programme. Shortly after completing the programme, they were asked about the extent to which they were making changes to their SMR practice, reasons for this, and whether they are feeling more confident in discussing alcohol as a drug with their patients.

MAC programme engagement

Pharmacist engagement during the programme was investigated through analysis of observation data on pharmacists at practice development workshops, peer support groups, and weekly coaching records kept by the coaches for each pharmacist. These summarised the content of coaching calls, and were shared in advance of coaching team meetings where practice development issues across the group as a whole were discussed.

SMR audio recordings

The MAC programme used audio recording of SMR consultations (with full patient consent) as the key mechanism for self-assessment of developing practice, supported by feedback from coaches. Nineteen recordings were obtained from 6 pharmacists. This was lower than anticipated due to: (1) low number of SMRs; (2) some pharmacists being slow to get started and not recognising the value at first, until done; (3) technical difficulties with recorders; and (4) losing momentum over the Easter break.

Patient participation

The pharmacists introduced the study to consecutive SMR patients, explained that their eligibility needed to be checked and asked if they were willing to complete a brief screening form. The screening form included a single item question about alcohol consumption (frequency of drinking question from AUDIT-C) and other brief health questions. Patients drinking weekly or more frequently were eligible for the study. Existing alcohol service referral pathways were available for patients. The pharmacists then gained consent to take part, for audio recording of the consultation and to be interviewed. Ten patients were interviewed. A further three refused to be interviewed when first contacted, one agreed but did not make further contact, and five could not be contacted at all to arrange the interview. How the patients participated in and responded to alcohol discussions was assessed in the audio-recordings alongside semi-structured interviews to explore the experience of discussing alcohol during the SMR, and their wider views on discussing alcohol as a drug linked to their medicines and conditions.

Analysis

Adopting a case study design, this study utilised triangulation of these multiple sources of data to provide a rich and in-depth account of the practice development journey for each of the 10 pharmacists, in real world, complex clinical contexts.[53] As well as providing a detailed description of each pharmacist 'case', we also used cross-case comparisons to examine similarities and differences in experiences of the MAC programme and practice

development outcomes. A modified framework was used to organise and present data, supporting a constructionist thematic approach to analysis. Minimal case descriptors are reported in this report (see *Appendix 6, Tables 3 & 4)*) to protect participant confidentiality.

Results overview

Engagement with the MAC programme and connections to practice

The programme sought to recruit clinical pharmacists who actively wanted to develop their practice. In their exit interviews, most said the programme was not what they expected, "but not in a bad way". They expected a more familiar didactic learning model rather than the participatory person-centred programme, tailored to their own evolving self-identified practice development needs. Some were able to engage with this quite different approach more fully than others. All participants enjoyed and found value in the coaching and face to face workshops, even when this challenged their pre-existing views of their own practice and competence. Each of the ten pharmacists was asked about their experience of the MAC programme in their exit interview; a summary of individual responses is provided in *Appendix 7*.

Engagement with the programme was impacted by interrupted momentum from holidays, illness and participants being required to meet the demands of their workplaces, including prioritising other tasks, or covering for other staff on leave or ill. All participants struggled to recruit patients and three participants left early because they were not doing any SMRs. Interviews revealed that practices stopped the drive for SMRs when funding under the Investment and Impact Fund incentive scheme stopped at financial year end.[51] There was wide variation in types of medication review services delivered, with few conforming closely to the SMR policy documents. It was clear across the interviews that pharmacists and their practices did not distinguish between SMRs and any other review:

> I'm not sure it's massively different to stuff I've always done … If you look at four different pharmacists, SMRs will mean four different things …

Usual practice was to deliver reviews by telephone. There was no routine SMR invitation process which would allow patients to prepare, though ad hoc arrangements were made for patients to attend for study purposes. Patient expectations of the appointment were shaped by prior experience of a "pill review" (PMAC4) or an "MOT" (PMAC 8). Some arrived under the impression that they had been brought in to discuss one specific thing: a condition, or a change in medication, and in some cases, they had. Pharmacist interviews show that during the study some left SMR recruitment to other colleagues, while others attempted their own recruitment process targeting alcohol. Study eligibility questions meant that all reviews started with questions about 'lifestyle' topics (including alcohol) which were not audio-recorded.

Those who completed the programme attended an observed online peer support session in small groups. In their interviews, pharmacists said they enjoyed exchanging workplace experiences of alcohol skills development in practice. Some said they picked up small tips listening to others. A group intending to continue to meet after the programme ended had

cross-cutting discussions about the frustrations of attempting to change the habits of patients resistant to advice, recognising their shared professional "fix it" orientation, as well as regarding their thinking about their practice as having altered.

Person-centred consultation skills development

There was a high degree of congruence between the coach and participant perspectives on progress made in developing consultation skills (see *Table 2*). All participants realised there was still work to be done. Those who engaged least, or struggled most, cited time constraints as the key reason inhibiting them offering a more person-centred approach to patients. Ironically, given the holistic aims of SMRs, the more complex the review, the less time they felt able to give patients to speak. Those who engaged most with the programme saw the approach as a means of maximising patient benefit in the time they had. Patients commented in their interviews on how much time they were afforded in these interactions by pharmacists with, "more time to listen to you" (PMAC 9) in explicit or implicit comparisons to GP appointments.

Being articulate in person-centred concepts did not readily translate into pharmacists being able to identify and discuss consultation skills issues in practice on joining the programme. As part of their required training, pharmacists universally and abstractly applied these concepts to their own consultation practice (it is professionally unacceptable to not describe one's practice as person-centred). This was described in terms of, "start[ing] consultations with their agenda … shared decision-making"; "putting the patient's needs first"; "listening"; "partnership" and balancing what matters to patients while achieving targets. At the beginning, most said that the consultation format presented in the MAC Guide was "more or less" what they were doing anyway, except for the attention paid to alcohol.

The MAC focus on communication skills entailed that familiar concepts were given substantive meaning, largely through new understanding of how this differs from current practice. Participation in the programme thus resulted in participants beginning to understand how person-centred concepts might be applied. They gained new and deeper insights into the rationale for person-centred practice and the challenges involved in changing what they do in their consultations to achieve it. Interviews show that this was considered important learning.

Through workshops and audio recordings participants recognised that their practice with patients at the beginning of the programme largely took the form of a pharmacist led question-and-answer dialogue. From interviews and workshop discussions it was clear that a checklist task fulfilment approach provided a sense of safety in alleviating concerns about missing things and keeping the focus on matters that the pharmacist felt able to address in short interactions. Changing this to a more open, person-centred conversational flow was not straightforward. In workshop exercises they observed the difference between the way they listened to each other about sensitive issues compared to their approach with patients. There was recognition throughout the programme that inducing change in a somewhat abstract way, rather than fully discussing what was involved, got in the way of understanding the needs of the person in front of them, and the actual prospects for change and issues to be navigated.

Table 2: Pharmacist and coach perspectives of individual progress

Case	Pharmacist	Coach
A	Previously felt pressure to perform talk on alcohol even when not appropriate. Also, not allowing any silence, filling gaps to avoid awkwardness. Thinks their patients might now feel a bit more heard because letting them talk more at the start. Then "towards the end…you have to take over and summarise and …wrap it up …in a time-productive way." Feels less "ignorant" about alcohol and less likely to shy away from raising it. Understands alcohol should not be a tick box exercise left to the end.	Lack of confidence apparent early on, leading to closed didactic style with patients. Bombarded patients with unsought alcohol advice, not well related to clinical contexts. Identified listening as main practice challenge. Was at an early stage of developing microskills, and giving patients opportunities to raise concerns.
B	Felt they were already involving patients in reviews but now letting them talk first is, "a permanent change", because this allows patients to, "give more to the consultation". Still a "long way to go for it to become more natural". Finds talking about alcohol in a different way is, "the hardest bit". Finds it difficult not tell people what they should be doing, and is unclear about role when there is no obvious problem.	Has a friendly, open style, and values the personal dimension with patients. They worked on restructuring their consultations to introduce alcohol and cede more space to the patient. Made progress here, but less on linking alcohol to medicines and health issues. The practitioner was becoming more responsive to what the patient said and letting them dictate pace. Less advanced in strategic use of microskills.
C	Saw self as empathetic and non-judgemental and in need of skills acquisition. By the end of the programme was doing things differently and, "definitely speaking less, listening more". Found it less frustrating and more satisfying taking a gentler approach. Still on a learning curve connecting alcohol to medication and includes alcohol in a lifestyle discussion (bundled with other subjects) whereas it would have been left out before.	Thoughtful and articulate in talking about own practice. Very unconfident about alcohol initially. Made good advances in consultation skills, building on existing person-centred foundation to extend repertoire. The programme demystified alcohol and made it available for discussion, but still struggling with restraining the impulse to jump in with advice.
D	Started uncertain of consultation skills and aware of gaps in clinical knowledge. Conscious was lacking "natural confidence". Using the MAC approach felt better; "I feel like I got more out of patients, more of what they wanted to talk about, and resolved issues that I feel might not have necessarily been addressed without that approach." Confidence enhanced and they felt better able to manage their "tone of voice" in consultations. Now they, "wouldn't say very confident [discussing alcohol], but not worried about it. I'll happily address it with them."	Had confidence issues, approaching the programme as if a daunting prospect. Took a conscientious, thoughtful approach, identifying what they wanted from it on structuring clinical consultations. Coaching relationship began with addressing confidence before direct engagement with practice issues. Recognised widespread clinical relevance of alcohol and were working on consultation flow, reducing hesitations and finding ways to invite the patient to reflect on their drinking.

Case	Pharmacist	Coach
E	Appreciated the chance to make changes they "probably wouldn't have done […] off my own bat". Identified changing the start to of the consultation, trying to "give people a chance to set their own agenda" as the key insight. Says has incorporated approach and, "I'm definitely using all of the lovely little … micro-skills … that either plant little seeds or get people to just stop and think…I've found it really works, and it can be as efficient, if not more efficient than the rigid, tell me about your breathing, tell me about this." Feels more confident about introducing "normal drinking" as a topic without hectoring or feeling they have to, "…fix it. Not tell people what to do but think about it."	Relished opportunity to create space to look at own practice and think about the idea of listening more to patients. Took some time to apply abstract thinking to own consultation practice. By the end describing inverting prior practice by listening and giving more time to people. Challenge identified to sustain changed practice in face of managerial pressures to achieve SMR numbers as efficiently as possible.
F	Was encouraged to hear, with coach feedback, better use of summarising and reflections. By the end, could see the connection between allowing the patient to raise their own issues and making reflections to focus subsequent exploration. Believes the development of skills has made their consultations shorter; "if you reiterate to a patient that you understand what they've said quite early on … then you can move on to something else that might be on their mind". Continues to find it harder to talk about alcohol with heavier drinkers who "don't think it's a problem".	Had a good foundation on which to build. A motivated learner. Thought about things deeply and responded to feedback. Understood benefit of listening back to their own consultations. Had previously avoided talking about alcohol; did not know what to say and was anxious about conflict with patients. Missed opportunities to connect alcohol to medicines and health issues. Struggled to go beyond a 'lifestyle' framework and the idea that they should tell patients what to do when it came to their drinking.
G	Found it useful to try out different styles of questioning but "it didn't feel that natural". Realises that they rush things when feeling time pressured. Is "trying to take out the more closed and dead-end type questions" and ask more open questions, letting patients do more talking: "more consultations have been partnership consultations rather than didactic type". Has always been "a bit antialcohol". Rarely raised it before but thinks this is a less judgmental approach.	Some prior exposure to person centred concepts and working with alcohol. Enjoyed talking abstractly about issues but struggled to engage with own practice issues. Spoke about practice as if wider forces limited any agency to change how things could be done within consultations. Took something of an all or nothing approach, either you control what happens or the patient does. Struggled to see that focusing on how the interaction could happen in ways that were to the best interests of the patient was not the same as simply giving people what they wanted.

Participants increasingly recognised and sought to apply some of the underpinning micro-skills required for person-centred communication. By the end of the programme all were asking more open questions (something they thought they were doing on entry but discovered they often struggled to do). As anticipated, those with some foundational skills were more able to focus on how people responded to their communicative style and made most progress in becoming more skilful. Interviews showed all pharmacists struggled with the concept and practice of making affirmations, often confusing recognising strengths with giving praise which might sound patronising. The audio-recordings were largely regarded as key to practice development by those who made them, alongside the coaching and workshop sessions.

Left early cohort (n=3)

Three participants did not make any audio-recordings of their practice and left the programme early. Through the workshops these pharmacists recognised that they were asking lots of closed questions that gave little space to the patient, and that this could get in the way of the information they sought to acquire. A compliance focused and information giving frame meant little attention was paid to how the patient was understanding or feeling about the information being transmitted. These pharmacists began to recognise that interrupting to ask another question, and information giving as the first and predominant strategy could come at the expense of understanding an important issue for the patient.

Although sometimes critical in interviews of workplace practices and policies in ways common across the whole cohort, these pharmacists largely presented their core role as enacting reviews on behalf of their practices and securing patient compliance:

> I don't agree with certain things but I comply, because that's how it is, so come to terms with it …

This was accompanied by a presumption that patients should, and will, listen to instruction from GPs and pharmacists. This didactic approach to practice operates not (only) at the level of individual pharmacist but for the profession as a whole. Our observational and interview studies amply demonstrated that pharmacists generally expected the provision of information to be sufficient for behaviour change. Sharing the agenda with patients who may not want a proposed change initiated by the practice was perceived as problematic in this group. On leaving the programme these pharmacists all said they were asking more open questions as a means of eliciting more information at the start of a consultation and retaining the pre-existing format thereafter.

Completed programme cohort (n=7)

Each pharmacist encountered practice development challenges fundamentally shaped by prior professional experience of, and in some cases by personal experience with, alcohol. Summaries are provided in this section, with more detailed analysis of how individuals (cases A-F) progressed in the programme, from audio recordings and patient interviews, provided in *Supplementary Material 2*. Case G was not able to obtain consent for audio recordings but remained committed to the programme.

Two pharmacists who completed the programme, notwithstanding gaps in engagement, continued to enact a didactic approach (cases A and G). Interviews and observations showed they shared the assumption that information giving led to behaviour change and that this was more difficult with complex patient groups, especially involving addictive or other medications where people might be defensive against deprescribing. Coaching was focused on practice recognition and listening skills.

The other five pharmacists who completed the programme also shared ideas such as identifying their role as "fixers" and concerns about patients "not doing what is best for them" which shifted somewhat over time. They also came in with a more skilful and open communicative styles on which to build (cases B-F inclusive). They worked with coaches on how to cede more space to patients and respond more effectively by reflecting on their interactions in consultation recordings and how they could do things differently. All were working to develop confidence in what they could offer patients and to reconcile tensions between workplace requirements for short interactions with the idea that something could be done differently within those constraints, or might take longer but was worth doing.

The programme was well received and acted upon, operating as a process of enrichment and fulfilment of a commitment to practice development. All were used to writing reflective pieces on their practice; listening to recordings made plain the limitations of recall of consultation interactions. They got over initial self-consciousness about making audio-recordings and began to focus on how patients responded to their use of technical skills (rather than the correctness of their own performative style). All found it highly illuminating, and made efforts to apply material on microskills and consultation management from the workshops.

Two pharmacists were clear that pushing things when patients were not ready was counterproductive (cases B and C):

> … it doesn't matter how much you know that will benefit the patient, if that's not on their agenda, then it's impossible …

Others shared this approach to different degrees. All saw the challenge of working towards a freer flowing structure at odds with current practice which was, "already imprinted in your head…because you do it all the time…I do think I'm better…but I still think there's a long way to go for it to become more natural". These five pharmacists began to see value in allowing patients more time to talk and a more relational interaction produced a sense of professional satisfaction:

> …. you see the difference in the consultation … you get so much more satisfaction. You feel like you've made more of a difference. And you go into these professions to make a difference.

One of the pharmacists, who had been making efforts to use reflections to show their understanding of what the patient was saying and structure the session, said counter to their own expectations, they found their consultations were becoming shorter and better focused as a result (case F).

Comparison with previous training in consultation skills

On entry, most said they considered themselves well trained and some considered themselves advanced in consultation skills. At exit, all said the MAC programme was very different from prior training which, "talked a lot about person-centred practice but less about how to achieve it". Some described the pharmacy training model as more focused on watching examples and recognising behaviour, "it's a bit like learning to play football by watching it". Support and feedback from coaches based on listening to consultations was new to all participants. They valued the tailored, interactive, actual practice focus compared to prior training approaches:

> you talk about it [person-centred practice] a lot, but … no one listens to you back, no one gives you feedback …you don't then go off [and] practise … This was very tailored … this is the skills …
>
> … although we've talked about person-centred care in the past … open questions and the golden minute, we perhaps haven't talked about the reflections … summaries and … affirmations … if you're reflecting and summarising, they know that they've been heard …
>
> … we all practice differently. We all learn differently … I didn't realise how many closed questions I was asking … you really limit yourself in a consultation, you really limit the patient as well … it was so positive to get … feedback …
>
> …this is more real …

All of those who completed the programme said they would recommend it to others as, "a rare and invaluable opportunity" to focus on consultation skills. One said that much in the emerging clinical pharmacy role was based on a patient's history, "and if you can't listen to people and talk to people, then I don't know how you get that right".

Changing perceptions of person-centred practice

All except one of those who completed the programme said their understanding of person-centred practice had changed. They valued this more as something to be done in practice (rather than something to be), recognising the gap between it and their usual practice:

> … That's what I've learnt … what I thought was patient-centred actually was …a lot more closed-ended questions that … weren't as patient-centred as I thought.
>
> …it's always been about the patient. But just in a tick boxy kind of way …not where my consultation and communication [is]as open as it is now …I see the value of it more ...
>
> [The difference is knowing it means] changing the way I've done the consultation … I just got stuck in a rut of doing something a certain way … this allowed me to reflect on that and change things.

> [The pharmacy] version of person-centred is about how many different metrics are you ticking for each person ... can you deliver all of your important objectives … [now I'm thinking] in terms of helping people with whatever health needs they've got by offering people a chance to set their own agenda … [which] can be as efficient, if not more efficient than the rigid, tell me about your breathing, tell me about this…

One participant who completed the programme while engaging with it at a more abstract than applied level maintained their entry view that being person-centred risked "giving in" to patients who might not know what is best for them (case G).

Helping patients make decisions about alcohol and medications; the ultimate intervention target

Pharmacists started with little confidence in talking about alcohol (see *Table 2* for perspectives on individual pharmacist progress). Their direct experience was limited to asking about and recording units and advising reduction if consumption was perceived to be very high. The focus in such interactions was on identifying those drinking too much rather than helping people see the problems alcohol causes for health. When raised, alcohol was usually bundled with other "lifestyle" issues at the end of a consultation in a "tick box" exercise leading to minimal or "tiptoeing" conversations. All were conscientious practitioners who recognised that they lacked knowledge underpinned by evidence about alcohol. Some of the pharmacists who had never consumed any alcohol said they were very unconfident because of their lack of personal experience. One recounted in their entry interview being flustered when a patient asked why units recommendations had changed from 21 to 14:

> I thought, oh god …. I really don't know enough about this to comment … …I didn't even know where that came from.

Programme participation meant more exposure to the complexities of the roles that alcohol plays in people lives and in the ways in which people talk about their own drinking. Some, who anticipated reluctance to talk about alcohol among religious groups for whom alcohol was forbidden, were surprised to find it such a sensitive subject across the board.

Most came to the programme largely wanting to find ways to achieve alcohol behaviour change in patients. One explicitly framed this as getting people who refused advice to, "take responsibility for their actions". There was a particular disjunction between conceptualising a consultation as inducing change in patients through information and advice-giving and the creation of discomfort when attempting to raise a sensitive issue some regarded as more personal or "social" rather than medicines related. Some initially felt that asking a question about drinking might be seen as implicitly accusing someone of having a "problem", faulty "lifestyle" decision making, or being irresponsible. Alcohol was not understood by any as a public health issue in which they had a clear clinical role. This precluded opening conversations and reduced interactions to a quick exchange which did not embarrass either party.

A shared presupposition that people need to be told things many times before they will do it was challenged at the workshops. During the programme, participants found it hard to shake the feeling that they were going to have to tell patients what to do when it came to their drinking, and this continued to make them reluctant to talk about alcohol in more meaningful ways. Some worked at curbing a habit of quickly telling people to reduce their drinking. Consultations show pharmacists informing patients that alcohol is a drug without checking how the person understood the relevance to them of a phrase that patient interviews show can be interpreted narrowly to mean alcohol is addictive:

> …everybody knows that it's a drug … Anything that there is a possibility that you could get addicted to could be classed as a drug (PMAC08).

Although the programme focus was on the problems any alcohol consumption can cause for any patient taking medication, some pharmacists maintained a focus on 'problem' or heavy drinkers. A pharmacist who assumed the programme was targeting "alcoholics" retained that narrow focus with a new legitimising focus:

> I certainly wasn't thinking of alcohol as a drug, I was looking at it as a problem. [This] will just let me … approach it in a less judgmental way … so it's an encompassing part of the review … as opposed to attacking someone's … personal habits … People can be quite defensive about lifestyle …

All shared an early fear of opening a "can of worms". One pharmacist was particularly concerned about getting embroiled in time-consuming conversations about why people were drinking without being able to offer anything. By the end of the programme this pharmacist started to recognise offering the chance to talk about something as a useful offer in itself, rather than only as a means to get and give information for specific actions. This, and acknowledging the limitations of what they could or should "fix", "save" or "change" in people made pharmacists less fearful of letting patients talk. Others said they realised that "planting a seed" to be revisited was important, and immediate change, however professionally desired, was unlikely.

Framing alcohol as a drug gave pharmacists a clear sense of legitimacy to raise alcohol in medication reviews, though the prospect of a well-developed clinical role remained distant for most. It made raising it less "taboo" and all were struck by the current lack of attention paid to alcohol as a potent drug in the mix with other medications. Many of the pharmacists for whom we have audio recordings were able to get details of how people drink, though the depth of the information was variable. Once alcohol was raised, most of the pharmacists remained unsure how to respond and missed opportunities to discuss drinking in a way that connected to a particular person's concerns about their medicines and health. Some recognised and discussed such missed opportunities, and the coaches regarded these practitioners as in many ways still in the early stage of a journey. The pharmacists agreed:

> I do now more look at … if they are drinking, what medication are they on and what effect might it be having on them? And … are they not taking their medication if they are drinking? … I still feel a little bit nervous about [talking about alcohol] … I still feel like I need to get more confidence …

> I'd always kind of known that alcohol does affect medication but because … not enough has been made of it [in training] …I didn't give it that same importance … I don't know how good patients are at connecting [medicines and alcohol] and I feel as though I can't really blame them, because a few months ago, I wouldn't have been as good as I am now and I'm health professional trained …

These two pharmacists, who previously avoided talk about alcohol, developed a more open consultation style in which they continued to include alcohol in a "lifestyle" bundle with subjects with which they were more comfortable. This usually set people up to give short responses. Both nevertheless coped well in consultations with heavy drinkers, one with a particularly challenging conversation style, managing to deal with a pharmacy issue by not being overshadowed by the alcohol issue (cases C and F). Other pharmacists also began to see the importance of, and were able to allow, more space for a person to talk without feeling rushed or judged:

> … allowing patients to open up a bit more, seeing us as a clinician, [building] better rapport [and a] more trusted environment … making those links with patients … those really subtle links, and just seeing that flick[er] for them, rather than it being, 'alcohol, no, don't do that'.

After the programme this initially unconfident pharmacist was comfortable being sent referrals of heavy drinkers when that was not the MAC population focus, and they had not gone that far with alcohol (case D). Another saw this approach as "bigger than alcohol" (case E):

> What I'm taking away from this is that I'm more skilled, I think … to discuss alcohol, but [also]… it's a better model for agenda setting and allowing patients to discuss problems.

Against their initial expectations they saw this approach as a potentially more effective means of working, which promised better outcomes from letting patients "tell their story", rather than the current "algorithmic" practice which engaged patients in lots of small, fragmented, and possibly less effective encounters.

In keeping with our earlier work, patients interviewed who had been in these interactions said a conversation about alcohol was appropriate but had poor recall of discussions. More abstractly, they thought it would be more useful for other people who are "heavy drinkers" or because they said it was "too late" for them. Recordings and patient interviews show attempts to make connections, but also missed opportunities for relevant conversations about alcohol, medications and conditions.

Discussion

The professional socialisation of pharmacists involves giving accounts of practice which conflate the work they do with the work described in training and policy documents. Commitments to person-centred practice as experienced previously were thus rather abstract, and early acquaintance with the MAC programme was both challenging and

positive for all pharmacists. The extent of the challenge varied, and appeared insurmountable for some when SMRs were no longer being prioritised, and other workplace pressures combined to encroach on or remove the space for practice development opportunities.

Even among those who completed the programme, all had to work hard to secure advances in practice. The completers as a group found it rewarding, and most but not all moved to some extent from addressing and advising a generalised 'type' of patient to becoming committed to finding out about particular patients, and inviting and being more open to their points of views and the ways in which the SMR could be helpful. The coaches, as well as the pharmacists themselves, saw both progress, and limitations to how far they had reached. There was some evidence of commitment to taking practice development forward after the programme ended in at least one peer group session having taken place.

This cohort of pharmacists have taken different things from the MAC programme, just as they began it from different starting points. For all it been based on exposing their interactions with patients to careful and detailed self and coach scrutiny, reflection and dialogue. Unsurprisingly, there is more convincing evidence of progress in promoting person-centred consultation skills than their application to alcohol. Thinking about how to handle alcohol clinically was less well developed, as was shedding stereotyped ideas about alcohol problems.

Progress in practice development was shaped by contexts in other ways. Most pharmacists worked extra hours to develop their practice and undertake this study, juggling other professional and personal roles. There was evidence of small gains across the cohort as a whole, including those who did not complete the programme, becoming more adept at asking open questions to gather information, without in many cases having acquired more advanced skills to use it in a person-centred manner. This may or may not follow in time. There were indications that any future appointments with the same patients would be informed importantly by the consultations examined, if these occur. Precarities in the wider system in which patients are trying to navigate encounters in what seems an increasingly fragmented system without continuity of care were reflected in this study. The idea of the SMR incorporating alcohol is a good one, valued both by patients and pharmacists, because pharmacists can do this work, and do it better if they are given more ongoing support than was offered in the MAC programme. Developments in the NHS system must be examined first, however, in order to consider how far clinical practice with potential for prevention may be translated into population health improvement.

Integrated Care Systems: A new context for NHS innovations on alcohol

Introduction and method

ICSs had been introduced to develop local, place-based integrated health and social care services to improve population health in England. To examine how the MAC intervention may work in this new context we examined decision-making and progress on alcohol in two contrasting ICSs, one of which had strategically prioritised alcohol. This study was

undertaken prior to the delivery study. We conducted in-depth semi-structured interviews with 14 senior ICS stakeholders (interviewees numbered in brackets below) in total. The topic guide covered the ICS itself and handling of alcohol therein, as well as views on current primary care practice relating to alcohol. We also discussed the broader MAC approach, the reframing of alcohol, and the implications for clinical practice.

Results overview

Stakeholders reported working in stretched and underfunded circumstances, trying to map resources and develop priorities across diverse organisational units, seeking to align these with ideas forming at a system level. Systems thinking on alcohol harm prevention was absent in one ICS and nascent in the other. The latter had long-standing recognition of the harm alcohol does regionally and hoped to link to prevention and health inequalities agendas.

Key system levers or mechanisms for progress on alcohol identified by one interviewee were, "an enormous shift in what our workforce culturally think of as their role, and [are] capable of delivering, and [are] confident and enthused by" (S11). All interviewees identified the importance of getting the workforce engaged with this broader perspective and able to contribute. For the ICS led alcohol strategy, this meant, "winning hearts and minds", i.e. getting NHS staff to recognise and acknowledge alcohol harm as an issue, and gain a sense of the implications for their own roles (S1).

The other ICS was still focusing on interventions promoted in existing national guidance. A public health team offered free, one-off, alcohol identification and brief advice training to non-alcohol specialists and found take up to be low. The leader of this team, however, wanted more upstream intervention and aspired to introduce local level minimum unit pricing, but was struggling with feasibility issues: "[in terms of] the things that we know work around alcohol on a population level, you feel very helpless" (S6). Primary care leaders in both ICSs explained that work on alcohol was not a practice priority given that this was not financially incentivised and because, "when there's an overwhelming demand on the system and you're firefighting", the focus is on the most acute and immediate problems (S4).

Reframing alcohol as a clinically important drug resonated with all the stakeholders. They recognised that despite alcohol use being an important consideration for treatment effectiveness at a clinical level, it was not currently considered in these terms. According to one interviewee "tagging it in as part of polypharmacy and as a drug within that to be optimised … strength, dose, timing … like we would do any drug, is actually probably a very good tack to go from, from a clinician point of view" (S3). Some stakeholders identified examples where alcohol had been overlooked in their own work, for example in producing antidepressant de-prescribing guidance. This interviewee stated: "alcohol is not mentioned anywhere in that … it should be, because … you don't want somebody to attempt to self-medicate with alcohol, as a replacement, because, clearly, that's not going to work and will cause all sorts of other health problems (S10).

While framing alcohol as a drug made sense to these key stakeholders, interviewees recognised that many health professionals were not confident with the subject, and thus

need support to talk to people about such a sensitive issue (S2, S5, S7, S9). This would mean moving away from template driven lifestyle questions (S1, S8) and generic stock information-giving (S9, S10). Giving more meaningful attention to alcohol carries obvious risks for clinicians of not being able to offer more as things stand. As one said: "I know full well that's [current practice] meaningless and it has a very poor outcome, they need structured support and … monitoring … if you haven't got the resource to make that happen as a clinician, that's probably the bit that makes you shy away" (S9).

Seeing alcohol as a drug entails not just reconceptualising targets for clinical attention, but also taking stock of the ways in which alcohol is relevant to the broader endeavours of improving population health by better integrating services. A focus only on a minority of heavy drinkers was something that leaders in public health identified as in need of change. No NHS strategic direction on alcohol outside of the Long Term Plan[9] left public health leaders feeling limited in their powers to implement evidence-informed upstream interventions. This therefore risks repeating the failures of the past in a vicious circle, with alcohol doing untold damage over time, increasing NHS workload and leaving staff, as one interviewee put it, "in survival mode, just doing the basics" (S2).

Conclusions

ICS formation occurred when services had been under sustained pressures and lines of communication and accountability were emergent and unclear. Stakeholders identified fundamental disconnects between prevention and treatment and a clear sense that alcohol was not currently well dealt with. ICS strategic prioritisation of alcohol engendered new perspectives and novel actions. While the MAC approach was congruent with the vision of how the new system should be working, there were doubts about capacity in current circumstances. There remains much to do to create a joined-up, system-wide approach to alcohol and thus a need for a national NHS alcohol strategy to guide ICS decision-making, addressing links between NHS work and public health.

MAC programme logic model

We built upon logic models produced during earlier phases of the programme,[32, 45] and key component studies which informed them,[18, 20, 24, 26, 28, 30, 31, 46, 47, 54] to arrive at a finalised logic model that summarises our understanding of the forces at work in developing clinical pharmacist practice on alcohol, and in medications reviews, with the MAC. As seen in *Figure 2*, the health system, environmental, cultural and historical contexts operate as macro level influences or moderators of MAC effectiveness.[11, 18, 24, 43, 46] These interact with meso-level factors, including adaptations resulting from the COVID pandemic,[18, 20, 45-47] to define the parameters of the space for practice development at this time, as targeted by the MAC. These apply to the studied practitioners, and thus the clinical pharmacist workforce more broadly, as a whole, whilst acknowledging local variability in SMR implementation.

Progress in coaching and individual practice-level change is also shaped by micro-level moderators of effectiveness acting at the level of the individual clinical pharmacist.[29, 30, 32, 34, 46] These are both contemporaneous and historical in nature, based on prior professional and personal experience. This presentation emphasises the heterogeneity of experience and

progress with the MAC approach within the group, and topics appropriate for consideration of wider dissemination of the MAC within the general practice setting.

At the centre of the model (in blue) are the MAC programme and practice development outcomes. The sought clinical outcomes are presented at the end of the figure. MAC coaching inputs are distilled into three principal components, reflecting how the programme was designed to operationalise attention to these targets in pharmacists' everyday SMR practice.

Firstly, the more widespread clinical relevance of alcohol and how it complicates treatment and patient health, entailing pharmacists recognise the tasks involved in raising and discussing alcohol sensitively and appropriately in the context of prescribed medications, and how these challenges may be overcome.[26, 36, 46, 47, 54] Regarding alcohol as a drug must be foundational to the clinical pharmacist role. It is difficult to imagine how alcohol can otherwise be incorporated into routine clinical practice, and we found repeatedly that this gives both legitimacy and understanding of importance to both pharmacists and patients. Within the 10 week programme delivery, limited progress was made in appreciation of the complexities posed by alcohol, and how they may be handled clinically (see above).

Secondly, we understood early that because alcohol was challenging to discuss for both pharmacists and patients, counselling microskills need to be learned and applied with some sophistication in consultations.[10, 25, 26, 31] This was in order to open up discussions of alcohol and medications and wider patient-initiated health contexts and concerns, and to proactively structure the consultation to explore their inter-relationships.[24, 32, 34, 37] This really lay at the heart of the MAC coaching input, and required the activation of the two other principal components to help patients think through and make better decisions about alcohol and medicines.

Thirdly, none of this was straightforward for practitioners to accomplish, and so required commitment to ongoing practice development on the part of the pharmacist[20, 29, 45-47]. In many cases unlearning habits established over many years was at issue, and this challenge was relished by some, and rejected by others, among other micro-level moderators of effectiveness. This involved exposing practice to critical self-reflection, via audio recordings of consultations, and guided by coaching interactions. The pharmacists we worked with were typically not well supported in their participation in this research by their practices.[32, 33, 35, 45, 46]

The MAC coaching components correspond to the three practice development outcomes. First, the subject of alcohol must be raised widely, and for many patients a brief discussion will suffice. For others, where there are medication issues raised and/or patient concerns, the active participation of the patient in consultations is essential to discussing alcohol consumption flexibly, and exploring the implications.[25, 27, 31] This is facilitated by a communication style that focuses on understanding the needs of the patient first, and the creation of an environment that facilitates a supportive exploration of concrete issues.[27, 32,

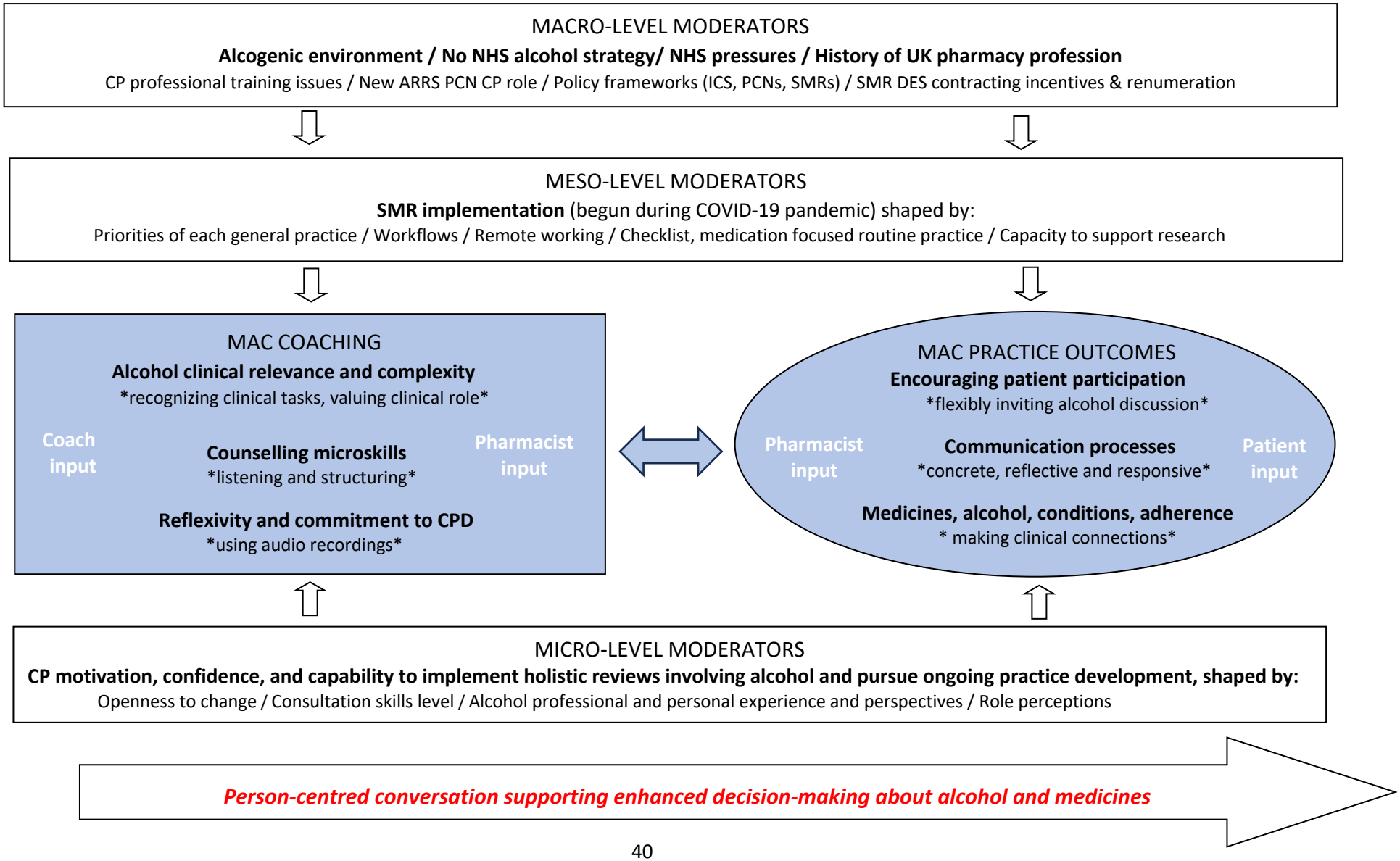
[46] Checking out possible connections between alcohol use and medicines, conditions and adherence, can be accommodated whilst respecting the lead role of the patient in agenda setting. In the most basic terms, it is a conversation that is led by the person, because it is the enhancement of their decision-making powers that is sought, with the pharmacist having a clinical role akin to that of the coach in the MAC (see intervention materials in appendices).

The double-sided arrow between the MAC coaching and practice development outcomes is important. It indicates a dynamic process, grounded in the realities of clinical practice with patients, and mirrored in the coaching process. This involves both pharmacist agenda setting and coaching feedback and other inputs, ultimately tailored to the needs of individual pharmacists as they progress through the programme. Topics for coaching sessions are discussed and negotiated between coach and pharmacist to highlight practice development issues, including both progress and challenges, with clinical pharmacist self-identified goal setting key (see appendices).

Giving attention to the professional and policy moderators of programme effectiveness at different levels[16, 29, 30, 37, 39, 40] provides indications of where and how practice development and clinical outcomes may be enhanced. Clinical pharmacists discussing alcohol with patients in general practice is more difficult than it needs to be. The wider environment normalises heavy drinking, promotes stereotypical ideas of alcohol problems and is underpinned by few restrictions on marketing.[11, 36, 39] These provide constraints on professional practice development, and may also serve as opportunities for discussions of patient concerns, albeit constrained in turn by pressures on the NHS.[46] There appears a real risk of the NHS being stuck in a vicious circle of using under-prepared clinical pharmacists, and perhaps other professionals, to cope with the consequences of the lack of a strategic response on alcohol (see ICS stakeholder study above).

The impacts of changes to the organisation of primary care and medication review services have been far reaching, not just for our research programme, but to the experiences of practitioners who struggled to develop practice and deliver SMRs in the manner envisaged by the policy guidance. Perhaps it is unsurprising that there is variability in how far individual pharmacists progressed towards person-centred conversations on alcohol in SMRs. That does not mean this is not an important finding, and there may be merit in considering advanced clinical practice roles for alcohol. On the basis of this programme of research, this would be unwise without substantial investment in selection and training of this workforce, and giving appropriate attention to making progress on the macro, meso and micro level moderators identified here.

Figure 2: Logic model for using the MAC programme to develop alcohol and related practice with clinical pharmacists (CPs)



Patient and public involvement (PPI)

The programme PPI group was initiated at the time of the CHAMP-1 funding application. Co-chaired by a lay co-investigator (recruited at the start of the application process) and the programme manager, the original group comprised 10 active members who regularly attended meetings. Members were recruited from local support groups for people with long term conditions (i.e. the target population for medicine review services) and through advertising on the NIHR People in Research website. We operated a rolling process of recruitment, as members withdrew over time due to illness and other commitments. As well as some downsides, this meant that the group benefited from fresh perspectives during the programme. Three meetings were scheduled per year, with additional contributions to the programme organised on an ad hoc basis as necessary. All members were remunerated for their time and travel in line with NIHR INVOLVE guidelines.[55] In addition to the lay co-investigator, another PPI group member represented the group on the Programme Management Group. PPI members were made aware of, and were consulted about the changes to the NHS, with discussions focusing on the corresponding revisions required of the programme to make it relevant and as part of our sign-off process for reporting to NIHR. Adaptions were made to remote working during the COVID-19 pandemic and subsequently.

Further details of the PPI group composition, working methods, contributions and impacts have been published in *Health Expectations*.[25] This paper, co-authored with two PPI group members, provides a critical overview of the development of the group and how PPI and co-production with patients have been interpreted and applied within the programme. In summary, PPI contributions were integral to intervention development and related research activities throughout. We consulted the group on patient facing components of the intervention, study recruitment and consent materials, and design of a patient recruitment pitch for pharmacists to use. Two members provided hosting and facilitation support at the Phase 1 workshop, and two different members were involved in patient simulation activities in the pilot trial pharmacists training. Research training was provided to members to support their participation in these activities. This was usually organised at group meetings in the context of the studies being conducted at the time; for example, we provided a session on RCTs before discussing plans for the pilot and definitive trials. We have received consistent positive feedback from NHS ethics committees on the planning and management of PPI.

Equality, Diversity, and Inclusion

Given the design of the research and the intervention, we strove to capture medicine review service delivery in routine clinical conditions, even when planning the pilot and definitive trials. We thus aimed to recruit successive eligible patients who were attending the pharmacy or general practice during the fieldwork periods, rather than targeting specific patient groups. In the case of SMRs, national policy proposed a range of prescribing categories for the service, to be prioritised at a local level. This meant considerable variation between practices, PCNs and ICSs in the types of patients who were being invited to an SMR.

All recruitment materials were co-produced with pharmacists and patients, seeking to optimise the appeal of the research. The emphasis for patient participants was on inclusivity, with very few exclusion criteria for the component studies; adults drinking at least twice per week were the principal selection criteria. We were more selective when recruiting pharmacists for the intervention delivery studies. We advertised the opportunity widely through local clinical, professional and research networks but stipulated from the outset the expectations we had for those taking part. This was to ensure transparency and full understanding of the time commitment involved, but also because we were seeking pharmacists conducting enough medicine reviews to make patient recruitment feasible, and to be motivated to develop their practice to some degree. This should be borne in mind when interpreting study findings. We achieved a reasonable range of equality, diversity and inclusion characteristics among pharmacists in terms of age and relatedly professional experience, gender, ethnicity and relationships with alcohol. All pharmacist and patient participants were remunerated for their time.

Much of the research was observational and qualitative, and thus conducted with relatively small sample sizes. Whilst limiting representativeness in numerical terms, these studies provided in-depth insights into experiences and behaviours concerning alcohol and medication that are seldom found in the literature, not least because for patients, practitioners and researchers, alcohol remains a difficult topic to discuss. The programme was located in Yorkshire and Humber and the North East of England. Reflecting the population characteristics of these regions, we recruited pharmacists and patients from diverse ethnic groups and from some of the most socio-economically deprived communities in the country. It is in such places that the individual and social harms from alcohol are likely to be greatest.[56] For example, Office for Health Improvement & Disparities data show the North East to have the highest standardised rates per 100,000 of alcohol related mortality, admission episodes for alcohol related conditions (broad), and a range of other alcohol harm indicators.[57] Our Phase 2 analyses of OpenPrescribing data showed this region to also have the highest level of opioid analgesics prescribing; these drugs pose risks for interactions with alcohol and are one of the target categories for the SMR. The Yorkshire and Humber region is also above the England average for these metrics.

Conclusions from the whole programme

Pharmacists are a good example of a candidate workforce who could contribute to prevention through integrating brief interventions on alcohol within core roles in the NHS and beyond. CHAMP-1 has examined carefully the process of embedding attention to alcohol within the clinical practice of pharmacists in medication reviews by supporting practice development through a dedicated intervention, the MAC programme based on coaching structured around audio-recorded consultations. Throughout, patients have been receptive to the prospect of discussing alcohol with a pharmacist if introduced and explained appropriately within a medication review. Numerous organisational and situational pressures, policy decisions, prior readiness and skills enhancement issues have been encountered, that warrant four principal conclusions from this research programme.

1. Workforce development, from initial pharmacy professional training onwards, needs to give more substantial attention to person-centred consultation skills, as they are applied to alcohol, than has previously been the case.
2. The effects of systemic pressures on primary care need to be managed to support rather than inhibit innovations in practice that contribute towards prevention, or the person-centred ambitions espoused in policy documents will not be realised.
3. Practitioners can be supported towards enhanced skilfulness in working clinically on alcohol with the MAC, with more intensive support for those wishing to further develop their practice likely to produce further benefit.
4. Seeing alcohol as a drug resonates strongly in primary care as it has multiple clinical and population-level implications. This idea could be particularly useful to developing thinking about how the NHS may better address the major public health challenges with which alcohol is implicated, albeit currently not well recognised as such.

These conclusions apply directly to clinical pharmacists in primary care, and likely also with caveats to pharmacists in other settings, and are also relevant to other professions in both health and non-health settings.

Reflections on what was and what was not successful in the programme

The research programme had to contend with a series of major national policy decisions that impacted directly upon the research aims and conduct, and the interruption of routine NHS services caused by COVID. It was not possible to undertake our planned RCT in these circumstances. This research programme has nonetheless identified major implications for brief interventions and NHS and primary care management of alcohol's harm to health. This has been based on rigorous and intimate study of the process of practice development among pharmacists, alongside studies conducted, of and with, patients, managers and other stakeholders. The contributions made to the research literature will inform NHS decision-making on the roles of pharmacists, the potential of medication reviews, and more broadly on alcohol as a clinical and population health challenge and how it may be addressed.

Limitations relating to the method or execution of the research

Due to external circumstances, we were not able to test the efficacy of the MAC as originally planned. In Phase 1, changes to the NHS community pharmacy contractual framework

removed the planned service to host the MAC (MUR) from the contract altogether. This impacted patient recruitment during the pilot trial when it was announced. This meant the extensive intervention development work conducted in community pharmacy would need to be supplemented with further developmental studies adapting the intervention for delivery by clinical pharmacists in primary care through a new service (SMR), arguably better fitting programme aims.

In Phase 2, in the general practice setting, we explored pharamcist and patient perspectives in the context of the significant challenges arising from SMR implementation during the COVID-19 pandemic. Implementation was slower than originally envisaged, which we studied and published on. Initially delivered entirely remotely in ways that departed from the vision for the SMR, this impacted on planned research, particularly our ability to recruit SMR patients for interviews.

Evaluation of MAC delivery in Phase 3 was undertaken in depth. Intensive coaching with audio-recordings of practice among participating pharmacists yielded rich data on their engagement and practice development journey. The small volunteer sample is not likely to be representative of the broader clinical pharmacist workforce, though the evaluation does show what is possible and delivers important lessons for future interventions.

Overall, the programme has comprised predominantly qualitative studies within the North East and Yorkshire NHS. This has yielded insights informing research contributions that have been well received. The contribution to NHS decision-making may be appreciated within the contexts of the evolving research literatures on alcohol, person-centred skills enhancement and pharmacist training, and dissemination work is ongoing.

Recommendations for future research

The four principal conclusions entail needs for further research on pharmacists, primary care and the NHS/health system management of alcohol. In this section a global perspective on this field of alcohol research is adopted. The 1980s screening and brief intervention (BI) paradigm is no longer fit for the purpose of informing how conversations about alcohol should take place within healthcare services. We need a new paradigm that guides how we conceptualise and study brief interventions. This need has also been recognised by others.[14, 15, 58] The CHAMP-1 programme shows how this research agenda may be advanced. Alcohol is currently largely avoided in routine practice consultations, and where addressed is dealt with by pharmacists in ways which are judged unlikely to be beneficial. This is likely to be true also for other healthcare professions. We make four recommendations, for advancing research that we refer to as BI 2.0:

1. The focus should not be only on self-regulation of alcohol consumption, in isolation from personal health and social contextual factors;
2. Much broader intervention content is needed to help people to think differently about, and to discuss, the place of alcohol in their lives and in wider society;
3. BI programmes should support a candid public conversation about how alcohol and alcohol problems interfere with the lives that people want to live, reframing existing ideas about what constitutes an alcohol problem;

4. BI programmes should form a key part of more comprehensive alcohol strategies, as important synergistic effects are anticipated.

Implications for practice and any lessons learned

The principal conclusions and research recommendations embody lessons learned and carry important implications for practice. Pharmacists (and other NHS professions) have important roles to play in contributing towards a prevention agenda for alcohol, that has not yet been articulated by the NHS. Practice-based research is needed to optimise this contribution. Progress in research on the costs to the NHS and society, as well as on new intervention approaches needs to be accelerated. Regardless of whether non-NHS public health policies are implemented, alcohol should feature more strongly in high level NHS workforce planning, training, prioritisation and other strategic decision-making. It is suggested that if we do not make progress on alcohol and primary care pharmacy research in these directions then it seems likely that what we do not know will continue to interfere unnecessarily with the work of the NHS, at great cost to health.[16, 37, 59] The same is true if we do not act on what we already do know now, even if we need to know it better.

Additional information

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Acknowledgements

We are grateful to all patients, pharmacists and other stakeholders who contributed to the success of this programme. Former CHAMP-1 programme members: Karl Atkin, Brent Foster, Catherine Hewitt, Tom Mills, Stephanie Morris, Louise Newbould, Steve Parrott, Anne van Dongen, Jude Watson, and Sue White.

Data sharing statement

All data requests should be submitted to the corresponding author for consideration.

Access to anonymised data may be granted following review.

Ethics statement

Research undertaken in this programme received NHS ethics committee/HRA approval (dates in brackets) as detailed below.

Phase 1 intervention development studies: Yorkshire & The Humber - South Yorkshire

Research Ethics Committee (17/YH/0406); Dec 2017

Phase 1 pilot trial: South West - Frenchay Research Ethics Committee (19/SW/0082); Jun 2019

Phase 2 practitioner interviews: HRA (20/ HRA/1482); Jun 2020

Phase 2 patient perspectives: South West - Frenchay Research Ethics Committee (20/SW/0194); Jan 2021

Phase 3 ICS stakeholder interviews: HRA (22/HRA/3638); Sep 2022

Phase 3 MAC delivery study: North East - Newcastle & North Tyneside 2 Research Ethics Committee (22/NE/0237); Feb 2023

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Disclosure of interest statement

This project received additional research capability funding from NECS. No further disclosures of interest are declared. Jim Mccambridge received a Wellcome Trust Investigator Award outside the submitted work. Ronan O'Carroll was a co-investigator on grants from the British Academy, Chief Scientist Office, NHS Scotland, Irish Cancer Society, and the International Development Research Centre outside of the submitted work. The following authors were members of NIHR funding committees: Duncan Stewart (HSDR 11/2022 – present); Ronan O'Carroll (HSDR 11/2010 - 03/2016); Margaret Ogden (Work and Health Research Initiative 06/2023 – present); Mary Madden (PHR 06/2022 - 01/2025). Shona Haining is a member of the NIHR Centre for Engagement and Dissemination Editorial Board (04/2020 – present).

Disclaimers

This report presents independent research funded by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, CCF, PGfAR or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, the PGfAR programme or the Department of Health and Social Care.

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This list includes links to institution repositories where publications are not open access via the journal.

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Appendices

Appendix 1 Original CHAMP-1 objectives, workstreams and programme governance

The original objectives were to undertake:

1. Intervention development, feasibility and acceptability studies to prepare the intervention and trial
design for a definitive evaluation study
2. A pilot trial in advance of the main trial
3. A definitive randomised controlled trial evaluating the clinical and economic effects of the intervention
4. Four participant-centred qualitative process studies which explore the complexities of medication
appointments and their effects on patients and pharmacists
5. A long term health economics modelling study to estimate future costs and outcomes
6. Policy engagement throughout the duration of the programme to assist post-trial decision making regardless of the result

Six workstreams corresponded to the study objectives as follows:

1. Intervention development, feasibility and acceptability studies (months 0-15)
2. Pilot RCT (months 13-23)
3. Definitive RCT (months 24-48)
4. Participant-centred qualitative process studies (months 20-47)
5. Long term health economics modelling study (months 43-60)
6. Policy engagement and implementation (months 49-60)

Programme governance

Programme Management Group

Progress in research and co-ordination of co-investigator inputs were overseen by the PMG. This was chaired by the PI and included all co-investigators, key research staff and one additional member from the PPI group. The group initially meet every two months in the first year, and then three times per year, with additional meetings arranged as needed at key points in the research process, and to address issues that arose outside the control of the research team.

Patient, practice and policy advisory groups

The development of the research plans was supported throughout by a Pharmacy Professional Practice Group (PPPG), a Policy Advisory Group (PAG) and a Patient and Public Involvement Group (PPI). Membership of the former two evolved to reflect changes in the programme. The groups were consulted during the development of the MAC intervention, trial planning and on changes to the programme. We also reconfigured PPPG and PAG

membership to reflect the transfer of the programme to the general practice setting. Advisory group membership and functions were as follows:

Pharmacy Professional Practice Group (PPPG)

Purpose: Lead professional input into development and testing of the intervention

- Support pharmacies/pharmacists to undertake the research
- Advise on intervention development & manual
- Assist dissemination via education materials, professional groups & forums

Membership:

- Pharmacy research champions
- Centre for Pharmacy Postgraduate Education (CPPE) representatives
- Local Authority Public Health
- Local Pharmaceutical Committees, Practice Forums, & Professional Networks (pharmacy)

Meet: 3 times in year 1, twice in years 2-4, twice in final year

Policy Advisory Group (PAG)

Purpose: Co-lead dissemination strategy with the research team

- Communicating results
- Implementation of alcohol in MURs (or NMS) in line with trial results
- Workforce development planning
- Education and support for pharmacists
- Contribution to wider policy agendas

Membership (reps):

- NHS England
- Service commissioners
- Royal pharmaceutical society
- CPPE

Meet: annually in years 1-4, twice in final year

Patient and Public Involvement (PPI)

Purpose: Support all aspects of the programme including

- Intervention content issues
- Design of qualitative studies
- Reviewing all patient materials
- Leading PPI dissemination activities

Membership: 10-12 members

Meet: 3 times each in years 1-2, two in years 3-5

Programme Steering Committee (PSC)

The PSC comprised an independent Chair, three independent members one of whom was a statistician and one of whom represented the interests of patients and the public:

Professor Claire Anderson (Chair), School of Pharmacy, Nottingham University

Professor Alan Montgomery, Director of Nottingham Clinical Trials Unit, University of Nottingham

Professor Niamh Fitzgerald, Institute for Social Marketing, University of Stirling

Ms Lynn Laidlaw, lay representative

The PSC meetings were all attended by the PI and Programme Manager, and an additional research team member as necessitated by the principal issues to be discussed (for example, pharmacy, trials, qualitative findings). The PSC advised on progress issues and proposed changes to the programme's plans and approved all requests to NIHR.

Appendix 2 Summary of changes to the original research plan, their rationales and key formal decision-making processes involved

National medicine review service and primary care policy

See the main report for content on the decommissioning of the MUR. Announced in 2019,[60] the SMR was a central component of the Primary Care Network (PCN) Network Contract Directed Enhanced Services (DES), and identified in the Department of Health and Social Care National Overprescribing Review[61] as the "…ideal tool to help people with problematic polypharmacy" (p31). CHAMP-1 originally selected pharmacists for an enhanced prevention role, and in our view the introduction of SMRs in general practice made this service the natural home of this work within the NHS (see also main report Phase 2 text for other conducive features).

Up to that point in June 2019 we had made good progress in the research and were conducting the planned pilot RCT in community pharmacy to schedule. A stakeholder meeting was subsequently held with NIHR in November 2019 to discuss the implications of the major policy decision for the programme. We discussed a number of different options and requested a 12 month funded extension in order to proceed with the programme with a significant delay to enable the team to move the programme into general practice. This required undertaking additional studies to explore the setting, the recruitment and training needs of a greatly expanded pharmacy workforce, and the introduction of the new SMR service, in order to adapt the intervention. The PGfAR panel agreed with the research team's plans and proposed further studies but deferred decision-making specifically on a 12 month funded extension until it became clearer whether a definitive trial was still possible within the award. The new plans included a revised checkpoint in June 2021 at which point a decision could be made on a definitive trial. In the event of not proceeding to a trial, the panel requested that the checkpoint review contain a proposal about the how the team could best use the time and remaining resource within the programme to carry out research which can clearly demonstrate benefit to patients, public and/or the health and social care system. A variation to contract (VTC) was thus agreed thus.

COVID pandemic impacts

We agreed a second VTC in September 2020 to revise the checkpoint date from June to December 2021 due to the impact of the pandemic on primary care services and research. The introduction of the SMR had been delayed by 6 months until October 2020, meaning the planned studies would be conducted at a time when most SMRs continued to be undertaken by telephone and implementation was uneven. We deferred the conduct of two preliminary observational studies as they were not possible to undertake and embarked on two review studies as replacements for the observational fieldwork, following discussion with the Programme Manager, and as noted in the additional information section of the second VTC.

Progression to a definitive RCT

Although we had managed to adapt the programme to the primary care setting in challenging circumstances, the accumulated impacts of national policy and COVID related factors had implications for the feasibility and timing of a definitive trial. The process for our decision-making about whether a definitive trial was possible, and what would follow if a trial was not judged to be possible, proceeded as follows:

1. Key trial feasibility discussion points shared with the PMG in December 2020. At that time the PMG members agreed that, broadly, our analysis of the risks and the basis for decision-making were correct and that by virtue of the timing (trial fieldwork not having started) we were actually well placed to navigate the research through the uncertainties being faced by the NHS during the COVID pandemic.

2. The research team then mapped out more completely the decisions to be made for each stage of the programme (for current studies; feasibility work; and definitive trial) and identified the major issues relevant to these activities. These were then distilled into questions that it was essential to answer, focussed on what would prevent us from proceeding to a trial, what information would be needed to inform such a decision, and various options for trial design.

3. In February 2021 the PMG agreed that the criteria for progression to the trial could be reduced to the following key questions: whether sufficient numbers of SMRs were being done for the purposes of patient recruitment (from NHS Digital data), and whether we could recruit sufficient numbers of PCNs and clinical pharmacists.

4. In June 2021 we consulted the PPI group and the PSC, both of which endorsed our approach to trial decision making and the progression criteria, which involved the commencement of PCN and clinical pharmacist recruitment from that point onwards. The PSC recommended that specific thresholds for trial progression were not required, and that engagement with other regions be initiated in the event of difficulties identifying PCNs and/or pharmacists delivering sufficient numbers of SMRs in Yorkshire and Humber and the North East regions.

5. A detailed timetable for the final decision making, leading up to the December checkpoint, was approved by the PMG in September 2021.

6. We proceeded with recruitment of clinical pharmacists, involving an 'in principle' agreement with the PCN, because it was premature to formalise the arrangement in advance of the funding agreement for a costed extension.

7. Provisional recruitment was undertaken in anticipation of the trial beginning in the spring/summer of 2022. However, various delays to the implementation of the SMR

service and outstanding issues in the organisation of PCNs indicated that it would be risky to attempt to proceed with the trial during 2022, and instead that it was necessary to acquire a more secure understanding of SMR practice from the perspectives of both practitioners and patients. At the checkpoint, we thus proposed that the trial would be less risky to undertake if the timing was delayed until 2023.

8. We submitted the Checkpoint review in December 2021 with a recommendation to proceed with the trial with a delay. The feedback indicated there were too many risks with recommending the planned trial, because of uncertainty with SMR roll out nationally and whether the team would be able to recruit the desired sample size.

9. We were invited to elaborate on our preliminary plans for a no trial scenario that we had provided in the Checkpoint review. This was for a no cost extension of the programme with studies focusing on the pharmacist role and skills development in the context of a multidisciplinary team in general practice, with a particular focus on alcohol. Without a trial, we also dropped the economic modelling and extensive policy engagement work we had planned for the end of the programme. Instead we adopted a complex systems perspective on how the delivery of the intervention could impact on alcohol practice in the PCNs and ICSs in which it was delivered, requesting a two year no cost extension.

10. These plans were felt to depart too far from the original research aims. We agreed instead a one year no cost extension that comprised a stakeholder interview study of ICSs as they were being introduced, and an implementation study drawing on audio-recording, coach, patient and pharmacist datasets.

Appendix 3 Phase 1 intervention development, feasibility and acceptability studies

The intervention development process was organised into four stages as described below.

Stage 1: Preliminary observational, patient interview and scoping review studies

Medicine review practice observation study[62]

We conducted an ethnographic observation study in five community pharmacies featuring nine pharmacists. The aim was to understand how alcohol does or does not fit into routine service provision of MURs and the NMS, and pharmacists' everyday practices in community pharmacies. A total of 31 consultations (16 MUR and 15 NMS) were observed along with informal interviews with pharmacists conducted during the observations. The reality of routine medicine review practice was that alcohol was raised, if at all, as part of a brief lifestyle check which came at the end of the consultation and framed solely in terms of quantity of consumption. Pharmacists found the topic of alcohol challenging to discuss with patients and were concerned that discussions about alcohol might alienate them.

Patient interviews[27, 31, 63]

Semi-structured interviews were conducted with 25 people eligible for medication reviews whose AUDIT-C screening scores identified they were risky drinkers. The study aimed to explore their views on the appropriateness of alcohol as a subject for discussion in the community pharmacy context. Most patients said they were open to the idea of a discussion that linked alcohol to their medications if this was well-conducted and confidential.[63] Whilst reporting being concerned about the felt effects of concurrent alcohol and medicines use,[27] they had limited awareness of, or regard for, potential future harms to their health from alcohol use. Their ideas about the nature of alcohol problems made it more difficult to reflect on possible impacts on their health.[27, 63] Being perceived as in control of their consumption underpinned efforts to convey drinking in moderation and rationalisations of their drinking.[31] Interventions were regarded as necessary for obviously problematic drinkers, and prevention and early intervention ideas had little resonance.

Scoping review[64]

We conducted a scoping review of the MUR and NMS literature to map the nature of the published evidence for these services. In particular, we sought data on barriers and facilitators to conducting MUR or NMS consultations, the perceptions of pharmacists and patients, how these consultations are conducted and patient outcomes. We did not publish or register our study protocol. Systematic searches identified 41 papers (from 37 studies). Evaluation of clinical outcomes was limited to a single RCT of the NMS.[65] Most were observational studies focussing on the introduction and implementation of MURs and the NMS. The experiences of pharmacists and patients was generally positive for both services,

despite substantial implementation challenges. Importantly for the CHAMP-1 programme, the review indicated that MUR and NMS consultations were short, such that opportunities for meaningful engagement with patients (on any topic) were limited. There was also very little information in the literature about the extent and nature of advice on health behaviours offered during consultations.

Theoretical and modelling work to inform intervention design decision-making

The intervention was developed following MRC complex interventions guidance,[66, 67] but our perspective was pragmatic, recognising that "there are no 'simple' or 'complex' interventions, and that simplicity and complexity are instead pragmatic perspectives adopted by researchers to help describe and understand the interventions in question".[68] We thus adopted a "bottom-up" data-led approach to co-production. We conceptualised alcohol as a toxic psychoactive drug, posing a potential problem directly via its impact on health and well-being, and indirectly by potentially reducing adherence to, or the effectiveness and safety of prescribed medications. In seeking to enable patients to better regulate their own alcohol consumption, we drew on Leventhal's common-sense model of self-regulation,[69] but also other conceptual material that fitted emerging qualitative data and to inform our approach to intervention design.

Stage 2: Co-design workshops

A co-design workshop was held with 14 people recruited from community pharmacies who regularly drank alcohol and took medications for long-term conditions. This was co-facilitated by patient advisory group leads.[54] Overall, patients welcomed the idea of conceptualising alcohol as a drug to be discussed alongside prescribed medicines use, safety and effectiveness. This was new to them and gave legitimacy to pharmacists to raise alcohol in medicines reviews. The workshop also involved consultation on the design of MAC materials including preferences for ways of asking about alcohol.

Two workshops were held for pharmacists: one in Yorkshire (n=3) and one in the North East (n=4). These explored the acceptability and feasibility of the MAC Programme and how it could be improved in term of: compatibility with existing practice; perceived benefits for patients; changes or additions to MAC content; and potential barriers to implementation and means of overcoming them. The premise of viewing alcohol as a drug, and the implications for how integrating alcohol into medicine reviews, was fully supported. Pharmacists' concerns focused on finding time to engage with the online materials and they recommended incorporating some in person delivery. Feedback for the basic concept was overwhelmingly positive.

Stage 3: MAC delivery study

The aims of this study were to examine: (a) the implementation of the intervention and research procedures including screening and recruitment procedures; and (b) the experience of the intervention for pharmacists and patients. The study was conducted with 5 intervention pharmacists and 2 others to act as controls. The former received an abbreviated version (a single training day) of the MAC programme. All participating pharmacists administered a screening protocol to successive MUR and NMS patients. Patients were eligible if they consumed alcohol twice a week or more frequently, and informed consent was obtained by the pharmacist. The consent form enabled participants to indicate their consent separately for study participation and consultations to be audio recorded and, for patients at intervention sites only, for telephone interviews to take place after the consultation. Semi-structured interviews were conducted with pharmacists from intervention sites to explore their experiences of the MAC programme and putting it into practice.

The study demonstrated the feasibility of delivering the MAC programme and of our approach to recruiting patients to a trial. The recruitment and consent procedures were acceptable to both pharmacists and patients. Some of the pharmacists experienced some initial confusion over eligibility criteria that was quickly rectified. The greatest challenges lay in the additional time required in the consultation for the screening and consent process, and in delivery of the intervention (see main report). Intervention pharmacists preferred the interactive nature of the training to online provision.

Stage 4: Revisiting programme theory, and pharmacist patient advisory groups

The final stage involved further theoretical and modelling work, aiming to refine the description of the MAC intervention components and their rationales. We used the Theoretical Domains Framework[70] to construct a complete programme theory. No major omissions of relevant theoretical constructs were identified. A final version of the MAC was then agreed with the patient and pharmacy advisory groups for the pilot trial, which was the next stage of the research.

Appendix 4 Key SMR and PCN policy developments

January 2019

The NHS Long Term Plan.[9] SMRs formally announced. https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf

Investment and Evolution: A Five-Year Framework for GP Contract Reform to Implement *The NHS Long Term Plan*.[60] Further details of SMRs and the role of clinical pharmacists. https://www.england.nhs.uk/wp-content/uploads/2019/01/gp-contract-2019.pdf

March 2019

Network Contract Directed Enhanced Service Contract Specification 2019/20.[71] Funding and workforce requirement for clinical pharmacists and other new PCN roles. https://www.england.nhs.uk/wp-content/uploads/2019/03/network-contract-des-specification-2019-20-v1.pdf

December 2019

Network Contract Direct Enhanced Service Draft Outline Service Specifications.[72] Proposed SMR service model and requirements. https://www.engage.england.nhs.uk/survey/primary-care-networks-service-specifications/supporting_documents/Draft%20PCN%20Service%20Specifications%20December%202019.pdf

February 2020

Update to the GP Contract Agreement 2020/21 - 2023/24.[73] Revisions to SMRs in response to the consultation. https://www.england.nhs.uk/wp-content/uploads/2020/03/update-to-the-gp-contract-agreement-v2-updated.pdf

March 2020

Network Contract Directed Enhanced Service Contract specification 2020/21 - PCN Requirements and Entitlements.[74] Updated SMR patient groups and clinical pharmacist role requirements. https://www.england.nhs.uk/wp-content/uploads/2020/03/network-contract-des-specification-pcn-requirements-entitlements-2020-21.pdf

Network Contract Directed Enhanced Service Guidance for 2020/21 in England.[75] Guidance for commissioners and practices, including clinical pharmacist training and supervision and SMR metrics. https://www.england.nhs.uk/wp-content/uploads/2020/03/network-contract-des-guidance-2020-21.pdf

Explanatory Note.[76] Response to the COVID-19 outbreak, including SMR postponement. https://www.england.nhs.uk/wp-content/uploads/2020/03/cover-note-gps-commissioners-revised-network-contract-des.pdf

September 2020

Structured Medication Reviews and Medicines Optimisation: Guidance.[77] SMR specification published. https://www.england.nhs.uk/wp-content/uploads/2020/09/SMR-Spec-Guidance-2020-21-FINAL-.pdf

Appendix 5 Phase 2 studies and findings

Study 1: From policy to practice: Early SMR implementation incorporating trial feasibility assessment

The aims of this study were to investigate how national PCN and clinical pharmacy policy was being translated into local practice, in order to develop understanding of contextual factors that influence the early implementation of the SMR and other patient-facing pharmacy services in primary care. These early experiences were judged highly likely to have implications for how these services would become embedded in routine practice, with relevance for understanding clinical pharmacist participation in, and outcomes of, the trial. The work was organised into sub-studies to investigate:

- National policy factors that influenced implementation of PCN pharmacist led services
- The implementation of the new service provision by PCN pharmacists including:
    - Recruitment of pharmacists and their developing roles and responsibilities in PCNs
    - The early day-to-day practice and medicine related service delivery of pharmacists in the early months of SMR implementation and subsequently
    - Pharmacist and senior PCN staff perspectives on implementation and possible future service provision innovations including changes to SMRs, public health interventions and alcohol
- Pharmacist perspectives on the PCN pharmacist role in relation to research
- SMR patient recruitment feasibility

Study 1a: Policy review[18]

We conducted a comprehensive review and analysis of national policy documentation associated with the introduction of PCNs and the SMR. Key factors influencing implementation were identified and summarised in a *British Journal of General Practice* editorial.[18] The roll-out of PCNs and SMRs was done at speed, to the extent of having likely implications for the quality of service delivery. The challenges became more acute when the COVID pandemic placed practitioners and services under increased pressure. This raised important questions about the preparedness of the newly expanded clinical pharmacist workforce for practice development (see also below). Despite compelling reasons for expanding the clinical pharmacy workforce in primary care, the evidence underpinning the decision to introduce SMRs was very limited. We concluded that support for pharmacists in developing their roles in multi-disciplinary primary care teams and acquiring more well-developed person-centred skills would be key for the sought benefits of SMRs to be realised.

Study 1b: Senior PCN staff interviews[45]

Semi-structured interviews with senior PCN staff were conducted to explore perceptions of the possible benefits and challenges that may arise from the new pharmacist workforce in primary care and the SMR service, issues arising from implementation, and how progress will be monitored and the service to be developed. A paper was published in *BMJ Open* that draws on data from studies 1b and 2.[45] An unplanned follow up was added because COVID interfered with both access to interviewees and the value of the interviews, as SMR implementation was delayed (see above). Twelve semi-structured interviews were conducted with seven senior PCN staff (three GP Clinical Directors and four senior PCN pharmacists) in six PCNs based in the Yorkshire and Humber and North East regions, purposefully sampled for diversity in terms of PCN size, patient population and operating model. The first round of interviews took place between March 2020 and October 2020 and two Clinical Directors and the four senior pharmacists did a follow-up interview between March 2021 and September 2021.

The process of forming a PCN involved uncertainties, trade-offs and risks which extended into the local design of the new clinical pharmacist roles. Senior pharmacists reported examples of the new clinical pharmacists being over- *and* under-utilised, with implications for staff wellbeing, retention and patient safety. Key factors that moderated implementation locally included: the presence of pre-existing collaborative structures, "pro-pharmacy" PCN leadership and senior pharmacist input into PCN decision-making. COVID-19 constrained progress, although the primary-care led vaccine programme presented opportunities for some PCN pharmacy teams. Overly optimistic expectations that saw GPs have to form PCNs at the same time that they integrated a new workforce with diverse experience and skills risked undermining the potential of both PCNs and the new roles, especially as GP interests were not necessarily well aligned with PCN policy objectives. Struggling PCNs required more time to fully form and implement the new PCN clinical pharmacy roles. Sensitivity to the organisational issues arising at the local level was obviously needed, so that trial recruitment efforts were targeted at PCNs with capacity to support conduct of the proposed study.

Studies 1c and 1d: Ethnographic studies

The NHS introduction of the SMR was delayed by 6 months until October 2020, with subsequent implementation uneven in quantity and quality. SMRs were mostly conducted by telephone and in many cases departed considerably from the vision of the policy. We were unable to conduct two planned preliminary ethnographic studies of SMR practice; these were to involve observations of SMRs and interviews with pharmacists early and later into SMR implementation. Therefore, we embarked on two review studies as replacements for the fieldwork, following discussion with the NIHR Programme Manager (see also Phase 2 methods).

<u>Scoping review of qualitative research on perceptions of one's own alcohol use</u>[43]

The qualitative studies in the programme had highlighted a distinct need to assess what research is available on how people talk about and think about their own alcohol consumption. This scoping review study aimed to map the extent, range and nature of qualitative research on how people's make sense of their own alcohol consumption. We did not publish or register our study protocol. Systematic searches identified 313 eligible papers published over approximately 30 years. The majority focused on people's 'experiences' of their own drinking behaviours, particularly when they were drinking in ways commonly understood as heavy, risky or problematic. Fewer studies focused on people whose drinking was moderate or was risky in less obvious ways, such as our target population: older adults prescribed medications for chronic health conditions. We concluded that there are opportunities for future qualitative studies, including our own, to contribute to improved understanding of people's perceptions of their own alcohol consumption.

Review of reviews of validation studies of instruments measuring individual practitioner person-centred consultation skills and behaviour[44]

Person-centred care is integral to high-quality health service provision, and to our intervention approach, but measuring it within clinical consultations is complex. We aimed to provide a high-level synthesis of a diverse literature in a systematic review of existing reviews of validation studies of instruments that measure person-centred practitioner skills and behaviours in consultations. We did not publish or register our study protocol. This study was undertaken to inform decision-making on instrument selection for quantitative process study within the trial. Four reviews were eligible which included 68 unique validation studies examining 42 instruments. These used diverse conceptualisations of person-centredness and targeted distinct, sometimes mutually exclusive, practitioners and settings. The study provides researchers with a guide to the instruments available. Based on the existing literature, we suggested that further validation studies of existing instruments are needed rather than the development of new measures.

Study 1e: Patient recruitment feasibility

This study examined how SMR patients eligible for the trial could be identified and recruited. We had planned to recruit from in person SMRs, but at the time the majority of SMRs were being delivered by telephone. Conduct of the study was impacted in these circumstances, necessitating revisions to fieldwork timing (see also Study 3 below) and ethical approval. The main change was that pharmacists would undertake eligibility checks and recruit patients rather than the researchers as originally proposed. We undertook discussions with pharmacists and senior PCN staff to devise study procedures that facilitated approaches to patients, ascertainment of eligibility and completion of informed consent both in-person and by phone. The study was conducted by five pharmacists from one PCN over a 5 week period. Ten eligible patients were recruited. Pharmacists reported recruitment to be challenging reflecting the nature of SMR delivery at the time: brief, opportunistic consultations, with pharmacists reporting being under pressure to work

through backlogs of patients. It had not been possible to provide face-to-face, group-based research procedures training for the pharmacists as we had done in our previous studies, and the pharmacists did not follow the recruitment protocol consistently. Despite the challenges, we concluded that we had a feasible albeit risky recruitment approach that could be appropriate for both remote and in-person delivery of SMRs.

Study 2: Person-centred skills acquisition of PCN pharmacists and congruence with MAC practice development[20, 46, 47]

This longitudinal study investigated emerging roles, SMR practice, views on alcohol, professional development and person-centred skills acquisition among new clinical pharmacists. The study was also designed to examine these experiences partly in comparison with pharmacists already working in general practice. Ten newly appointed clinical pharmacists in 10 PCNs in Northern England were recruited and interviewed three times between September 2020 and January 2022. In addition, another group of 10 pharmacists working in 10 other PCNs across England already established in GP practices, were also interviewed once between February and May 2021. A compulsory PCPEP 2-day history-taking and consultation skills workshop conducted by video conference in 2020 was observed with permission from CPPE providers and the attending group of workshop participants.

SMRs undertaken in GP practices were compared favourably against MURs in community pharmacy.[20] Those more experienced in clinical reviews said that it took time to develop the necessary knowledge and skills to do them.[20] However, SMRs were not yet a priority and practice was not well organised in clinics, being provided as an ad hoc service in numerous ways. Pharmacists already in general practice appearing to be more ready for implementation and were clear that SMRs took more time and were more challenging to do than other medication reviews because they were more clinically complex, in-depth, and patient focused.[20] New pharmacists were on the primary care education pathway and drew on pre-existing practice frames, habits, and heuristics. Those lacking patient-facing expertise sought template-driven practice, thus compromising the distinct purposes of the SMR.[20]

We further explored clinical pharmacist perspectives of consultation training provision and skills acquisition for the new SMR service, with a particular focus on person-centred consultation practice.[46] Remote working during the COVID pandemic had limited opportunities for patient-facing contact. Pharmacists new to their role in general practice were predominantly concerned with improving clinical knowledge and competence.[46] Most said they already practiced person-centred care, but referred to transactional medicines-focused practice. Direct feedback on consultation practice was rarely received. Their CPPE training provided knowledge but with limited opportunities for actual skills acquisition; the pharmacists had difficulty translating abstract consultation principles into specific consultation practices.[46]

Finally, with data from the third follow-up interview available, we examined pharmacists' experiences of discussing alcohol with patients in general practice. This included views on confidence about the subject, alcohol as a drug directly linked to patient health, conditions

and medicines, and integrating alcohol into routine medication reviews.[47] Alcohol was either not raised at all or addressed in terms of calculating dose and level of consumption, leading to crude advice to reduce drinking. Pharmacists did not currently consider alcohol as a drug in their practice and were interested in learning more about this concept and the approach it entailed, particularly in relation to managing polypharmacy.[47] Some recognised a linked need to enhance their consultation skills.

Study 3: The scope for integrating the MAC into SMR practice: patient perspectives[48]
This study investigated patient views and experiences of SMR consultations. The lay co-investigator and the PPI subgroup worked with us to refine the interview guide. We were advised by our PPI group not to proceed with this study at times of heightened concern about the COVID pandemic. It would have been delayed anyway by the rate of implementation of the new SMRs. When we were in a position to do the study, we limited the target sample size to 10 mindful of the need to explore experience of SMR delivery, including mode in particular, given phone was the predominant way this service was being delivered.

SMRs received by these interviewees did not match the ideal presented in policy documents. Rather than being invited to take part in a consultation for which they could prepare, patient or practice-initiated routine medication enquiries and reviews were categorized as SMRs if patients receiving these fitted any SMR target group criteria.[48] Patients reported that the SMRs received were brief and paid scant attention to alcohol, yet they welcomed the possibility of including alcohol in SMRs in the ways developed in our intervention. They viewed our approach as congruent with the aims of a holistic medicines review linked to their medical history.[48] Considering alcohol as a drug impacting on their medications and the conditions changed the way in which some patients thought about their own drinking.

Study 4: Data availability and policy evaluation feasibility study

The overarching aim of this study was to explore the potential to use NHS England primary care datasets to evaluate the macro level effects of the introduction of SMRs on prescribing patterns. This was intended to inform decisions about a substantive policy evaluation study in the absence of a definitive trial, and to provide useful background in the event that we were able to proceed to trial. We undertook scoping of OpenPrescribing data to examine the prevalence of prescribing for BNF sections and sub-sections per calendar year, informed by the patient populations or drugs targeted in the SMR specification, as well as prescribing for conditions known to be related to alcohol (e.g. hypertension, cardiomyopathy, atrial fibrillation, and depression) and for medicines known to interact with alcohol (e.g. hypnotics and anxiolytics), as a basis for further selection of drugs for more detailed analysis.

We explored trends and tools for identifying outliers and variations between geographical regions. We downloaded prescribing data for more detailed descriptive analyses, and specifically to examine and quantify variations between PCNs in the number of items prescribed (per 1000 patients). Variation between PCNs was assessed by organising the data into deciles. For example, comparisons between the lowest and highest PCN deciles

showed that total items prescribed varied by 3.95 times for hypnotics and anxiolytics, 2.61 times for diuretics and 4.43 times for opioids. The feasibility of constructing prescribing datasets with variables from linked datasets for modelling purposes including age, gender, chronic condition and workforce profiles at the PCN level was broadly confirmed.

The feasibility of using national data for the number of SMRs being conducted was more uncertain. The variations in recorded SMRs within and between PCNs was substantial but difficult to explain from the limited data available. Evidence from the other studies undertaken at this time indicated that in some PCNs medication reviews are being coded as SMRs when brief medicines use checks of 10 minutes duration or quicker were being undertaken. The broader extent of this issue was unclear, and the prospects for ameliorations in data quality over time likely depended on progress in the implementation of the SMR as a new and distinct service from other kinds of medication reviews. Data coded as SMRs thus comprises a range of different types of medication review, without any capacity to distinguish between them. Further work undertaken within this programme indicates that the fate of the innovation represented by the SMR as a new distinct service comprising a patient-centred clinical medication review will depend on decisions yet to be taken about its future.

Appendix 6 Phase 3 clinical pharmacists and patient interviewee characteristics

Table 3: Clinical pharmacist characteristics

Identifier	**Ethnicity** (self-described)	**Years qualified**	**IP**	**Age**	**Religion**	**Gender**	**ESL**
MAC_CP_01	Indian	16	Yes	38	Hindu	Man	Yes
MAC_CP_02	Pakistani	15	Yes	43	Muslim	Woman	Yes
MAC_CP_03	White	05	Yes	27	None	Woman	
MAC_CP_04	White	26	Yes	50	None	Man	
MAC_CP_05	White	23	No	42	RC	Man	Yes
MAC_CP_06	Pakistani	04	No	26	Muslim	Woman	
MAC_CP_07	White	13	No	41	None	Woman	
MAC_CP_08	Pakistani	08	No	38	Muslim	Man	
MAC_CP_09	White	14	Yes	48	CofE	Woman	
MAC_CP_10	Pakistani	22	Yes	47	Muslim	Man	

Notes: IP=Independent prescriber; ESL=English a second language

Table 4: Patient interviewee characteristics

Identifier	**Ethnicity** (self-described)	**Employment status**	**Age**	**Religion**	**Gender**
PMAC1	White	Retired armature winder	70	RC	Man
PMAC2	White	Unemployed	51	Unassigned	Man
PMAC3	White	Retired driver/labourer	77	CofE	Man
PMAC4	White	Retired train driver/footballer/fireman	73	CofE	Man
PMAC5	White	Retired car insurance customer service/border force	59	RC	Man
PMAC6	White	Retired	74	CofE	Man
PMAC7	White	Retired civil service	71	None	Man
PMAC8	White	Civil servant	60	CofE	Woman
PMAC9	White	Unemployed	55	None	Woman
PMAC10	White	Disabled roadie/taxi driver	65	None	Man

Appendix 7 MAC programme experiences reported by participating clinical pharmacists

Those who left early

CP01

A “medium learning curve”. Valued the coaching interaction and coach expertise. Biggest learning was that he came in confident about practice and realised he was not doing things wrong but there were ways he could do things differently. Open questions and tools for starting conversations were good, but he left early and feels he missed out on the alcohol specific intervention aspects. Did not want to exit but changes at work and indecision about SMRs meant he had no clinics. Would have extended if he could.

CP05

Is in a new PCN role and is focused on clinical knowledge rather than consultation skills. It was new to him to step back and think about how he said things rather than what to say. Found it good. “It certainly made me realise certain bad habits”. Had worked for years in community pharmacy where he used to speak to people as much as he does now in primary care, but had not experienced any consultation skills coaching in that setting. The way he speaks to people now is different. Left because his role changed, SMRs were no longer a priority and he was asked to do other tasks. Wanted more clinical content on alcohol.

CP08

The setup, training, face-to-face sessions and “mentoring” were good. Enjoyed meeting new people. Overall, quite a good experience, something new that he was looking forward to as; “a new way of discussing an old topic”. “Eye-opening”. Although he checks alcohol units, he now realises that a lot of people don’t know what a unit is, or that alcohol is a drug. Includes himself in this because he did not think of it in that way in a medicines review context.

Those who completed the programme

CP02

"A journey" from which she gained a lot of satisfaction and got much more than she expected. There have been struggles; recruitment, unplanned events, work/life balance and time pressures. Overall, a really positive experience: "I've learnt so much … the coaching has been great. I've picked up so many skills." Enjoyed meeting the team and other pharmacists. Saw many angles and viewpoints that she had not come across before about patient behaviour (not only in relation to alcohol) and even basic things on how alcohol intervenes with medication.

CP03

Thought it was good, and enjoyed it. It was better than expected. "I don't think I knew what I was really signing up for." Thought it would have more in-depth focus on alcohol. "But I do now understand that the idea behind it is to get those consultation skills behind us, to then enable us to talk about alcohol more easily."

CP04

Very good, very positive. Only problem was trying to get recruits in, it took a bit more time than expected, and minor technical issues. He found the open style and the focus on agenda setting fitted really well with a new role involving more physical health examinations.

CP06

Really helpful. A good experience. Grateful she had chance to do it. Enjoyed meeting people and the chance to reflect on consultations once she got over initial worries about this. Made her reflect on previous practice of asking people about units of alcohol consumed without quite knowing what this meant for either herself or the patient because it was "easier to talk about alcohol that way". Now sees this as a "very unproductive" and a "restrictive" conversation which can close people down because they are anticipating they are going to be told they are drinking too much. Feels the programme should be longer or include follow up "because we all get complacent".

C08

Interesting and supportive. "I really think it did develop my consultation style … using the reflections [and other microskills, because] … I don't think I was doing [these] particularly well before doing the study." The alcohol side was difficult because she found it difficult to recruit patients who were drinking. Would have preferred it if it was over a longer period of time. Feels she now has a basis that can be developed in her consultations. Enjoyed the peer support sessions which are continuing.

CP09

Grown in confidence. Found it tricky in terms of patient recruitment. Has realised she has a tendency to want to "fix" everybody and has not changed in this, though has heard the message that telling people they are drinking too much won't make them change unless

they see its relevance to their medication and health. Thought she was involving patient already in consultations, but now involves them more.

C10

Interesting and useful experience. Feels he was becoming closed and “going through the motions”. It was good to stop and think about how he is communicating with patients.

Supplementary material 1: The MAC Programme

1. Programme outline

The MAC programme presents clinical pharmacists with an opportunity to develop a deeper person-centred consultation style within which to raise alcohol in a clinically appropriate way in medicines reviews. It offers you a 10 week supported programme of practice development rooted in the challenges pharmacists and patients encounter in interactions in everyday practice. This moves your practice development on from the foundation provided by the Centre for Pharmacy Postgraduate Education (CPPE) primary care pharmacy education pathway. It does so in two main ways, by: 1) introducing alcohol as a complex and challenging subject for discussion that requires the application of specified consultation skills; and 2) providing in-depth support for the acquisition, development and application of these skills, which are foundational to person-centred practice. The MAC programme recognises that you possess significant existing consultation skills that provide a key foundation for practice development, and that different practitioners begin their practice development journeys with us from different starting points. We aim to tailor the programme to your needs, and will be as flexible and pragmatic as possible in offering you the support you need to develop your practice.

The programme encourages you to recognise alcohol as clinically important for many patients in primary care, even where level of drinking may appear modest. The programme will help you to develop and value your role in helping people to make connections between their medicines, conditions and alcohol. Given the sensitive nature of talking about alcohol consumption, doing this appropriately requires clinical pharmacists to develop more advanced person-centred consultation skills, based on a strengths-based view of the patient and respect for their autonomy in decision-making. This programme will engage you in a process of learning from your patients in the consultations you deliver in routine practice. It begins with a focus on the application of consultation micro-skills within a flexible person-centred structure. This is used to develop a conversational, person-focused and responsive medicines review model that integrates appropriate attention to alcohol. As your practice advances, reflection on, and detailed examination of, consultation experiences are used to guide more advanced skill acquisition. Attending closely to the patient, eliciting and responding to their articulated needs and preferences, characterises what we regard as advanced practice. This is understood to be an ongoing process, characterised by increasing sophistication in the application of skills, without having a fixed endpoint.

Each MAC Coach will individually support a small group of participants, who will be encouraged to offer each other peer support, in addition to the dedicated time arranged for the MAC programme each week. The two training workshops are designed to be integrated with the coaching support which is designed in turn to support you to develop your practice by learning from patients. After the initial ten week practice development programme, participants will

attend a research training day to prepare for the randomised controlled trial (RCT). Further support of practice development can continue during the trial period, if we can help to meet ongoing needs that you identify.

Week	MAC practice development process
Prior	Introductory programme bundle
1	Coaching (C): introduction
2	Training workshop C: post-training reflection, next steps
3	C: putting MAC into everyday practice
4	C: getting started with audio-recording
5	C: using audio-recording to work on specific skills 1
6	C: using audio-recording to work on specific skills 2; workshop preparation
7	Training workshop C: post training day reflection, next steps
8	C: review ongoing issues in advancing practice
9	C: peer group discussion: advanced practice
10	C: reflection, next steps

2. MAC coaching manual

Aim

To build a supportive working relationship with Clinical Pharmacists (CPs) to enhance their SMR practice development, in line with MAC training content and other programme components.

Outcomes

At the conclusion of the 10-week core programme we are aiming for practitioners to have achieved the following outcomes, as evidenced in audio recordings of SMR consultations, and in discussion with their coach:

1. Developed deeper person-centred consultation skills including proficient use of counselling microskills in managing SMRs
2. Be able to support patients in making decisions to improve their health and well-being by encouraging discussion of patient concerns and priorities identified by the patient
3. Be able to integrate attention to alcohol within SMR consultations, exploring connections to medicines, conditions, adherence issues and health more broadly
4. Value the exploration of medicine use, conditions and alcohol in a person-centred way as good clinical pharmacy practice
5. Commit to ongoing development of patient-centred consultation skills

Delivery principles

MAC coaches will ask CPs for, and otherwise identify, newly arising practice issues for discussion or issues encountered, and encourage the practitioner to lead, or otherwise be active in, decision-making about how to proceed. CPs will be invited to set the agenda, as they in turn are encouraged to do with patients; the way in which support is delivered models the person-centred approach of MAC. Planning in advance of calls will be undertaken to ensure content is tailored to the evolving practice needs of individual CPs, and the coach will be strategic in agreeing agendas for discussions in line with the person-centred nature of the intervention. Each coaching session will be scheduled for one hour, with one session planned each week for the duration of the programme. It is anticipated that up to one hour's preparation will be needed for each coaching session in advance of audio-recordings becoming available, and more than one hour needed to prepare for sessions for which audio-recordings have been submitted for review. The coach will also make themselves available by e-mail and for short phone calls as needed.

Outline weekly programme

The anticipated content of sessions on a week-by-week basis is presented below. The sessions will employ this structure flexibly, in line with CP identified practice development needs and agenda setting:

<u>1. Introductory session</u>

- Build a relationship with the CP.

    - Introductions
    - Check hopes, revisit reasons for participation and discuss how programme can support
    - Present self as a resource
- Thoughts on initial reading of programme documents 1a-c? Discuss each in turn.
    - If not read, discuss the reasons why not, identifying issues that may impact on participation in programme, attending to both motivational and practical challenges
- CPs are encouraged to reflect on their current practice in one or more recent SMRs that may be interesting to discuss in light of this reading/discussion. Possible questions to ask:
    - What was the patient doing in this consultation?
    - How far was the patient deciding what gets discussed?
    - How can you know whether the consultation has been useful to the patient?
    - Was alcohol discussed?
        - How did it come up?
        - If not discussed, could it have been?
        - How does it feel to talk about alcohol with patients?
- Discuss time pressures and fitting MAC programme into already busy schedules, especially with anyone who has not done the initial reading.
- Agree any issues that have arisen on how you will work together.
- The call ends with e-mailing and brief introduction of documents 2 and 2a, and a reminder of arrangements for the first workshop.

2. Training Workshop 1

Details are provided in the separate document, including distribution of recruitment materials, audio-recorders and documents 3a-d.

3. Putting practice development into everyday practice

- The session starts with a discussion of the training workshop:
    - How did you find the workshop?
    - What were the main learning points for you and what are the implications for your practice development plans?
    - What did you find most challenging?
    - Are there any other big issues for you from the workshop?
- Discussion then focuses on first experiences of using the microskills in interactions with patients:
    - Overall, how did you get on?
    - Any SMRs? How did it go?
    - Any particular experiences would you most like to talk about?
        - Allow the CP to identify issues of importance to them
        - How did the patient(s) respond?

        - Summarise positives, challenges and obstacles that emerge
- If no SMRs since the workshop, discuss putting the full range of microskills into practice in non-SMR consultations and plans for SMRs in the coming week.
- Refer to document 3d if helpful
- Ask if raised alcohol consumption, requesting examples of exactly what was said
- The call ends with agreement on what to work on in SMRs over the coming week, and whether ready or not to initiate audio-recording.

4. Introducing audio recording into practice development and coaching

- Actions from the previous week's session are discussed, with close attention given to the detailed content of the verbal interactions described, as well as time, structuring or other issues that have arisen, and anything the CP would like to discuss
- Discuss how recordings will make practice development and coaching a different experience from this point:
    - More fine-grained attention to the full range of microskills in consultations
    - Style of information giving
    - More detailed attention to facilitating patient activity, structuring and agenda setting
- CPs have already been provided with, and may already be using, the audio recorder. Review recorder instructions if needed and also:
    - the patient recruitment and consent process for study audio-recorded SMRs
    - How the UoY Drop-off service works
- The call ends with agreement on what to discuss next time and work on in SMRs over the coming week, including audio-recordings.

5. First audio recording(s) discussed together or issues to be addressed before audio-recording

- The focus of the call is on CPs appreciating the value of audio-recording to practice development in addition to giving time to any other issues the CP brings to the session:
    - Using the recording(s) to highlight use of open questions, affirmations and summaries in particular, as well as early efforts at reflective listening in advance of second workshop
    - Allowing the CP to identify what worked well or less well with use of the microskills and patient responses on the basis of the recording playback
        - For the latter, asking what could be done differently
- In the absence of any audio-recordings being available, discuss importance to practice development, any issues or barriers that need to be addressed, and plans for audio-recording, in *after* dealing with the issues raised by the CP.
- Check for issues also with consent taking, including early indications of eligibility rates and refusals
- The call ends with agreement on what to work on in SMRs, and encouragement to identify new issues for discussion as part of setting the agenda for the next session after the break.

Discuss audio-recording the implications of the upcoming Easter break for practice development plans, and the planning needed.

2 Week Break in MAC Programme Delivery

6. Back to the programme

- Taking stock; have the CP to set out their agenda for this session, agreeing new practice issues to discuss plus those previously planned as appropriate.
- Recordings are used to pick up the issues discussed previously and to identify progress, as well as considering newly identified practice development issues, for all including those whose practice is advancing well.
- Discuss the absence of recordings (if this is needed, and communicating their importance), prioritising a focus on the barriers or other motivational issues within the context of engagement with the programme more broadly.
- Discussion of what might be most helpful in the second training workshop for further practice development based on own practice development, perhaps previewing possible content.
- The session ends with e-mailing and introduction of document 4.

7. Training Workshop 2

Details are provided in the separate document. Groups identified for session 9.

8. Getting to more advanced practice issues

- The session starts with agenda setting based on workshop and subsequent SMR practice experiences
    - How did the workshop go; what went well for you, what was less useful to you, what was challenging, and what seemed important to take further? What about the patient vignettes?
    - Prompt also for updates on the developmental learning in practice: How are SMRs going? What are the issues arising from review of audio-recorded and other consultations?
    - What is going well in the programme and what are the key issues for you to focus on now?
- Use review of recordings to cover the use of reflective listening skills and SMR session management issues in particular, if not raised by the CP
- What are the more complex situations you are encountering, and how might they be addressed?

- Discuss how peer group session can be used to share progress and ongoing challenges, as well as the preparation needed and the practical arrangements.

9. Progress and ongoing challenges: peer group discussion

The detailed content of this session will be decided by the group, with the coaches playing a role in assembling the individual data and sharing in advance in the form of tentative agenda for the group to discuss and agree at the outset. The coach will facilitate this session, keeping to time and agreed agenda.

10. Reflection and next steps

- The content of this session will overlap to some extent with the one month coaching follow-up session. This session will also prepare CPs for the exit interview undertaken for research purposes, avoiding direct overlaps.
- Across the two coaching sessions the following issues will be considered: feedback on MAC programme overall and the individual components; major advances in practice development; resolved and ongoing challenges and barriers to practice development; ongoing use of audio-recording and other helpful material; thoughts on how practice development will be taken forward in the future; interest in research participation.
- The aim is to have a final programme ending audio-recording selected for discussion to illustrate practice development in session 10, which may have been recorded a little earlier.
- This is to be replicated with a different recording of an SMR undertaken during the month after the programme ends for the coaching follow-up session.
- The coach and the CP will review together attainment of the MAC programme coaching outcomes during this session.

3. Practice development training days

MAC TRAINING WORKSHOP 1 FACILITATION GUIDE

Practice development outcomes; by end of the day

- Appreciate what a person-centred approach involves, and be able to discuss why and how this may be challenging for clinical pharmacists, and in the contexts of their own careers
- Value SMRs as important opportunities to help patients manage their conditions, and see discussing alcohol as an integral element of good practice among current drinkers
- Possess increased skilfulness in asking open questions, recognising strengths, and inviting and making summaries as foundational person-centred microskills
- Become aware of the power of reflective listening in helping to advance patient exploration
- Be able to discuss preliminary thinking about strengths and limitations of one's own practice in SMRs, and developmental needs, informed directly by the workshop content
- Becoming increasingly comfortable with the prospect of asking about, and discussing, alcohol in person-centred ways, whilst gaining insight into the nature of the challenges involved
- Be cognisant of the issues involved in flexibly structuring SMRs and ready to use simple structural devices to organise person-centred consultations

9.30
Introduction: Welcome and introductions

The CHAMP story: Slide-based presentation on research and brief Q&A

10.00
Section 1: Re-orientation to person-centred practice ideas and issues

Key Objective: To help the practitioners identify the importance of careful attention to person-centred consultation skills for them personally in developing their SMR practice

Initial discussion in two or three groups with plenary feedback discussion on what patient or person-centred practice means to me and how this has changed over the course of my career.

How do I do this in practice/what kinds of things do I say? (C)OARS verbal behaviour coding exercise in three, rotating 5 min each as CP/patient/coder in any chosen SMR scenario. In whole group, count up totals.

10.50

Break

11.05

Information gathering, giving and advice: How can all this be done in a person-centred way? How does this fit in the clinical pharmacist role in SMRs? Whole group discussion.
Small group exercise with 3 practitioners taking turns practising asking open questions and coaching each other in consultation with a simulated patient. Are there any dangers in persuasion?

Why is alcohol difficult to talk about? Should alcohol be included within a SMR? Any questions on reading material? How much do you need to know? Whole group discussion.

12.20
What's it like to start practising in the MAC approach.

12.35
Lunch

1.20

Section 2: Re-orientation to wider person-centred consultation skills

Key Objective: To help the practitioners practise and develop skills in foundational person-centred microskills

Small group exercise with 3 practitioners taking turns practising asking open questions, and making two summaries whilst coaching each other in consultation with a simulated patient.

Brief demonstrations of how to do it and how not to do it and whole group discussion. Include brief intro to listening.

Exercise in pairs discussing a difficult personal challenge and how it was overcome. Invite listener to formulate some statements recognising strengths at end, then followed by whole group discussion on issues raised.

Whole group discussion designed to take stock of the emerging style of helping patients to talk more in consultations.

2.30

Break

2.45
Section 3: Moving towards more person-centred SMR practice

Key Objective: To help the practitioners develop a sense of how a person-centred SMR might unfold, and how to analyse the consultation skills involved

Whole group discussion designed to address what might a person-centred SMR look like?

Two group exercise with practitioners observing and coaching interaction with simulated patient, starting with the opening of the consultation and asking of open questions, recognising strengths and using summaries to manage the consultation.

Whole group discussion on SMR management, structure and time issues.

Brief demonstration of the introduction of reflective listening.

Contingency time, use by doing whatever may most helpful if the schedule has operated on time.

Whole group discussion: Review of the day including; 1) discussion on letting go of old habits in developing a more person-centred approach; and 2) next steps in practice development and introduction of documents 3a-d.

4.00

Section 4: Audio-recording and research contexts

Key Objective: to prepare practitioners for their roles in the study

Discussion of why consent matters in research and the study procedures and materials.

Discussion of the value of audio-recording and the practicalities of using recorders.

MAC TRAINING WORKSHOP 2 FACILITATION GUIDE

Practice development outcomes; by end of the day

- Become more adept at ways of asking about, and exploring, alcohol in a person-centred manner, gaining new insights into the nature of the challenges involved, and forming views on the roles of the pharmacist in a range of clinical situations
- Possess increased skilfulness in reflective listening and other foundational person-centred microskills
- Develop own thinking about the issues involved in flexibly structuring SMRs and other patient consultations, adapting new insights from the programme to advance management of person-centred practice
- Be able to identify strengths and limitations of one's own practice in SMRs, and ongoing developmental needs and how they may be met
- Be able to look ahead to the remainder of the programme and plan how it will be used to develop practice

9.30
Introduction: Welcome back, invite Barbara to discuss experience of recording and what learnt from it and go around everyone else with invitation to identify at least one thing learnt since last workshop through programme participation.

9.45
Section 1: Discussing alcohol issues with individual patients in the MAC approach

Key Objective: To address the nature of the role in respect of alcohol – "what to do".

Form 3 small groups to discuss assigned vignettes 1, 6 & 3.

Feedback in whole group discussion of patient vignettes in that order.

Whole group discussion on the pharmacist role and alcohol, incorporating brief overview feedback from recordings.

11.00

Break

11.15
Section 2: Focus on listening in the OARS

Key Objective: To address the acquisition of key microskills, reinforcing previous content and working on reflective listening in particular – "how to do".

Real play introduction to reflective listening and whole group discussion.

Real play exercise in pre-selected pairs, first with relatively simple reflections interspersed with open questions for 3/4 minutes each, then introducing more complex reflections for 3/4 minutes each, alternating roles, plus whole group discussion.

Small group exercise (2 or 3 groups, allocation to be pre-determined) on using all the OARS together in an SMR with some alcohol content, explicitly using reflections to steer the consultation.

Whole group discussion on current practice in planning and organising SMRs, and advantages and disadvantages of using the MAC steps and guide as a structuring device.

12.45

Lunch

1.30

Section 3: Practice development – what are your issues right now?

Key Objective: To elicit and develop practitioner skills development agendas based on their own experiences in practice and be responsive to the needs of the group.

Role play consultation skills to be deployed in vignette to be selected with 3 CPs taking turns, plus audience and discussion.

In originally allocated 3 groups invite everyone to identify at least one consultation skills development issue newly identified since last workshop and which remains an unmet need important to address.

Form 2-4 groups based on issues articulated and work with group to design an exercise that will help address the identified issues.

Plenary agenda setting discussion, inviting consideration of balance between alcohol and broader consultation skills issues.

2.55

Break

3.10 One hour available to use as directed by the group in prior agenda setting exercise

4.10 Ending section: Look ahead to the next phases of programme including recruitment steps for telephone recording, 2 coaching calls and follow-up, and make arrangements for peer session in a fortnight.

4. The MAC Guide

MEDICINES AND ALCOHOL CONSULTATION (MAC) APPROACH TO SMRs

Getting Started

First Prepare

Before the consultation, review the person's medical record to get a picture of conditions and medicines prescribed. Note any reconciliation or red flag issues, how alcohol may impact clinically and any potential for deprescribing. Check for any known capacity or communication issues and:

Basic background information

- Reason for SMR/risk or problem identified
- Recent hospital admission
- Relevant previous consultations
- Latest investigations and test results
- Additional useful contextual info e.g., social care, safety issues

Medicines information linked to conditions and harms/risks posed by alcohol

- Conditions (LTCs, acute/major)
- Medicines information
    - Acute medicines
    - Repeat medicines
    - Recently stopped/started
    - Non prescribed medicines and supplements
    - Allergies
    - Multiple compartment aids/ adherence challenges
    - Potentially addictive or other high-risk drugs
    - Treatment burden

In the consultation

SMR templates may be useful to prepare and record, but these should not be used to structure the conversation. You are not ticking off items but attentively listening, an active, high-level skill that needs conscious effort.

The review is a chance to meet the patient and understand something about the life in which these medical interventions are being managed. Hold off on raising your agenda in the consultation until you have taken the time to find out how the patient is currently feeling, if there are any particular concerns, and how the review may be useful to them. The agenda and goals are set with and by the patient. People do not necessarily present things in order of importance, and they may need a bit of time and encouragement to open up.

Below are examples to give you an idea of what might work well in structuring the review, with specific suggestions for things to say along the way: this material has been judged by patients to be friendly, clear and comfortable for use early in the consultation. We do not recommend using it as a 'script' or in isolation, and it may be most helpful soon after the workshop as you are beginning to apply that content. Adapt the suggestions to your own style and keep your focus on the person in front of you and their needs. Listen for pointers about where they might like the discussion to go. The patient should be talking more than you throughout. Neutral facilitative responses are useful at the beginning of the consultation as people start to tell you things – "go on", "OK", "anything else", "got it", "can you say more about that" or "I see". Later on, reflections and summaries will be more helpful in organising the flow. If you don't know what to say at any point, try keeping quiet. If there is a pause from the patient and you feel the need to speak, ask: "what are you thinking/feeling?

Step	Examples
1. INTRODUCE -yourself and your role - the purpose of this service and how it can be useful - the subject of alcohol: raise it early and get **permission**	○ Welcome the person remembering to state your name. **Explain the role** (not just that you are a clinical pharmacist), that you work with the GPs in the practice and what the consultation offers. Many people are unaware of your expertise and the SMR as a new service. *"My job as a clinical pharmacist is to try and help you look after your health by making sure your medicines work as safely and effectively as possible."* *"This is a chance for us to talk about your medicines and your health conditions, how you are managing, and if there is anything I can do to help you with that. We have x time available today. Is that OK?"* ○ **Ask if it is ok to talk about alcohol** and explain it can affect their medicines and how they use them, as well as the condition(s) the medicines are prescribed for: *"Many of us enjoy a drink and I would like to ask you about alcohol alongside your medicines. This is because even small amounts of alcohol can interact with some medicines and make them less effective. Is that OK?"* ○ Explain that the consultation is part of their ongoing care and **confidential** (within GP practice - you work as a team). If the person is accompanied, clarify that both people are comfortable with being included in the conversation.
2. OPEN - the agenda - start to use open questions and listening to understand how the person is feeling and gather information about: **M**edicines **A**lcohol **C**onditions **A**dherence	○ **Invite the person's agenda**. Check if there is anything specific they would like to get out of this discussion. ○ **Use open questions** to find out how the person is currently feeling about their health. ○ **Ask the patient to briefly talk you through their medicines routine**. Rather than focus on separate medications, ask what they take for each condition and how they fit them into their day. This gives the person a chance to take stock and reflect on any difficulties with the treatment regimen. Telling you the story of what they do may also reveal unintentional non-adherence. Show understanding of difficulties if they are not taking medicines as prescribed. ○ Check if anything has changed for them recently and if so, how this is affecting them. Ask which medicines are most important to them. Check if they feel their medicines work well for them. ○ **Avoid a checklist or quick-fire question-answer** format. ○ Encourage the person to tell you if there is anything in particular they would like to discuss. Listen for any main issue from their perspective and its impact on daily life/fears for the future. ○ **With the person's permission, ask how alcohol fits with their medicines routine**, explaining why you are asking: *"So, [if it's OK to ask] can you tell me how drinking alcohol fits in with taking your medicines?"*

	○ Ask further questions to gauge how much they drink. *"Maybe if you think about the past week; when did you have a drink?"* ○ Note any issues they identify about medication, alcohol and their conditions ○ When relevant, you can also carefully ask a direct question or two, alongside more exploratory open questions *"People often miss taking doses of their medicines for a wide range of reasons, for example, being more likely to forget after you've had a drink. When you are drinking, have you taken your medicine differently to how you usually do, for example later, earlier or not at all?"*
3. FOCUS - help the person to decide what to address in more depth	○ **Summarise** the main MACA issues that have come up from the patient so far. Check that this summary covers the main issues. ○ Check also whether there are any remaining issues you would like to raise from your preparation (tailoring this to meet their concerns). ○ Remind the person that this is about finding out what is most important and clinically useful for them and **invite them to identify what might be most helpful to discuss today.** Explain this is part of their ongoing care. *"So, how can I help?"* *"Where would you like to start with all this?"* *"What would be most useful for you to discuss now?"*
4. EXPLORE - use OARS **O**pen questions **A**ffirmation **R**eflective listening **S**ummarising … to make MACA connections	○ Explore what has been identified by using reflections and asking open questions ○ Explore any possible implications of alcohol in the context of the person's condition(s) and medicines. ○ Enquire about alcohol gently where appropriate without being judgemental, recognising the person's strengths and also using summaries as useful. Make sure these do not interrupt. ○ **Help the person make connections** between their conditions and how they use their medicines and alcohol that they may have not considered previously. ○ Explore the person's agenda. You may end up discussing alcohol quite a bit in some consultations, and little or hardly at all in others. ○ **Offer information sparingly** when it is requested and where it helps make connections: *"I can give you information on that, but first, if it's OK with you, I'd like to understand a bit more about your situation, so we can see what might be useful. Is that OK?"* ○ The process of exploration may begin to generate some simple 'solutions' to any 'problems' identified.

5. OFFER - guidance on any MACA concerns - suggestions or other forms of help, however it is needed	○ **Ask what the person thinks** about any information offered and follow up on how this fits with the person's own sense of their situation and where this leaves them. ○ Encourage the person to **make their own suggestions** if they identify that anything might need to change, or what might be useful to monitor if not. ○ You can also make suggestions for change **if** the patient first identifies such a need; **get permission** to do so first. ○ **Check** their understanding of anything suggested. *"Let me just check that I have explained this well enough - can you tell me what you have picked up from what I've just said?"* Keep it as simple as possible: *"Is this helpful to you?"* ○ **Tailor any information you give to their specific situation** (using what they have told you)**.** ○ If the person seeks advice from you, give specific suggestions about what is possible to do and ask what they think of the options: *"That is worth thinking about, do you think you are ready to try that?"* *"You could try that and see how it goes."* ○ **Check for possible difficulties** with any proposed changes. This will help people think through the obstacles and confirm that they are making the right decision. ○ If appropriate, ask about the roles of family, carers or other forms of support that may be helpful in making changes, and also if there is anything else that you can do. ○ Provide information on how this will be **followed up** by the practice or PCN team and **safety net** ○ **Referral:** If the possible value of referral or further discussion involving alcohol arises naturally, ask the person *if* they would like to talk more about it.
6. END - with a summary	○ **Briefly summarise the key points and any actions**, e.g., for alcohol: *"I think we have covered everything now. Even though you do not drink heavily, it looks like alcohol may be affecting how your medicine is working for your blood pressure. This matters to you. You've got some good ideas about cutting down to address this."* ○ Check how well your summary matches the person's own sense of the key issues covered. *"Is that correct? Is there anything I've missed out there?"* ○ **End the consultation positively** by telling the person you have enjoyed the opportunity to talk to them and invite them to contact you if they have any further concerns.

5. MAC learning support resources

ALCOHOL: THE OVERLOOKED DRUG?

Alcohol (ethanol) is a health harming drug that is often overlooked and is clinically relevant to your role as a pharmacist. Like other drugs, it has clear pharmacological effects on the brain and the body; in this sense it presents a clear clinical issue rather than being regarded separately as a 'lifestyle' issue. Alcohol has wide-ranging impacts on people's health and well-being and affects the way people take their medicines, as well as the safety and effectiveness of their medicines, but is often missed out in medicines reviews [1, 2]. Even seemingly modest levels of drinking are implicated in a wide range of health issues [3]. Often unnoticed, alcohol interferes with the everyday work of primary care [4, 5]. The Medicines and Alcohol Consultation (MAC) approach is to introduce alcohol appropriately into a Structured Medication Review (SMR). Alcohol is introduced as a drug which may be linked to conditions for which medicines are being taken, and which is relevant to medication use. The MAC approach is delivered by pharmacists in SMRs in primary care to help patients:

- use their medicines safely and effectively
- consider ways in which their conditions and treatment can be adversely affected by the drug ethanol (alcohol)
- understand and manage the risks for themselves

The clinical pharmacist role

As a clinical pharmacist, you have legitimate reasons to ask about alcohol and how this is linked to patients' medicines and health – these reasons need to be shared with the patient. As a medicines expert, you are uniquely placed to discuss alcohol in the context of patients' use of prescribed and non-prescribed medicines and supplements. Our studies have shown that people are interested in receiving information about how their medicines interact with alcohol and how this might affect their own health conditions, if this is sensitively done [6, 7]. Patients have helped to design the approach of the MAC.

Raising the subject of alcohol without discomfort

We appreciate that alcohol can be a difficult topic to raise in consultations and it may be challenging for some patients and pharmacists to discuss. Patients can become defensive if health professionals suggest a patient is drinking too much or has a problem with alcohol. There are, however, ways of raising alcohol that avoid communicating negative implications of this kind.

The first things you say about alcohol are important, so the MAC approach encourages pharmacists to ask patients for permission to talk about alcohol at the start of a SMR, explaining the reason for

doing so. This helps both parties feel more comfortable. Alcohol is then discussed in relation to that patient's particular medicines and health conditions. Rather than a narrow focus on people with the most severe alcohol problems, this broadens clinical attention to the important harms associated with alcohol use in general. The MAC approach shifts the focus from patients with alcohol problems to problems caused for patients by alcohol. Patients can be encouraged to think about any current issues with medication use, what they want from their medicines, how best to protect their own health and well-being, and how alcohol might affect all of this. Skilful person-centred handling of alcohol-related issues will help with further discussion of other relevant issues in the SMR.

Engaging with the patient

As a pharmacist in primary care, you will have received training in person-centred skills and will be developing these skills in your patient-facing role. Much depends on *how* alcohol is raised, and this programme is designed to help you think about how best to approach discussing alcohol in these consultations. For example, there are many opportunities to first raise alcohol as a clinical issue during a consultation. These include:

- Drawing attention to instructions on medicines relating to alcohol
- Pointing out known interactions with prescribed medicines
- In discussion of adverse effects of alcohol on specific conditions that patients have (e.g. high blood pressure)
- In response to patient questions about medicines or conditions
- As a question about any already identified adherence issues

You can be ready to state the reasons to ask about alcohol in simple ways e.g. that drinking can interfere with medicines and how they work. You should also ask permission to raise the subject ("is it okay if I/we"), explaining why you are doing so, to help avoid discomfort and misunderstandings. There are also things to avoid in discussing alcohol:

- Avoid closed questions; you want to encourage the patient to talk
- Avoid overly casual or 'jokey' language about drinking during the consultation, though informality can be good, it needs to be carefully handled
- Don't talk about units of alcohol unless the patient does
- Don't use stereotypical ideas about problem drinkers or use the term 'alcoholic' (even if the patient describes themselves as an 'alcoholic')

If a patient reveals any negative experiences of past discussions about alcohol in healthcare settings, don't ignore these. Instead, it can be helpful to recognise explicitly that it must have been uncomfortable and, if opportune, explore further as this may provide useful information. If early talk is defensive, or if you are concerned that it may not be accurate, don't keep persisting with the same approach; consider returning to the issues later in a different way, the programme will help you focus on what works well in your interaction with patients and how to try new approaches.

Reflecting on your own drinking and its relevance to MAC

- Most people in our society drink alcohol, and that includes pharmacists and other healthcare professionals who help patients avoid or reduce alcohol risks or problems.
- If you drink alcohol, it does not mean you are being hypocritical or not practising what you preach; you are not preaching at all, rather you are aiming to help patients make informed decisions for themselves about drinking and health
- Your own alcohol consumption or abstinence can subtly shape what you may regard as risky or problem drinking
- Stereotypical ideas and alcohol marketing are both widespread, and profoundly shape what we all think about alcohol

It will be useful to think about:

- Adopting a curious and questioning approach to the subject of alcohol and interrogating taken-for-granted assumptions
- Becoming open to thinking differently about your own alcohol consumption, and that of other people
- Discussing these kinds of issues with colleagues, friends, or others
- How SMRs provide an opportunity to help people to think about alcohol, health and well-being

Further reading

We will of course be discussing alcohol together, and the MAC programme will help you to incorporate attention to alcohol within your clinical repertoire for consultations, with particular attention to SMRs. You do not need to read lots about alcohol, you just need to know enough to feel comfortable raising the subject and developing your skilfulness in the consultation. Nonetheless, do be curious and questioning about any alcohol materials you come across. Below are some specific examples from our research programme that we have referred to here, and can provide if intrigued

by the title. They are not about alcohol itself but about various issues we have encountered in doing research to help pharmacists include alcohol within their professional roles. It will be best to discuss any request with your coach, in order to be clear about how it fits with your interests, and can actually be useful to you.

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HOW THE MAC APPROACH FITS WITH THE SMR

SMR requirements

Medicines have negative as well as positive consequences, they can cause harm and can be difficult to manage. The SMR is a patient-centred, outcome-focused approach to medicines optimisation in which the agenda and decision making are shared with patients [1]. The contract specification is for a personalised, holistic review of all medicines and detailed aspects of health for people at risk of harm or medicines-related problems, lasting 30 minutes or more [2]. The DHSC Medicines Directorate report on medicines optimisation identifies SMRs as 'an ideal tool to help people with problematic polypharmacy' and also recommends appointments last at least 30 minutes to allow for shared decision-making [3]. Expert peer guidance recommends allowing additional time for prior preparation to maximise the contact time with the patient during the SMR consultation [4]. The new clinical pharmacist role and the SMR service specification are a response to a recognition that medication reviews in primary care have not always been completed with the thoroughness that is required to achieve medicines optimisation [5].

Many people eligible for SMRs are managing multiple medicines and conditions. The SMR facilitates real world risk management. The purpose is to ensure that the person's medicines are working for them and to help the person decide what is right for themselves. This requires a 'structured' approach which allows flexibility to respond to the agenda of the patient during the consultation [4]. The outcomes that matter most to patients may not be what professionals think [6]. The specification for the SMR states that it should be attentive to health literacy and in line with the principles of shared decision making [2]. It is not a one way transmission of advice but an interaction in order to achieve shared understanding [7]. Polypharmacy is an issue that originates with prescribing [8]. The introduction of SMRs has been far from smooth [9, 10].

SMR skills

Clinical pharmacists conducting SMRs are required to have, or be in training for, a prescribing qualification and to have person-centred communication, advanced assessment and history taking skills. These are underpinned by communication micro-skills that develop with practice over time [11]. Effective communication is essential for person-centred clinical pharmacy care [12]. While widely promoted as good practice, the actual extent of person-centred healthcare and shared decision making in health care systems remains unclear and is presumed low [13]. Learning how to do person-centred consultations and shared decision making well (as opposed to talking about these

things) is a work in progress for many health professionals. Routine experiences reinforce habits but that is not the same as developing skilful practice, which requires specific kinds of attention.

How the MAC fits

The MAC approach recognises alcohol as another drug, presenting real world risk to be considered in the SMR, and both alcohol consumption and medicines-taking as sensitive topics that require skilful handling. The MAC programme provides a flexible guide to enable you to respond to the agenda of the patient and offers personalised support to help you develop micro-skills to improve the quality of your consultation practice, and in a deeper person-centred manner. Pharmacy education and practice are often focused on one kind of content: giving and getting the information you think you need from patients and working out what you should say. The MAC approach links content with process skills: how you interact with patients, build trust and respond to the patient's circumstances. This involves accurately picking up on and responding to what patients are saying and feeling. The goal is to improve outcomes for patients through improved consultation practice.

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MACA: MAKING CONNECTIONS BETWEEN MEDICINES, ALCOHOL, CONDITIONS, ADHERENCE

After carefully raising the subject of alcohol, skilful linking to issues of concern to the patient lies at the heart of the Medicines and Alcohol Consultation (MAC) approach. The idea is to help people to make connections between their everyday health and well-being concerns and:

M = Medicines
A =Alcohol
C = Conditions
A= Adherence

Alcohol consumption is deeply culturally ingrained and, in the UK, is commonly associated with enjoyment, relaxation and celebration. Alcohol (ethanol) is a psychoactive neurotoxin which presents some risk to all who use it, but public awareness of its harms are limited. It is linked to poor health in various and complex ways. It can:

- cause and exacerbate long term health conditions
- interfere with the therapeutic objectives intended from prescribed medicines
- cause adverse drug reactions
- cause potentially serious drug-drug interactions
- impede adherence

Low levels of drinking by patients can be implicated in a wide range of health issues identified and managed in primary care [1].

Alcohol and polypharmacy

Many people are living with multiple, often long-term medical problems which can decrease overall quality of life. The more medicines prescribed to one person, the less likely they may be to take them all, and the more a person takes, the more likely they are to have an adverse event from one of them. A recent government-commissioned review into overprescribing, found 10% of the volume of prescription items dispensed through primary care in England are inappropriate [2]. Alcohol is another drug in the mix; complicating problematic polypharmacy, but is usually not recognised as such by patients or health professionals, unless taken in very large amounts and/or the patient is perceived as dependent.

For people with several long-term conditions, alcohol can exacerbate symptoms. Alcohol can contribute to the prescribing cascade [3], if it causes symptoms or exacerbates adverse drug reactions which are misinterpreted as a new condition. For example, adverse drug reactions including nausea, dizziness, tremor and gout are linked to common medicines known to be associated with causing a prescribing cascade. These may also be linked to alcohol use. Alcohol impacts on the gastrointestinal system and is therefore at cross purposes with medicines taken for gastroprotection. Increased risk of falls in older adults taking benzodiazepines or antidepressants can also be further increased by alcohol.

Much of what we know about how people use their medicines is based on evidence from studies of patients with single conditions, e.g. diabetes or asthma, with little research on people taking multiple medications for multiple conditions [4]. Those taking medicines long-term develop their own strategies for fitting them into their daily routines to minimise treatment burden and disruption. Some prefer to minimise their use of prescribed medicines and maximise their use of alternative ways of managing their conditions [5]. For example, some use alcohol to manage their symptoms (e.g. difficulty getting to sleep or managing anxiety) in addition to or instead of medication, seeing this as readily available and less problematic [6]. Some assume that leaving a gap between taking medicines and drinking reduces the risk [6]. Alcohol is also seen by some as an accessible means to manage the psychological and social burden of some conditions.

In one of our earlier studies, medicines taken by people who drank twice or more per week had the potential to interact with alcohol in ways which can result in adverse and non-trivial health effects for the drinker, including sedation, hypotension, gastrointestinal bleeds, hypoglycaemia and liver damage [6]. These medicines included most of the 38 potentially serious alcohol-medication interactions in older adults according to the POSAMINO (Potentially Serious Alcohol Medication Interactions in Older Adults) criteria identified by Holton et al [7].

Learning from the patient

Most people are not aware of the risks that alcohol poses to themselves, and prefer to see risk and indeed problems as located elsewhere, in the heavier drinking of others. Public information on alcohol health harms is limited by extensive marketing of products and corporate strategies that cast doubt on scientific evidence about product harms and public health policy responses, and emphasise purported benefits [8]. There is therefore a gap in the provision of accessible, evidence-informed, clinically relevant, alcohol health information. You can help bridge this gap, acting as a pharmacist.

You know that deprescribing is the safe and effective stopping of unnecessary drugs. Alcohol is in a sense an 'unnecessary' drug which might also be usefully stopped or reduced, BUT only if it seems worth it to the patient in terms of health protection and/or improvement. You can use your judgement to consider whether there may be possible benefit in change that might be helpful to discuss to inform a patient's own decision-making. This situation will only arise, however, AFTER you have had an exploratory discussion and the patient has indicated in some way they are ready to have a conversation about change. Trying to persuade people to consider or make changes they themselves are not ready for should be expected to backfire.

Alcohol consumption has a predominantly dose-response relationship with alcohol related harms. Reducing drinking reduces risks. Reducing drinking may also help reduce the burden of coping with disease. Finding out how people feel about their medicine is recognised as a key step in a person-centred consultation [9]. Ways of doing this include asking which of the patient's medicines is most important to them or whether they think any of them could be working better. Finding out about how a patient uses alcohol and how this connects to their prescribed medicines and conditions is another, often overlooked, key step. Some people intentionally take their medication in ways not intended by the prescriber, whilst other people's non-adherence is non-intentional but due to a lack of information or a misunderstanding. A lack of evidence-informed information and underestimation of alcohol as a drug can lead people to take risks with it that are non-intentional.

Finding out why actions are being taken underpins useful responses. This means being ready to listen to the specific benefits that alcohol consumption brings. The more skilfully you listen during a consultation, the more you are able to understand the person's situation, and how they weigh up the issues, and the areas that may be most useful to discuss. Generally speaking, the more the patient talks (about relevant issues) the better; this involves you learning from your patient how best to support them. Humility, respect and curiosity are important qualities that will help you develop listening skills. Listening seems superficially easy but it really takes a lot of hard work to reach advanced skilfulness.

Preparing for individual patients; linking medications and conditions to alcohol

- Before delivering an SMR, use the patient's notes to consider possible interactions or impacts that alcohol may pose in relation to particular medications and/or conditions

- Think about questions you could ask to explore drinking based on what you do and do not know about this individual patient
- Make use of information that is gathered from the patient early in the consultation to help tailor what comes after, with permission sought explicitly.
- Help point out any connections between medicines, alcohol and the patient's own health concerns, briefly as they arise if they seem important, and in summaries

For example, a man who was taking medication for angina, chronic obstructive pulmonary disease and high blood pressure, was asked by a pharmacist in our earlier work to describe his daily medicines routine. During this, the pharmacist spoke little and he told her about having fainting spells, including one when he was at the top of a ladder, after which his GP told him to stop working. However, he continued to work and was worried he would have to stop if it happened again. The pharmacist asked him how his drinking fitted in with his medicines routine and clarified how much he was drinking. She then explained why she was asking, saying there might be a link between his drinking and his blood pressure medication and his concerns that further fainting would affect his ability to work:

CP: Okay. And the reason really I'm asking about the alcohol is, as a pharmacist, I perceive alcohol as a drug itself, okay, so ...

P: Right.

CP: ... so obviously it can, it can interact with your medicines. Okay?

P: I understand that, yeah.

CP: So you are on bisoprolol, simvastatin and inhalers and, what I can say here is that alcohol will definitely enhance the effects of bisoprolol. So you mentioned that you had a few falls and dizziness,...

P: Yeah.

CP: ... and that's why the doctor started to reduce the work.

P: Right.

CP: So, you know, the combination of alcohol and bisoprolol can actually do that to you. Okay? So it, it ...

P: A bit like ...

CP: ... it can make you feel dizzy or ...

P: ... with the Statins.

CP: ... fainted, yes.

P: Shit, I never knew that. So stop drinking?

CP: Well, I would probably think about reducing it, definitely

This little piece of new information seemed to produce a lightbulb moment for this man. It took careful work for the pharmacist to identify and explore the issues, which was accomplished quickly. Before offering any information, the pharmacist listened without interrupting except for acknowledging, reflecting back and empathising with the man's inability to take the advice he had been given by his GP to stop working. Being able to continue working rather than any particular health issue was this patient's most pressing concern. Note here that the pharmacist did not give the patient advice on what to do but helped him to identify something within his power to change that could make a difference to that concern.

Whether or not to discuss alcohol in terms of units*?*

As a clinical pharmacist you may be familiar with the recommendations for lower risk drinking and how these are expressed in terms of alcohol units. The alcohol unit (approximately 8 grams of ethanol) allows the ethanol content of different types and volumes of drinks to be calculated and standardized. You may have previous experience of calculating alcohol units on a daily or weekly basis and giving advice. Although accurate information on doses of ethanol is important in assessing risk, awareness and understanding of units in relation to every day consumption is limited. You may also be unfamiliar with the amounts of ethanol in different products being consumed.

During a medication consultation with a patient who has one or more long term conditions the primary aim is to involve the person in a discussion which aims to support their self-management. In this context, talking in terms of units may be helpful if the person is comfortable doing so, and unhelpful if they are not. Here are some useful points to consider:

- Listen carefully to how the person describes their own drinking. What words do they use?
- Use the same language as the patient to describe their drinking, as this may help the flow of the discussion
- If a patients wants to discuss how much they drink based on 'number of pints of beer' or 'glasses of wine', use this terminology
- Do not use units or other alcohol specific terms first during your discussion, just use the language the person uses as far as possible
- Some patients may be curious about the number of units they drink and/or want to know if their drinking is within current guidelines. Take your lead from the patient and only discuss

such aspects at their request, and note you could ask them how they think such information may be helpful to them

- If a patient asks for more information on alcohol units contained in common drinks, you can also suggest they go to the NHS web page on alcohol units and again consider asking how they might use this information

Many people consider their drinking to be unremarkable even if they are drinking above recommended levels [6, 10]. However, they may want to know more about how their medicines interact with alcohol, and/or how this might affect their own conditions [11].

Linking alcohol to medications, conditions and adherence in a holistic clinical approach

In addition to:

a) how alcohol may interact with each drug

Consider:

b) alcohol in relation to each of the patient's conditions

And:

c) the relevance of alcohol consumption to any adherence issues identified

And:

d) alcohol in relation to the patient's wider health and life goals (e.g., how it may impact on capacity to work) and how they manage medicines in daily life (e.g., how alcohol may lead to forgetfulness or negate the effectiveness of medicines taken)

Alcohol (ethanol) affects a number of physiological systems. It impacts on pharmacokinetics (the movement of drugs through the body) and pharmacodynamics (the body's biological response to drugs) [12]. There are 287 interactions listed for alcohol in the BNF. Be aware also that studies specifically designed to investigate the pharmacodynamic interactions between alcohol and other drugs are very limited [12].

Alcohol is directly implicated in the key clinical areas requiring accelerated improvement to tackle health inequalities identified in the NHS Core20Plus5 (adults) approach to reducing healthcare inequalities. The following pages provide information on alcohol and medications used for a range of common conditions. The examples given below are not exhaustive but identify some of the potential effects of alcohol on long-term conditions and their treatment.

Alcohol and medications for cardiovascular disease

- Cardiovascular medications are widely prescribed and many patients are unaware of the risks of interactions with alcohol, though some may ask you if they can drink with these medications
- Alpha-blockers, used for high blood pressure, can have a significant interaction with alcohol. The combination can lead to excessive hypotension and sedation. For example, when the centrally-acting alpha-blocker clonidine or the peripherally-acting alpha-blocker doxazosin are mixed with alcohol there is a risk for excessive low blood pressure, light-headedness, drowsiness, and increased risk for falls. You should advise your patients to avoid or limit alcohol consumption when taking an alpha-blocker
- Glyceryl Trinitrate and isosorbide are vasodilator and antianginal agents used to help prevent chest pain or pressure from angina. Sedation and hypotension may result when one of these preparations is co-administered with alcohol
- Beta-blockers may lead to blood pressure lowering when combined with alcohol. Headache, dizziness, light-headedness, fainting, and/or changes in pulse or heart rate may occur, especially at the beginning of treatment or with dose changes
- Angiotensin-converting enzyme (ACE) inhibitors help relax blood vessels and alcohol can cause enhanced hypotensive effects
- Calcium-channel blockers interact with alcohol and can cause enhanced hypotensive effects; if taking verapamil, the plasma-alcohol concentration could be increased
- Warfarin control is affected by alcohol. Acute ingestion of a large amount of alcohol may inhibit the metabolism of warfarin and increase INR (International Normalised Ratio) and increase the risk of bleeding. Conversely, chronic heavy alcohol intake may induce the metabolism of warfarin, increase the risk of thromboembolism (formation of blood clots within the blood vessels) and associated conditions such as heart attack and stroke
- Loop diuretics e.g. furosemide, thiazide diuretics e.g. bendroflumethiazide and potassium-sparing diuretics e.g. amiloride can increase the risk of postural hypotension seen as dizziness and fainting which can lead to falls

Alcohol and medications for diabetes

- Alcohol can make the signs of hypoglycaemia less clear and can cause delayed hypoglycaemia

- Alcohol contains calories, which can lead to weight gain. Many patients with type II diabetes have excess body weight which increases the risk of cardiometabolic morbidity and mortality. Alcoholic drinks are not calorie labelled
- People with diabetes who drink thus need to be aware of, and monitor, the effects of alcohol
- Alcohol can be associated with persistent poor glucose control, leading to erratic insulin requirements or episodes of hypoglycaemia
- The intoxicating effects of heavy alcohol consumption can mimic the signs of low blood sugar, which might include drowsiness, confusion, dizziness, and headaches
- The mix of alcohol with metformin can increase the risk of a rare but dangerous condition called lactic acidosis

Alcohol and medications for respiratory disease

- Histamine and sulphites which are present in common alcoholic drinks exacerbate asthma; an Asthma UK survey identifies red wine as most commonly associated with wheezing
- Prolonged and heavy exposure to alcohol impairs mucociliary clearance, and may therefore worsen lung function for COPD patients
- Suboptimal use of inhalers is common, with pharmacists encouraged to help patients get more benefit from them; alcohol impacts on psychomotor skills and inhaler technique could be impaired after drinking
- In COPD consider if the effect on psychomotor skills could impact on nebulised therapy or oxygen
- For both asthma and COPD, stepwise add on therapy is used to manage patients whose condition is not controlled
- Theophylline and aminophylline (stable combination of theophylline and ethylenediamine) are drugs with a narrow therapeutic index which can be used for asthma management. Theophylline (and sometimes aminophylline) can also be prescribed for COPD
- Both are metabolised by cytochrome P450 enzymes and the plasma-theophylline concentration is decreased by alcohol consumption
- Both require drug level monitoring when treatment is started, changed and also should be reviewed annually
- Oral corticosteroids (e.g. prednisolone) are used for treatment of chronic asthma and exacerbations of asthma and COPD and have adverse effects (e.g. gastric bleeding) which would be further exacerbated by the effect of alcohol on the stomach

- Carbocisteine prescribed in COPD can cause gastrointestinal haemorrhage, as can heavy drinking
- Acetylcysteine prescribed as a mucolytic in COPD can cause gastrointestinal side effects e.g. diarrhoea, discomfort and vomiting. Alcohol has a similar effect on the gastrointestinal system

Alcohol and medications for pain management

- Paracetamol used for pain control, alone or as a combination medicine, can cause hepatotoxicity, as can alcohol
- NSAIDs are commonly taken by people as self-care medicines as well as being routinely prescribed in chronic conditions for both inflammation and pain
- Consumption of alcohol whilst taking a NSAID is not contraindicated but there may be increased risk of gastrointestinal problems, in particular heavy drinking, may lead to gastrointestinal (GI) blood loss
    - The mechanism may be due to a combined local effect, as well as inhibition of prostaglandins leading to decreased integrity of the GI lining
    - NSAIDs use has a small effect on increasing the risk of a thrombotic event (e.g. MI/stroke) particularly if take at high doses for a long duration. Alcohol also increases the risk of cardiovascular disease
    - Older people are at greater risk of the GI side effects of NSAIDs, which would be further exacerbated by the effect of alcohol on the stomach
    - Consumption of alcohol can lead to dehydration and therefore could put some individuals at further risk
    - There are some reports of acute renal failure in patients following NSAID use and heavy drinking episodes
    - The regimens for NSAIDs routinely require multiple daily dose e.g. twice or three time a day, and alcohol consumption may affect pain/inflammatory control if adherence is affected
    - Skills related to driving are impaired by indometacin and phenylbutazone and this is made worse if patients drink alcohol while taking phenylbutazone, but this does not appear to occur with indomethacin
- Drinking alcohol while taking opioids for pain (or treatment for dependence) risks depressed central nervous system function and death
    - Alcohol can cause the rapid release of opioids from sustained relief preparations

    - Opiates can cause drowsiness, chronic fatigue, constipation and low breathing rate (central nervous system depression) these effects can be increased with alcohol
    - Opiates and alcohol can cause sedation and affect the ability to perform skilled tasks
- Alcohol combined with amitriptyline, gabapentin or pregabalin, prescribed for neuropathic pain, may increase the risk of sedation and affect the ability to perform skilled tasks
- Amitriptyline and alcohol can both increase the risk of hypotension

Alcohol and medications for cancer

- Drinking alcohol has been identified as causing 3% of UK cancer cases each year, particularly in mouth and upper throat (pharynx) cancer and breast cancer. Alcohol may cause cancer through a number of mechanisms:
    - Conversion to acetaldehyde and release of reactive oxygen species (free radicals) during metabolism damages DNA
    - Potentially reduces blood folate levels required for DNA synthesis
    - Increased absorption of tobacco carcinogens in the mouth / throat
    - Increased hormones levels (e.g. oestrogen) linked to breast cancer
    - Alcohol induced cirrhosis can cause liver cancer
- Some people with Hodgkin lymphoma have reported pain associated with lymph nodes when drinking alcohol
- Many oral anti-cancer medicines cause nausea and/vomiting which can be exacerbated by alcohol. For example, for patients who are prescribed oral anticancer medicines with; direct anti-tumour activity e.g. capecitabine, hydroxycarbamide, chlorambucil; small molecule/antibody treatments e.g., imatinib, erlotinib, sunitinib; hormonal or anti-hormonal agents e.g., tamoxifen; or other agents e.g., thalidomide or lenalidomide
- A common side effect of cancer treatments is mucositis (epithelial cells of the GI tract e.g. mouth break down). Alcohol can increase mucositis or make it worse which can lead to infection and delay further treatment
- Tiredness / fatigue is a side effect of cancer treatments which could add to any drowsiness linked to alcohol
- Thalidomide causes drowsiness which could be made worse by alcohol
- Cancer patients are often prescribed antiemetic medicines e.g. ondansetron, metoclopramide, and opioids for pain relief. These can increase drowsiness and reduce alertness which could also be exacerbated when taken with alcohol

- Alcohol can cause a disulfiram-like reaction when given with procarbazine used in cancer treatment
- A number of medicines used in the treatment of cancer can increase the risk of hepatotoxicity as can alcohol e.g. methotrexate, mercaptopurine, vincristine, dactinomycin, alectinib
- Sunitinib can cause hypertension, therefore patients will have regular monitoring of blood pressure, which can be raised by alcohol

Alcohol and medications for sleep, depression and anxiety

- It may be helpful to discuss how alcohol could be affecting depression or anxiety, which often go together
    - Alcohol causes depression and depression can also lead to increased alcohol consumption
    - People often use alcohol to deal with anxiety issues and it can provide some immediate relief. Repeated use of alcohol makes anxiety worse, however, and clinically significant anxiety problems can be caused by alcohol
    - Many depressed or anxious drinkers will start to feel better within a few weeks of cutting out or reducing alcohol consumption. Hence it is often advised to reduce or stop drinking first, and then deal with the depression afterwards if it has not lifted after a few weeks. If this is not possible or preferred, encourage addressing the sources of anxiety and/or depression.
- Selective serotonin re-uptake inhibitors (SSRIs) generally don't cause additional problems when taken with alcohol, however, vigilance in relation to drowsiness is recommended
- Tricyclic antidepressants (TCAs) lead to drowsiness and affect co-ordination, particularly during the first few weeks of taking them; the manufacturers advise avoiding alcohol while taking TCAs, although it may be safe to drink small amounts after a few weeks once the side effects have settled
- Tricyclic antidepressants, may also enhance the central nervous system depressant effects of alcohol e.g. dizziness, disorientation, slurred speech, shortness of breath/ shallow breathing/ low breathing rate, reduced heart rate, confusion, nausea and vomiting
- For monoamine-oxidase inhibitors (MAOIs) a substance called tyramine, found in some alcoholic drinks, such as wine, beer and sherry, can cause serious side effects, including a sudden and dangerous rise in blood pressure

- For those using St John's wort, alcohol can increase the side effects of dizziness, drowsiness, and difficulty concentrating
- Mirtazapine and alcohol can both have central nervous system depressant effects, which may affect the ability to perform skilled tasks
- Manufacturers generally advise not drinking when taking anti-depressants; for example, people should avoid alcohol if they are taking mirtazapine, because it can make you feel very sleepy. Caution and monitoring are therefore needed if continuing to drink alcohol
- It is inadvisable to stop taking antidepressant medications in order to permit drinking alcohol. Stopping antidepressants suddenly can cause withdrawal effects
- Alcohol should be avoided when taking anxiolytics and hypnotics as this causes enhanced sedative effects
- Alcohol's effects on mood are partly due to the interaction of medications with alcohol, drawing attention to the patient information leaflet may be useful, as can advising patients to see their doctor for further discussion
- Zopiclone / zolpidem and alcohol can have central nervous system depressant effects, which might affect the ability to perform skilled tasks.
- Zolpidem and zopiclone may be prescribed for the short-term management of insomnia, drinking alcohol (especially in excess) is linked to poor sleep quality and duration

Alcohol and medications for psychoses

- For most first and second-generation antipsychotic medications, including chlorpromazine, haloperidol and olanzapine, alcohol can depress the central nervous system and increase the risk of hypotension, this may affect the performance of skilled tasks
- For patients prescribed benzodiazepine (such as lorazepam) to manage symptoms of mania, such as agitation, alcohol will further depress the central nervous system causing hypotension and confusion, especially in the older population
- Caution is needed if continuing to drink alcohol whilst on treatment for psychoses about whether and how the two may be linked e.g. in intoxication; careful monitoring is recommended

Alcohol and medications for epilepsy

- Drinking alcohol can increase the risk of a seizure
- Adherence is important for seizure control. Alcohol can cause sleep disturbance which may lead to missed doses

- Drinking alcohol when taking epilepsy medicine has been reported by some people to make them feel drunk quicker
- Many anticonvulsants used to treat seizures have drug interactions with alcohol. This increases the central nervous system side effects e.g. drowsiness, dizziness, mood changes, and trouble concentrating
- Alcohol and sodium valproate / carbamazepine can increase the risk of hepatotoxicity

Alcohol and medications for thyroid conditions

- Alcohol has multiple effects on the hypothamo-pituitary-thyroid axis and the thyroid gland
    - Alcohol is toxic to the thyroid gland and can be used to treat and correct thyroid gland abnormalities
    - Alcohol is associated with reduction in size and volume of the thyroid gland. This reduction in turn also causes reduction in T3 and T4 levels both of which are involved in metabolic control
    - Alcohol also affects release of both Thyroid Releasing Hormone and Thyroid Stimulating Hormone
- Treatments are prescribed for both hyperthyroidism and hypothyroidism, and hypothyroidism requires lifelong therapy with levothyroxine; alcohol may affect disease control if adherence is affected
- Carbimazole is used to prepare patients for thyroidectomy or for long term treatment. Propylthiouracil is used when carbimazole is not suitable. Mild GI side effects during treatment (carbimazole, propylthioracil and levothyroxine) could be exacerbated by alcohol use
- Adherence is also important in hyperthyroidism, with over-treatment leading to hypothyroidism, and again adherence could be affected by alcohol use

Alcohol and medications for Parkinson's disease

- Alcohol consumption increases the risk of neurodegenerative disorders e.g. Parkinson's Disease
- Parkinson's disease presents with motor-symptoms hypokinesia, bradykinesia, rigidity, rest tremor, and postural instability. High levels of alcohol consumption over time can impair vision, which can reduce a person's effective visuo-motor control

- Alcohol can increase the side effects of levodopa such as dizziness, drowsiness, and difficulty concentrating. Some people may also experience impairment in thinking and judgement
- Alcohol can increase the risk of hypotension with drugs used to treat Parkinson's disease (levodopa, pramipexole, ropinirole, rotigotine, selegiline and apomorphine)
- Side effects of pramipexole, ropinirole and rotigotine e.g. GI disturbances, dizziness; drowsiness; fatigue/malaise, headache, nausea are also those linked to alcohol
- Adherence to medicine and time of medication taking can affect motor control and quality of life. Alcohol could affect adherence to medicine regimen

Alcohol and medications for opioid dependence

- Medications for opioid dependence (including methadone and buprenorphine) and alcohol will depress the central nervous system and increase the risk of overdose
- Patients who use illicit opioids and drink alcohol should be encouraged to consider the risks and how they may be reduced, including through accessing treatment
- Asthmatic patients receiving treatment for opioid dependence, and drink alcohol are at increased risk of respiratory depression and overdose

Alcohol and infections

- Alcohol affects the immune system, even small amounts of alcohol can affect the immune response
- Antibiotics have side effects e.g. causing sickness and dizziness, which might be made worse by drinking alcohol
- Regular timed dosing of many antibiotics is important to treat infections. Alcohol could affect adherence to medicine regimen
- A disulfiram-like reaction can occur when alcohol is combined with metronidazole, tinidazole or ketoconazole
- Metronidazole and tinidazole can cause drowsiness, which can be exacerbated by alcohol
- Alcohol may increase the risk and/or severity of central nervous system side effects of cycloserine e.g. dizziness, drowsiness, depression, seizures
- Linezolid can interact with undistilled alcoholic drinks, such as wine, beer, sherry and lager
- Alcohol and doxycycline can both increase the risk of hepatotoxicity
- The effectiveness of doxycycline may be reduced in people with a history of chronic alcohol consumption

- Alcohol and isoniazid and can both increase the risk of hepatotoxicity
- Heavy drinking reduces the efficacy of interferon therapy and increase the risk of hepatotoxicity
- Alcohol can cause yeast to grow which may make candida infections worse, this can render an antifungal medicine e.g. fluconazole less effective

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Sample open questions

Openings/conditions

How are things?

How have you been doing/feeling?

How has the pain/sleep been?

What's happening with the asthma/diabetes/blood pressure?

Medicines

How are the medicines working?

How have you been getting on with your medicines recently?

What's been going well recently?

What have you found about taking all these medicines together?

Why do you take them in that way?

What is that one like to take?

How do the meds help with the condition?

Alcohol and adherence

What does going out drinking do to how you take your medicines?

How does the drinking affect when you take the tablets?

Focussing

What are the most useful/helpful things we could discuss today?

What are the most important things to you right now?

General

How does that work?

How does that fit in?

What do you think makes that happen?

Why do you say that?

What are you thinking of doing about that?

How do you think you could do that?

What do you think about giving it a go?

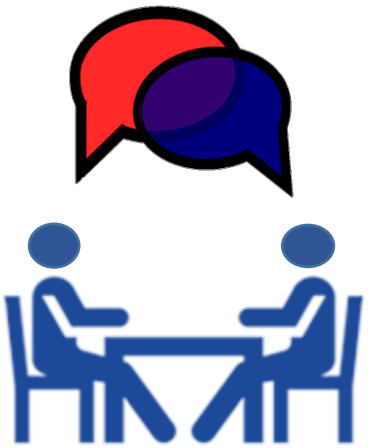
The Medicines and Alcohol Consultation (MAC) Approach

Strategically: Help people to **make connections** between their everyday concerns and:	Verbally: Use specific communication skills:
M = Medicines **A** =Alcohol **C** = Conditions **A**= Adherence	**O** = Open Questions **A** = Affirmations **R** = Reflective Listening **S** = Summarising

Goals:

The aim is to give the patient an opportunity to reflect on their health, including giving appropriate attention to alcohol. Information is provided only where welcomed by the patient; **avoiding telling people what to do, including telling them not to drink or to drink less**. Also avoid implying that you know what is best for them, whether to do with alcohol or anything else. If you have reason to be concerned about a particular issue, briefly and carefully present this, in order to ask the patient what they think about the issue.

An SMR may lead to reductions in drinking, changes to medicines, or their use, or a decision to continue without any change. **The goals are determined by the patient, who is supported by your actions in the consultation and subsequently**.



As a patient in a MAC informed consultation or SMR, I should feel:

- that the consultation is for my benefit (a useful personal offer, not just for the sake of targets/the system) and part of my ongoing care
- free to raise issues of importance to me
- that my experiences and concerns are listened to, understood, and taken seriously
- that the consultation is tailored to me and my circumstances, rather than only offering generic advice
- that I am known (or am becoming known) to the clinical pharmacist and I am trusted to make decisions about my health
- that the consultation moves things on for me in some way

I should not feel:

- judged when talking about my use of medicines or my drinking, especially when I am not doing what is usually advised
- hurried through a list
- overloaded with questions
- talked at
- pressured to talk about alcohol (or anything else) more than I would like to
- that I am being told things I already know

HOW EXACTLY ARE YOUR CONSULTATION SKILLS DEVELOPING?

Here are 10 questions about how your practice may be developing that will help you to critically review where you are with your own consultation skills development and help you prepare for the next coaching sessions or peer group discussions:

1. Are you gathering information in different ways?
2. Have you developed a patter for asking permission to introduce alcohol?
3. Do you feel comfortable thinking within the Medicines, Adherence, Conditions, Alcohol (MACA) framework?
4. Are patients doing more of the talking in consultations?
5. Are you hearing more about issues with medication use?
6. Are you asking more open questions?
7. Are you becoming increasingly comfortable in making reflective listening statements rather than asking lots of questions?
8. Are you giving information, advice and summaries in different ways?
9. Can you identify good examples in your practice where you have explored patient concerns?
10. Have you developed your ability to identify patients' strengths and how you communicate these?

PATIENT VIGNETTES

SMRs are likely to be complex partly because there are so many issues to consider, for example:

- Current and relevant prior health problems
- Current and relevant prior drinking patterns
- Managing multiple medications (both prescribed and over the counter)
- Current and prior experience of side effects/adverse events, including safety issues
- Medication use or adherence issues
- Medication effectiveness issues
- Sensitivity of the issues for discussion
- Involvements of other clinical team members, other professionals, and carers

Some of these issues are more likely than others to be relevant in a particular consultation, making agreeing a focus an important task. This consultation should start or continue an ongoing conversation about how medicines (and alcohol) are impacting on this patient's life and concerns, linked to their conditions and health. The conversation may continue with you, a GP and/or a social prescribing link worker trained to help support patients after a SMR. There are different sources of complexity in the patient vignettes that form the seven case studies that follow. These are derived from our research. We offer some thoughts on how to approach the alcohol aspects of the consultation. Compare these with your own thoughts and discuss with peers if opportunities to do so arise. Remember, you will not get to know the details about people's lives and drinking disclosed here unless the patient is comfortable enough to tell these things to you. All MAC consultations start with asking permission to include alcohol, inviting the person's agenda, and identifying where they want to start.

Always raise alcohol sensitively in consultations:

- Alcohol consumption can be a sensitive subject to discuss for many people for many reasons, and they may be concerned about accurately revealing how much they are drinking
- People may have had negative experiences of being asked about alcohol in other NHS contexts and these are useful to find out about by asking carefully
- The very first things you say about alcohol are important
- Avoid appearing judgemental. Make clear the appropriateness of discussion of drinking for this review, for example by recognising that 'most people enjoy drinking' and that it is very relevant to how medicines work

- Explain also if needed or useful that asking about alcohol is good practice to confirm patient safety when taking medicines
- Avoid any focus on whether people are drinking ‘too much’; keep your focus on connecting alcohol to medicine use and their conditions

Some people are more open to talking about their drinking than others. This calls for different ways of raising and exploring the issues tailored to willingness to discuss this subject, and other patient preferences. Be realistic about what can be done in one consultation. Opening doors to discussions and building trust are important foundations. Your confidence in talking about alcohol will help the patient feel comfortable. Whilst it may be relevant for some, don’t let a focus on alcohol treatment, even for particularly heavy drinkers, overshadow the service you offer in the SMR, and the care offered by your multi-disciplinary team. Similarly, do not exclude anyone who drinks from these conversations e.g., people with learning disabilities.

1. ***Peter is a patient with various medication and adherence issues, with alcohol potentially implicated***

Peter is a 75-year-old man who has just come out of hospital after a fall; he lives alone. He is now taking a range of medications (including codeine, NSAID, aspirin, PPI, and a calcium channel blocker) not all of which he knows much about. He says he "likes a drink"; two pints of beer two or three times a week with his mate Charlie, always early evenings in his local pub. Peter doesn't know the recommended drinking limits, or what units are. He used to drink quite heavily when he was younger but was never an "alcoholic". All this he tells you in a very straightforward manner. His new medications leave him feeling slightly dizzy sometimes, so that he needs to sit down. It's all a bit of a palaver and he could do with someone just going through everything with him and keeping it simple.

- What do you think may be the key issues here, and how would you begin to explore them?

A good starting point might be to invite Peter to articulate his concerns about his medicines and why he considers them to be a "bit of a palaver", and therefore to start with his priorities. It might be helpful, perhaps after asking him to tell you about how he's feeling and his medicines routine post-hospital, to respond directly to his request to go through the medications, separating the short and longer term, discussing the history, and checking his understanding of the medicines and the conditions. As part of this discussion, you could identify how alcohol may have an impact on these medicines individually or as a whole and this may lead to opportunities for further exploration. This would include the dizziness he is experiencing which he has linked to his new medicine; he should be assured early that this will be covered, and that it is useful also to discuss other issues to get the full picture.

This may need some prioritisation, including:

- *Dizziness and falls (are there any, and if so, discernible types or circumstances and their history?) including current issues for safety netting*
- *Medication changes and their timing in relation to dizziness*
- *The possible contribution of alcohol to dizziness*
- *Alcohol in relation to the new medication*
- *The nature of the adherence issues*

Gather the information you need from Peter, whilst helping him to think through this confusing situation for himself. There may also be simple measures that you can suggest that will help him feel

more confident with his medicines (medicine information sources, reminder charts etc.). This consultation needs good management, reviewing his medication linked to his current circumstances and also his longer-term health goals. Ask Peter what he thinks about any advice given, and his level of concern about how alcohol could impact on his health and wellbeing, in particular regarding his risk of falls.

2. ***Mike has what appear to you quite concerning drinking patterns and is very sensitive about being 'hassled' by what he calls the 'health police'***

Mike is a 55-year-old man with cardiovascular and other alcohol-related health conditions for which he takes multiple medications including warfarin and a diuretic. He is very straightforward about his drinking; he has five pints of Stella every night in his local pub and every few weeks he will go on an all-day bender on a Saturday with his mates. This he sees as completely normal for blokes where he lives, and states very clearly that he has never been an "alcoholic" and is sick of his middle-class GP implying that he is. You can see from his records that his blood pressure has been high and is gradually getting higher.

- How do you discuss the subject of alcohol with Mike?
- Should you consider referring Mike, and if so how, and where?

The big challenge here is to find a way of discussing drinking that encourages Mike to reflect on his health. His past experiences with the GP have not succeeded in doing this and appear to have made it more challenging to do so. This makes it particularly important to carefully explain the purposes of the SMR as a service offered to him to manage his long-term conditions and help him with medications so he is able to protect his health and wellbeing in whatever ways he chooses. It is also very important to seek his agreement carefully that it is OK to discuss his drinking during this consultation, explaining that as well as looking at the medicines he is prescribed, the review will also need to consider alcohol as it is highly relevant to how his medicines work. You could ask him about his previous GP discussions regarding alcohol and emphasise that this would be a different type of discussion to one that he's had before with his GP. Providing information on the role of the clinical pharmacist could be useful here to emphasise the holistic approach to help people manage their long-term conditions however they choose. This could include consideration of the impacts of his medicines and his drinking on his health conditions, but what gets discussed really is up to him. Explicitly seek his permission by asking if it is OK to discuss a particular subject as you go and ask him how he wants to use this discussion, whether he has any specific concerns about his medicines and

where he would like to start. Gauge any issues that seem to matter to Mike as you proceed, and be flexible and explore those issues.

Consider asking him what he thinks about his blood pressure slowly getting higher, whether he has noticed any symptoms or changes in his wellbeing, as people are not always aware of gradual changes in their BP. Don't overstate any concerns you have, frame them very carefully, and err on the side of under-statement. Explore the patterns of his medicines use and whether any adherence issues may be related to drinking, particularly at weekends. If he is interested in discussing it, you could ask more about how much he is drinking on Saturdays and whether it affects his medication being taken. Perhaps also about what happens on Sundays.

Be honest about any concerns you have, avoiding over-statement and getting into a discussion with Mike about whether he is drinking too much; keep your focus on helping him to think through how alcohol may or may not be related to his medicine use and his conditions. Find an opportune moment to let him know that drinking can increase risk of bleeding or make warfarin less effective. It is important to demonstrate that you are considering issues from his perspective, and what is normative in his community, acknowledging the validity of his experience. Avoid trying to persuade him; reflective listening is likely to be the most valuable skill here. Make enquiries about the implications for him, if he articulates that there is something specific he would like to discuss. If the discussion is going well and it seems appropriate because he has raised it, encourage Mike to consider whether he wants to make any changes, and if so what and how. Otherwise don't! It could be that even small changes in his usual drinking pattern may start to show positive improvements to his health. Be careful, however, that you do go at Mike's pace, and that you follow his lead where possible. If you, for example, start talking about how he might reduce his drinking before he has decided that he will try to do so, expect this to backfire. Say sorry if you do get it wrong. Let Mike make the decisions at the key points in the consultation, and do not try to persuade him. Do not consider referring Mike, unless he is indicating that he may find benefit in taking the discussion further. If so, invite and follow his preferences about who this might be with, and be ready to make suggestions, though only if this is requested by him.

3. Prakash is unconcerned about his regular drinking

Prakash is a 68-year-old man who has been taking cardiovascular medication (aspirin, atorvastatin, bisoprolol, ticagrelor) for over a decade following his first heart attack. He has a spray for angina (glyceryl trinitrate) and takes quinine sulfate (for leg cramps from statins). He takes strong painkillers

when necessary for back pain (co-codamol) and a NSAID (naproxen) with a PPI (omeprazole). He has recently started taking medication for an enlarged prostate (tamsulosin). He is also taking medicines for allergic rhinitis (cetirizine, fluticasone furoate nasal spray). Prakash feels a bit cheated because he did all the things he was told in his cardiac rehabilitation sessions but still had a second heart attack. He has had a number of side effects from medications over the years, including dizziness, bad breath, upset stomach and leg cramps, most of which are common side effects (bad breath less so). He says lots of the tablets don't agree with him but better to be alive. He is presently taking medication for leg cramps and to lower stomach acid. Prakash used to enjoy spending time in the pub with his friends but has cut this back. He goes out much less and has a few beers at home. He regularly has a brandy or two to settle his stomach, adding a mixer to take the taste away.

- Prakash appears unconcerned about drinking, so how might you establish what role alcohol may be playing in this situation?

Following the basic good practice introduction, start by discussing what Prakash might want to get from the SMR; being clear about his concerns (could it be a third MI, or is he fatalistic about this?) and his agenda is important, particularly when there are multiple possibilities lurking behind the information presented. Do ask about the dizziness, cramps, drinking and stomach issues past and present to the extent that Prakash is concerned by them. Where does his feeling of being cheated leave him; is he depressed? Does he see any connections between drinking and his condition? Aim to have Prakash lead the direction of the discussion rather than answering very specific questions you ask about side effects or other issues.

It may be the case that alcohol plays a greater or lesser role in his concerns; you will only find this out by helping him to tell you what they are. Be vigilant for alcohol complicating the issues being discussed, even if Prakash is unconcerned. It may be that there is a valuable discussion to be had that links the various issues in a way that has not occurred to Prakash previously. This needs to be accomplished carefully, and you can usefully articulate curiosity about how it all fits together, and concern for Prakash and his health. It may be useful to invite him to provide summaries of the information being discussed, and you can be ready to make suggestions about anything clinically relevant that has been overlooked. Alternatively, or in addition, you can offer summaries which highlight particularly salient issues and invite him to correct (is there anything big that I've left out?) and add to them. Your role is to guide him to undertake a thorough assessment of his circumstances and be helpful along the way. Don't assume anything about alcohol, or indeed about other issues.

4. Liz is an older adult who is accompanied by her husband during the consultation

Liz is an 85-year-old woman who has had high blood pressure for many years and is recovering from a stroke, for which she is prescribed a range of medications. Her husband, Pat, accompanies Liz to the consultation. He looks after her medicines, but he cheerfully discloses that he is a bit forgetful. Liz tells you that she drinks a small glass of whisky every night before bedtime and has done for many years. She's never discussed her drinking with any health professional, and it wouldn't be obvious to her why she should. You don't know anything about her husband's drinking, medication use or health, the SMR is for Liz.

- What might be the key issues here and how would you organise your exploration of them?

You know Liz had a stroke, so consider early on how this might impact on the consultation itself. Check with Liz that she wants Pat to be present, and also whether she would like him to take part actively in her SMR. Ensure they both understand what a clinical pharmacist is and what the SMR offers in respect of Liz's health. Ask them both what they want from this SMR (if Liz has indicated she wants Pat to be part of the consultation). Once you know what Liz and Pat would like to gain from the SMR, explore this further by asking Liz for more information about the effects of the stroke, and linked to this, her ongoing support needs, considering both her medicines and her health. Ask about alcohol in connection with Liz's high blood pressure and stroke, and her rationale for having a small whisky at bedtime. What are the perceived benefits and the risks? It may be useful to know a little about Pat's drinking, e.g., do they drink together, and if so you might explore if this may be linked to Pat's forgetfulness?

During this part of the consultation focus primarily on Liz. Once you have an understanding of the points above, explore Pat's role in caring for Liz, and his role in supporting Liz to maintain her health, including looking after her medicines. Does Pat have any health and support needs? Exploring Pat's forgetfulness is very relevant to Liz's needs. How often does this happen, and what are the impacts on Liz? As appropriate, discuss issues with them that have been identified which could support Liz with sleep hygiene and being able to adhere to her prescribed medicines (side effects, dose timings, swallowing difficulties, concerns about any of the medicines etc). The medicines and their formulation may be important, especially if Liz and Pat consider that using a monitored dosage system (MDS) might be appropriate due to Pat's forgetfulness. If you identify Pat also has health

needs, you could address these by offering to facilitate an appointment with his GP or, depending on what has been discussed, signposting him to other appropriate services/support.

5. ***Tom has had previous treatment for alcohol dependence and is still drinking heavily while taking multiple medications***

Tom is 69. He has problems managing his medication and recently had a fall in the bathroom, so a social worker has become involved. He has been taking painkillers for many years following a serious accident. He is also taking medication for heart failure and angina, and has recently been diagnosed with COPD, for which salbutamol has been prescribed. Tom finds it hard to read the information on the medicine packets. He has had treatment for alcohol dependence in the past and says he has been a drinker for most of his adult life. He drinks during the day but now his capacity for drinking is nowhere near as much as before. He says he can't be bothered with it so much now.

- What are the "ways in" to discussing alcohol with Tom after he has given you this information?
- Which subjects do you feel comfortable discussing in this, and which do you not? Where does this leave Tom?

Attending carefully to the MAC basic good practice guidance will help with Tom. Start with his concerns, are these more to do with managing medicines in general, or are they around the new medicines for COPD, or more about his recent fall or about his health overall? You could ask briefly about each or simply where he would like to start. Explore with him where alcohol fits in to this picture, decide on whether to ask about this across the board, or in connection with more specific concerns. Your decision will be informed by the discussion up to this point, including what he is ready to explore with you. Was alcohol involved in his fall in the bathroom? There are many ways in, and some are more direct than others. For example, one possible way in is via Tom's use of inhaled therapy and its relation to alcohol. Using an inhaler is a skill which is possibly affected by alcohol as it reduces psychomotor skills particularly for complex tasks. Alternatively, what about the painkillers and alcohol? Depending on the type of painkiller Tom is taking there could be an interaction leading to drowsiness and reduced alertness (could this be linked to his recent fall?). Also if Tom is taking a sustained relief opiate for pain control, then alcohol can cause the rapid release of opioids from such preparations, and the overdose risk may be related to the fall risk.

Providing Tom with information is important, though this needs to be managed carefully to avoid getting in the way of him thinking about and talking about his issues. You need to listen for his concerns and be vigilant for the ways in which he indicates that drinking alcohol is relevant to the issues he is raising. It is worth paying attention to the ways in which he talks about alcohol, including what he is more or less comfortable discussing. Is Tom saying that because he drinks less now it is no big deal? That's a somewhat different issue to exploring whether drinking alcohol has contributed to any of the specific issues he has experienced or is facing now. You are not an alcohol treatment worker, so be straightforward with Tom about anywhere you feel the discussion is taking you outside your role and expertise, clarifying what you can offer. You can listen carefully and help him to make sense of this situation. How independent is Tom? What is the social worker or his GP doing? Are there other services he is currently using? Aim to find out whether Tom wants any further help than he is getting now, and if so consider whether you or other team members have a role in facilitating this? What plans have you and Tom made together about his existing medicines and the new COPD therapy, particularly linked to Tom's risk of another fall?

6. John is a patient with a history of mental health problems who drinks alcohol each day

John is a 68-year-old man who has long term health conditions including anxiety and depression and takes a range of medications. He has had two episodes of psychosis following particularly difficult times of life in his late forties and early fifties. He drinks a little over half a bottle of wine every night at home with his wife, sometimes more. It helps him get to sleep. John knows the recommended drinking limits, and that he exceeds them, and sometimes he thinks he would like to drink a bit less, as he worries somewhat about the impact of alcohol on his health. Apart from some brief conversations with his GP, where he gave the 'right' answers, he has never discussed his drinking with any health professional. He is cautious about discussing drinking but has revealed all this to you as he has spoken to you before and feels he can trust you. He is glad he's been asked to come for an SMR as he is quite keen to talk about his medications because he's not sure if he needs to take them all.

- How do you approach this consultation?

There is much to be gained from obtaining a fuller picture behind this view that he might not need to take all his medications, and also about what he thinks about his health more broadly. What are John's current priorities and concerns? How is his health, how is he doing right now? What are his beliefs about his conditions and the medicines? What are the adherence issues? How does he look ahead and think about his future, and in which ways is his health important to him? Seek to develop

this consultation so that you are being led by John, and this means avoiding getting into correcting particular beliefs and question-answer dialogues. You want to hear, and more deeply understand, what's right for him. Don't assume that he has it all worked out, so listen for ambiguities and uncertainties, and be ready to reflect them back, either at that time or later on.

Once it has been established that John is comfortable talking in the consultation, and you have permission to ask, enquire about the possible effects of alcohol on his conditions, including whether and how mental health problems may have been brought on or exacerbated by alcohol. Discussing the past may or may not be helpful. Understanding how John regards alcohol, and the nature of his caution in discussing it, looks important to establish as the basis for an exploratory discussion which could have some depth. His thoughts about the possibility of drinking less need to be located in these kinds of contexts. Talking about his conditions, medicines and alcohol together may be very valuable in helping him to think about his situation holistically, and there are many ways this can be done. It may arise naturally in the course of the consultation, and if not, you can ask him, for example, how he thinks alcohol may help him sleep. There may be lots of issues to keep in mind, so be explicit if you are coming back to issues flagged up earlier, as you try to connect the threads of this discussion. It can be helpful to be explicit early that you will discuss the possibility of removing or replacing medicines when you know more about his situation. Expect that providing signposting of this type will be appreciated. There may be challenges involved in putting all the issues together; the use of summaries throughout the consultation may be important for John. Together you can then decide on how his medicine regimen can be optimised in line with his thoroughly considered preferences.

7. Lisa has concerns about her drinking but is worried about talking about it

Lisa is a 55-year-old woman who takes anti-inflammatory drugs for arthritis, as well as statins and anti-platelets following a transient ischaemic attack. She is also taking calcium supplements because she is aware osteoporosis 'runs' in her family. She has been taking the antidepressant sertraline for six months since the death of her mother. She is worried that starting to take multiple medications over the last couple of years marks the beginning of old age. Her stomach gets more upset than it used to before she started taking them. She has a stressful job and drinks with her partner Anne to relax and unwind at the end of the day. Lisa used to be the 'life and soul of the party' type of drinker when she was younger. Now, she mostly drinks for relaxation and to mark the end of a busy day. She sometimes feels she drinks too much and feels ashamed of it. She thinks drinking is probably not a good thing with depression and feels a sense of shame sometimes when she overdoes it. Lisa is concerned about how alcohol might mix with her medications and thinks she probably should do

something about her drinking but is worried about talking about it in case she is told to stop drinking, or that the GP, who she knows well, will be judgemental towards her.

- How might you explore Lisa's concerns?

Lisa needs reassurance that the service really is confidential and person centred, and that she will not be treated judgementally. Elicit her concerns by simply asking about them. She may see this as the opportunity to start to discuss the concerns about her drinking which she has been keeping private; her sense of shame means she may be very easily put off. It is quite likely that Lisa is going to ask for specific information about each of her medicines and alcohol. If so, give this information in a neutral and non-judgemental way including details of the timing of taking her medicine, looking for opportunities to ask sensitively if drinking is impacting on her conditions. For example, if she is taking aspirin or clopidogril, they can both cause GI discomfort, as does alcohol. If Lisa is taking dipyridamole, not only can this cause nausea, but there is an interaction with alcohol which increases the risk of hypotension. It is also important to focus not only on Lisa's specific questions about alcohol and her medicines but to also encourage discussion about alcohol linked to her wider health and well-being. You should be ready to provide this rationale if asking for contextual information, for example linked to her transient ischaemic attack. Seek opportunities to move on from the exchange of information by asking Lisa what she thinks of the information being discussed, and the possible implications for her, as you try and gain a deeper sense of what it all means for her.

Exploring these aspects with Lisa is likely to be received positively as Lisa has been thinking a lot about her own drinking, and now appears ready to discuss it, notwithstanding her mixed feelings about the subject. The key task in this consultation is to create the conditions in which Lisa will talk about it, and in making the discussion genuinely exploratory for her, rather than just recounting of what she has previously thought. You could ask about Lisa's drinking history if she raises it, or alternatively you can raise it as a basis for exploration of her current concerns. You are curious about the sense Lisa makes of her situation and are inviting Lisa to clarify this for you, and by doing so, she will also be doing this for herself. As Lisa drinks with her partner Anne, you also need to explore these drinking patterns and their relevance to the decisions that Lisa makes about her own drinking, and whether and how it might change. Ask Lisa what she thinks about changing her drinking, if and when she raises this possibility. Go with her, try and find out exactly how she weighs up the situation, what might she want to do, what barriers may there be, and what are the issues for her? Focus on the person and her strengths and let this be the basis of how you talk with her.

Supplementary material 2: Clinical pharmacist interactional analysis

Discourse analysis of consultation audio recording data are presented here. Excerpts of transcripts referenced in brackets are available at the end of each section. Patient perspectives are reported where interview data were available.

Clinical pharmacist A

Nature of the interactions examined

Two face-to-face consultations: 30 and 38 minutes.

Opening and sharing the agenda

Makes an attempt to allow the patient to set the agenda. In one consultation, embeds a "very open-ended question" in a 'holistic' view of the patient's health, but then follows by limiting this to how the patient is "getting on" with their medicine. Asks open questions but follow-ups are often closed and not following on from the patient's responses. When the patient raises issues with one of her prescriptions, the pharmacist offers the patient the opportunity to deal with her issues in the order she chooses, asking "what would you prefer that we maybe focus on?" [1]. The limitations of this approach are clear when, at the end of a consultation, the pharmacist asks the patient if there is anything else that they might have wanted to discuss. The patient mentions their ME, of which the pharmacist seems unaware, and is surprised [2]. The patient is almost apologetic, saying "But, you know, in a way, it's not relevant, is it? I don't know. I suppose it's part of my health, isn't it?" [2]. In the other consultation the pharmacist asked if there is anything they wanted to discuss, the patient says they have a couple of things about medications. Rather than asking what these are, the pharmacist takes this as an invitation to the usual practice, anticipated by the patient, of going through each medication [3].

Raising the subject of alcohol

In both consultations, questions about alcohol interrupt the flow and stray from the central concerns of patients [4]. There are three attempts to discuss alcohol in one consultation. The pharmacist mentions that alcohol will be discussed in the opening, checking that this is okay [5]. The second is a misunderstanding that leads the pharmacist to ask if alcohol is involved [6]. When they do get the patient to talk about alcohol, the pharmacist returns to the effect of drinking on adherence to a medication routine, a line of discussion which leads nowhere [7].

Connecting issues clinically

A different patient starting to take amitriptyline introduces alcohol after the pharmacist says amitriptyline can produce a "hangover" effect, … "when I read the label, it says avoid alcohol but obviously I do drink as well, so". This provides an opening on alcohol in the context of the patient's medicine and health, which is not explored, instead stating generically, "most of us like to have a drink alongside our usual routine, erm, but sometimes even low levels of alcohol can affect how medications work" [8]. Returning to questions about drinking patterns and asking the patient about links between their drinking and medication interrupt the flow of the other consultation [9]. The patient tells

the pharmacist that she has stopped drinking because a doctor told her this was linked to gastritis. The pharmacist asks her how she feels about this and seems uncertain where to go after this [10].

Counselling microskills

The pharmacist made use sometimes too much of summarising in both consultations, with some evidence of affirmation, including when discussing alcohol. They use this to recap and to set out the patient's decision making with regard to alcohol and health. For example, "you're clearly very intelligent, you do your research [...] You're aware of the implications of alcohol, potentially [...] you've mentioned that people have as things that they enjoy. But it's not something you are going to change because, actually, it's something that adds something to your [...] the social/personal life that you'd rather enjoy at this point" [11]. Summarising is also used as a launchpad for further questioning.

Patient perspectives

No interviews secured.

Audio recording excerpts

[1]

I: So, we've not actually met before. My name's []. I'm one of the clinical pharmacists. I know that you've spoken to one of the pharmacy teams before. So, what our main roles, really, are in medication reviews is to make sure, actually, looking at your health [noise], looking at your health a bit more holistically and the medication you're on, is it safe, is it still effective and actually how do you think you're getting on with it. So, just, sort of, as a very, very open-ended question, how, how are you getting on with what you're currently on?

R: [Deep inhale]. Um, what I'm on, on a repeat prescription I'm happy with.

I: Okay.

R: My recent prescriptions, um, for the skin, I'm not so happy with.

I: Okay.

R: [Laughs].

I: So, do you want to maybe start with what you're not happy with or what you're happy with? What, what would you prefer that we maybe focus on [voices overlap 00.55]?

R: We'll get the unhappy out of the way first. [Laughs].

I: The unhappy out of the way first. [Laughs]. Okay, fab.

[2]

I: Yeah, yeah, okay. So, that, that's really your tablets as a whole. Is there anything...? And again, when I say tablets as a whole, your... So, I suppose your medication and health as a whole. Is there anything that you wanted to mention that I've maybe not discussed or anything that you've, you feel like I've not maybe captured from what you've said or not...?

R: No. The only thing we haven't mentioned is that I've got the, em, ME still.

I: You've got what, sorry?

R: ME. Chronic fatigue syndrome.

I: Okay, right.
R: I still have that.
I: Right. My apologies. I, you know…
R: No, no, that's fine. So…
I: Okay.
R: But, you know, in a way, it's not relevant, is it? I don't know. I suppose it's part of my health, isn't it?
I: No, of course, yeah. And when you got that diagnosis, had there been…? Have you had it for a while?
R: Five years.

[3]
I: So, I'm one of the practice pharmacists. I don't think we've really met…
R: No.
I: …or spoken previous to that. But really my role is just to make sure that everything that you're taking, you're still getting the best care and it's still safe.
R: Yeah.
I: So, it's still safe and appropriate. A part of the medication review is really making sure, again, that everything's, sort of, safe prescribing but actually, how you're getting on, any, sort of, questions that you might have.
R: Yeah, okay.
I: So, one of the main purposes of, sort of, coming in today was that [alcohol 00:45] is one of the, sort of, topic of discussions. Now, when I previously spoke to yourself, you were happy to discuss it.
R: Yeah, yeah, that's fine, yeah, yeah.
I: That, yeah, okay. So, what, what might be best and if you don't, sort of, feel comfortable or anything like that at any point, don't feel like sharing, please don't feel obliged to.
R: That's fine, that's fine, yeah.
I: Okay. So, in terms of your review now, is there anything you can think of that you want to discuss, anything, that can be tablets or anything that I've said previous about the study, anything like that?
R: Not about the study but obviously if we're going to go through my medications, probably a couple of things I probably don't…well, definitely one thing I don't think I've been taking for a while so I don't know, do we talk about…go through each medications to see which I'm still using or need or…?
I: Yeah, okay. So, with regards to that, we can maybe go through each of your medication in terms of why it was prescribed.

[4]
I: … So, we've talked about your tablets in, in general. Eh, but when you were booked in for the review, was there anything that you, so-, sort of, felt actually I, I want to speak about something in particular or anything like that?
R: No.
I: No, okay. Em, one of the, the reasons why you were booked in as well is that you had some recent bloods. Is that right?
R: Oh, for this one? Yes. Yes.

I: Yes, yeah, okay. And was there any information that was given to you with regards to your bloods [voices overlap]?
R: I was told it was high. My cholesterol was high.
I: Your cholesterol was high.
R: That was all. Nothing else.
I: Okay. And were…? Have you ever heard that before? Has anyone ever said actually your cholest-, you have high cholesterol?
R: For me? No. [Laughs].
I: No, okay. We'll explore that a little bit more then.
R: [Laughs].
I: Em, so before we do that, are you okay just, sort of, telling me how alcohol fits into your routine? Em, typically in the course of a week

[5]
I: Okay, fab. Em, and then one of the other, sort of, aspects of your medication review, we… We did discuss alcohol.
R: Yes. [Laughs].
I: And you mention that you do enjoy alcohol in, in your, sort of, week, em, and you're quite comfortable talking about it [voices overlap].
R: Oh, yes. Yes. [Laughs].
I: Is that all right? Fab, great stuff. So, we've touched on the, em, what you're not so happy with. So, the dermatologist said… Are you relatively happy now with, actually, the plan that we've come up, try and using the fungal one on the feet…

[6]
R: I tend to forget about it.
I: Okay.
R: But, yes, I have to use that every day.
I: Okay. Can I just maybe explore the forgetting aspect there in terms of…? You forget… We all forget to do things for a range of reasons. There's different reasons, so… There's a change in your routine, or… If you bring it in the context of alcohol just because we are, sort of, speaking about alcohol, one of the reasons why someone might forget to take a medication or a dose or they might take it earlier or later is because actually that day they've enjoyed a drink. Is there any, sort of…? What, what…? When you say you forget, what, what do you think is the reason for that?
R: Because it's so [sighs] routine.

[7]
I: Yeah, th-, that's fine. So, with regards to your alcohol over the course of, of the week, have you ever, sort of, thought about alcohol as, em, how it might impact your routine with your tablets?
R: No.
I: No.
R: [Laughs].
I: Do, do you think that it does?
R: I don't think it does, no.

I: No, okay.

[8]
I: How are you getting on with the amitriptyline?
R: Well, like I said, I just took my first one last night, so.
I: Yeah, did you any, sort of, notice anything when you first started taking it, any side effects or anything, no?
R: No, no.
I: Okay.
R: I took it just before I went to bed last night.
I: Did you, yeah? People often find it is, kind of, quite sedating and sometimes can feel like a hangover effect the next day, did you not...
R: Er, yeah, I was a bit tired this morning, er.
I: Yeah.
R: But again, when I read the label, it says avoid alcohol but obviously I do drink as well, so.
I: Okay.
R: And obviously I drink on a weekend so I was just a little bit concerned that it wasn't going to have an impact on me if I'm having a drink on a weekend.
I: [Laugh] okay, fair enough, okay. Er, so, we've mentioned alcohol, haven't we?
R: Yeah, yeah, yeah.
I: And most of us like to have a drink alongside our usual routine, erm, but sometimes even low levels of alcohol can affect how medications work.
R: Yeah.
I: So, is it okay if we maybe just discuss a little bit more...
R: Yeah, yeah, yeah, it's fine, yeah.
I: ...about your alcohol intake. So, can you tell me how you, sort of, fit in your alcohol intake?

[9]
I: ... So, with regards to your alcohol over the course of, of the week, have you ever, sort of, thought about alcohol as, em, how it might impact your routine with your tablets?
R: No.
I: No.
R: [Laughs].
I: Do, do you think that it does?
R: I don't think it does, no.
I: No, okay.
R: Yeah.

[10]
R: Well, I've stopped drinking because of the gastritis, because she told me that that could affect it.
I: Okay.
R: So, for the last three weeks, I haven't had any alcohol.
I: Right.

R: So, because of that advice, I've adhered to it.
I: Okay.
R: But if it settles down afterwards, I might go back. But if it doesn't settle down, I'll probably won't go back to drinking.
I: Hm.
R: I don't know. I'll see.
I: How does that make you feel then with [voices overlap]?
R: I'm not bothered in the least.
I: Okay, so...
R: I can live without alcohol. [Laughs].
I: Yeah. Yeah.
R: I enjoy a drink, but...
I: Yeah.
R: But that's it.
I: So, with regards to alcohol then, it can... Doctor [] mentioned that it can maybe trigger your gastritis. Have you thought about other, sort of, alcohol, just generally, as, as actually what, what, what does alcohol, sort of, look like to you in the sense...? Did, did you think that actually alcohol could trigger your gastritis or something?
R: No.
I: No.
R: I didn't think of it triggering it. I thought of it maybe aggravating it.
I: Okay.

[11]
I: So, just a, sort of, summarising. So, as we're talking quite a bit about alcohol and it's really been the focus of what we've spoken about. Is there anything that you wanted to discuss, unrelated to anything alcohol or tablets or anything generally?
R: No, I don't think so.
I: No?
R: I think I'm okay, yeah.
I: Okay.
R: Yeah.
I: And then just going back to then the alcohol then, what are your thoughts on what we've discussed? The potential that amitriptyline can make you probably feel worse.
R: Yeah.
I: Whilst drinking and from what you've described, I mean, you're clearly very intelligent, you do your research.
R: Yeah.
I: You're aware of the implications of alcohol, potentially.
R: Yeah, yeah.
I: Erm, and I don't want to, sort of, misquote you...
R: No, no, that's fine.
I: ...or not [inaudible] but just, sort of, summarise, actually, you recognise there might be risks there.

R: Yeah.
I: Like, with smoking and other things…
R: Yeah.
I: …that you've mentioned that people have as things that they enjoy. But it's not something you are going to change because, actually, it's something that adds something to your…
R: Yeah.
I: …the social/personal life that you'd rather enjoy at this point.
R: Yeah, yeah.

Clinical pharmacist B

Nature of the Interactions examined
Five face-to-face consultations linked to annual reviews (25-38 minutes).

Opening and sharing the agenda
Recordings start at different points. Where the beginning is recorded, the pharmacist tells patients what they will cover and affords the opportunity to the patient to raise something [1, 2]. Sometimes these offers overlap [1]. Consultations follow up tests or recommendations made elsewhere for changing drugs, some of which are resisted by patients. The pharmacist discusses things in the light of test results, checking patients have information [3]. Patients are comfortable to disclose that they have not been taking things and the pharmacist provides explanations and advice.

Raising the subject of alcohol
The pharmacist asks permission to discuss alcohol "as part of your medication, okay?" [4] and inquires if drinking changes medication routines [5, 6]. In doing so, rather than responding to what the patient volunteers, the pharmacist sometimes uses hypotheticals in which drinking alcohol might disrupt a person's medication routine, which patients refuse [5, 6]. In one consultation a patient brings up the way in which drinking on holiday exaggerated the blood thinning effect of warfarin. The pharmacist asks, "what happened?" and does not explore much beyond establishing that the patient recognises this as a problem that should be corrected [7]. The patient does not want to stop drinking on holiday and the pharmacist suggests that he should take advice from the warfarin clinic before he goes, doubling down on this with reference to staving off a "massive bleed on the brain" when he suggests he might skip the medication for a couple of days to accommodate the drinking [8].

Connecting issues clinically
The pharmacist makes explicit use of 'alcohol as a drug' framing to provide information, particularly on the effects on blood pressure pointing out possible interactions and problems that might arise with their treatment [9, 10, 11, 12, 13, 14]. Within these interactions, patients comment, "I've never had that explained to us" [11]. Others explain why potential interactions won't affect them in the way described because "they don't stand up quick" [9], they shake rather than feel dizzy on getting up [10] or because they are no longer a heavy drinker [12]. One patient interprets "drug" narrowly to mean addictive and mood-altering rather than impacting their condition or medicine and this is confirmed in the patient interview [15] (PMAC8). However, also in this review a link is made to their medications and history which leads to a suggestion to reduce the 'dose' of alcohol to which the patient responds positively [16]. Within the same interview the pharmacist combines persuasive and gently encouraging approaches, "I'm going to give it one more shot with regards to your sleeping. So you've got some bad habits there, yes. Would you be prepared…" [17].

Counselling microskills
The recordings are from early in the programme. The pharmacist sometimes follows open questions with closed ones, they make some affirmations and simple reflections

[18]. Interactions are relational and warm. Patients and the pharmacist sometimes exchange gentle humour, for example about how hard drug names are to pronounce. Patients readily volunteer details about their own lives. The pharmacist is appreciative that patients have come in. There are references to previous interactions and an invitation to future interaction.

Patient perspectives

Four patient interviews. The pharmacist was described as having an open manner and their interaction was compared favourably to those with other health professionals: "... it was just nice to have somebody listen ... and to communicate with me as if [they] knew what I was going through ... I felt totally in charge of the conversation ...[they] did pick up on a couple of things that I said and then we discussed that ... which I thought was really good ..." (PMAC08). "[They] kept asking me if I had any queries, or understood, or if there was anything else I wanted to know" (PMAC03). While appreciating getting an explanation for the first time, one patient wanted more space in this and other interactions, "you're given a slot, and basically, they do the talking ... [Name] explained ... and that was the only explanation I got ... But [name] tells you. Instead of ... 'anything to bring up'? ... I'd like to know why, why, why? ... You've got to listen ... But [they've] got to listen to you ..." (PMAC 4). When prompted, most patients recalled generalised discussions of alcohol and medicines which were comfortable, they did not feel "put on" (PMAC 4) but largely saw these as not particularly relevant to themselves. One could not remember being advised about the impact of alcohol on his blood thinner (PMAC 3). Patients described these interactions favourably against the absence or poverty of their usual discussions about alcohol and medicine with health professionals.

Audio recording excerpts

[1]

I: So, I've had a quick look through your records of what medication you're taking, obviously a couple of your hospital letters and you've had a lot going on, haven't you?
R: Yeah, yeah. Quite a bit. [chuckles]
I: Yeah. So where would you like to start? So, I'm going to go through you medication and I'm going to go through the last neurology letter that there was.
R: Yeah.
I: And the last gastro letter that there was.
R: Yes. That's fine.
I: Yeah. So is there anywhere that you would like to start.
R: No, I'll just go with you.
I: Go with...
R: Yeah.

[2]

I: Right, okay. So, I know what I would like to talk about today, but what I were wanting, was what you would like to talk about. So, is there anything, before I

start, that you would like to talk about today, that's important to you, with regards to your medicines?
R: N...well one little question...

[3]
R: I'm on the same, I've been on the same dosage for donkeys.
I: Yeah.
R: Um, so when I read the literature I thought well, I'm okay then so why swap onto something different.
I: Yeah, absolutely fine. It's our job to give you that information.
R: You don't, you don't fix it if it's not broken.
I: It's not broken.
R: Yeah.
I: So, interestingly I was just curious as to how, what...how you perceived it to be, um, m...more problematic than warfarin is?
R: Just, you know well you know all the literature...
I: Yeah.

[4]
I: So, I will be talking about alcohol, but as part of your medication, okay?
R: Yeah.

[5]
R: The first thing I do, before breakfast, anything, is me... me tablets.
I: Perfect. That's what I want to hear.
So, with regards to alcohol, does that change how you take the tablets?
R: No.
I: No?
R: Because if I have alcohol it's maybe...a...a...a can or a bottle at a night time.
I: Aha.
R: [inaudible 00:09:08] glass of wine. But, w...first thing when I get up in the morning, it's the tablets before we...
I: Okay.
R: [inaudible]. It's a...it's a routine I've been in, well, I've been on blood pressure tablets now, for twenty-seven year.
I: Right, okay.
R: So I'm set in a routine.
I: Yeah, you're in a routine. Good, good. Some people...don't...they might oversleep the n...the morning after they've had a drink, or, you know...
R: Mmm.
I: ...that sort of thing, and then it just throws them out of...
R: No, well...
I: ...kilter.
R: ...[inaudible 00:09:38] I'm always up eight o'clockish, so it's...like this morning, about half past seven. In the summer day light [inaudible]

I: Yeah.
R: But it's always, my tablets are always taken way before half past eight, at the latest.
I: Right.
R: Ye nah?

[6]
I: So when do you drink alcohol?
R: Match day.
I: Right, okay.
R: Just either Friday night – depends when the match is on – Friday, Saturday, Sunday or Monday.
I: Right.
R: I gang to me mate's, we have a…share a case of beer between wur…
I: Right.
R: …ten cans between wur.
I: Yeah.
R: Three, three each. Or might have two in the first half, two in the second half.
I: Yeah.
R: And that's it.
I: Okay. And when…the morning after you've had a drink, do you ever forget to take your tablets?
R: No.
I: Do you change your routine?
R: No.
I: No.
R: The routine is there.
I: Perfect.
R: Aye.

[7]
I: Did anybody, before you went on that holiday, did anybody tell you how going from drinking twice a week to drinking every day could affect your warfarin?
R: When I first went on warfarin the guy down at, uh, Rake Lane said that drinking and warfarin are a bad mixture…
I: Yeah.
R: …sort of thing. So, I used to go to, um, [inaudible] on a Sunday morning.
I: Sunday morning for a pint?
R: Yeah. Just because
I: That's old school, isn't it?
R: …there's a place, you know
I: Yeah [laughs].
R: Um, so as soon as went on warfarin I, I didn't drink. I went but I didn't drink.
[…]

R: Um [slight pause], so yeah, I knew it would, it would have some effect, but I didn't realise it would have so much effect sort of thing.

[8]
I: Yeah. It might be worth discussing holidays with the warfarin clinic before you go.
R: Hmm.
I: You know, if you're going to go from twice a week to having a drink every day...
R: Aye.
I: ...will affect your INR.
R: Hmm.
I: The last thing you want is to have...
R: So, I'd maybe miss out a couple of days?
I: So, I would take advice from them, because the one thing you don't want is to have a massive bleed on the brain...
R: Aye.
I: ...when you're abroad.
R: Aye.
I: That's not going to work out well. Um, so m...yeah, if you're going to change your drinking habits...
R: Yeah.
I: ...particularly...
R: Right, I'll do that, aye.
I: ...that might be a, a good... You're right, your timing range is absolutely...it's probably the...one of the highest I've seen.
R: Right.
I: So, when we get your INR results we also get something called timing range. Um, and you wouldn't believe how low some of those figures are. You're in range ninety-seven per cent of the time.
R: Hmm.
I: So, it means ninety-seven per cent of the time it's prot...protecting you from a stroke.
R: Yeah.

[9]
I: So I tend to look at alcohol as a drug, a, a bit like smoking...
R: M-hm.
I: ...was. Erm, and i...there's, it has interactions with drugs, but it also has, erm...
R: [Coughs].
I: ...actions that can make the actions of the drug worse.
R: Yeah.
I: So, for example, when you're having a drink, do you find that when you stand up quickly you feel a bit lightheaded?
R: No.
I: No.
R: No, I don't stand up quick.

I: You don't stand up quick [laughs].
R: No.
I: So...
R: I've learned that.
I: So alcohol and blood pressure medication, when you're standing up quickly, turning around quickly, makes your blood pressure go lower than it would normally do, so you could find yourself a bit dizzy.
R: Happened to me mate, that.
I: Did it?
R: Aye, his blood pressure went woof.
I: When he stood up?
R: Aye.

[10]
I: Yeah. Do you ever get dizzy or anything when you get up quickly? I know we've got to factor in the stroke as well as what the medication's doing.
R: Occasionally, but me, it's more me shakes.
I: Right, okay.
R: Erm, I don't tend to, erm, get lightheaded or anything like that. But I do get, erm, when I do get up, especially in the morning, erm, I know that if I need more rest when I get up and I can't really move very well...
I: Yeah.
R: ...and I shake then. I just lie back down until it sort of...
I: Yeah.
R: ...goes.
I: Yeah.
R: Passed a little bit. But...
I: The reason I'm asking is because that with alcohol, it drops your blood pressure. So, anybody on blood pressure medication can find that they're a bit more dizzy than they would normally be.
R: Hmm, no, it's not...
I: No. Okay.
R: No.

[11]
I: You know when you're getting up from sitting or standing or anything, do you get...do you feel any different to how you normally do?
R: I don't feel dizzy or anything like that.
I: Do you not?
R: No.
I: 'Cause you're on a...a Beta blocker, nebivolol...
R: Aha.
I: ...so alcohol with that, can make you...m....y...when you stand up can make your blood pressure drop as well. So, if you are having a couple of drinks on a night-time, just be conscious of that, that you do take a Beta blocker.
R: Mmm

I: If you get up suddenly, and you're like, feel a bit woozy, it's likely that that's what's happening, your blood pressure just drops as...as you get up, so do it more slowly.
R: Right, I didn't know that mind. I've never had that explained to us.
I: Aha.
It's interesting, 'cause alcohol is a drug.
R: Mmm.
I: And nobody talks about it as a drug. Everybody just talks about how much you drink...
R: Mmm.
I: ...and how much you shouldn't drink. But really, it's really important to understand what it's doing inside your body.
R: Mmm. As I say, I've never had that explained.

[12]
R: No, I [voices overlap] used to be, I used to be, mind.
I: What, a heavy drinker?
R: Not now, nah.
I: Good.
R: Er, moderation, you know.
I: Good. [Voices overlap]...
R: A family party, I'll have four bottles of beer.
I: Yeah, that's you done.
R: That's me done.
I: So it can affect your stomach as well. So you know I was on about the lansoprazole?
R: Yes, aye.
I: It increases your risk of bleeding as well, it thins your blood. So that is added onto aspirin as well, so that might be, you know, if you were still drinking a lot, then...
R: Nah.
I: ...that would...
R: I've had none...
I: ...definitely be an issue.
R: ...since Saturday. Wednesday.
I: It's only Wednesday, Brian.

[13]
I: With this new medication it does interact with alcohol.
R: Right.
I: So it affects your central nervous system, so it can make you more dizzy and more drowsy. So bear that in mind...
R: Yes.
I: ...especially at the weekends when you're having a drink and see how you respond to it...

R: Yes.
I: ...when you're having a drink.
R: Yeah. No problem.

[14]
I: So when you had your stroke back in two thousand and sixteen, did anybody speak to you about, um, lifestyle, how alcohol can...affect...that, or anything like...or the medication that you were started on, anything like that at all?
R: Eeh, I can't remember. Honestly, I can't remember.
I: Right, okay.
R: Um...
I: So the reason why I'm asking is, it's really important that you understand, okay? So your clopidogrel makes your blood less sticky. Did you know that alcohol can also make your blood thinner?
R: I didn't know that, no.
I: There you go.
So what happens when you put the two together?
R: Aye, it's like water.
I: Yeah. Yeah.
R: And that's the reason why me...

[15]
I: So, with regards to alcohol, as a pharmacist I look at it as a drug.
R: H'mmm.
I: That's what it is.
R: Yeah.
I: So, we look at...I think about how it interacts with your medication and how it affects what's going on in your body from that. Have you ever thought about it from that point of view before?
R: No, no, no. No. I know you sometimes feel quite happy after... [laughs]
I: Yeah. It... Yeah. In, in smaller volumes it does have that...
R: H'mmm, yeah. Yeah.
I: ...effect. Euphoric effect.

[16]
I: Okay. Do you think you could...because so I'm coming off the interaction with the medication, kind of thing, and looking at what it's doing to your body. Because you're on your magnesium supplements, aren't you? Which you struggled with the side-effects as well. The nephrology really wanted you to have a look at reducing your alcohol intake as much as you could. How would you feel, because a lot of it's psychological as well, isn't it and habit.
R: Of course it is, yes.
I: How would you feel about having a single measure instead of a double measure? Take your two, but just half the amount of vodka that you put in it.

R: I can do that, yes, definitely. I will try that.

[17]

I: Right. I'm going to give it one more shot with regards to your sleeping. So you've got some bad habits there, yes. Would you be prepared, on some nights not to have any alcohol but to take two amitriptyline instead? Because I think that might [Voices overlap]

I: I think that might. So if you're only using the alcohol to help you sleep, because you're worried that you're going to have nightmares through lack of sleep, how about we try the prescribed medication? Rather than the medication you're buying in the form of your vodka, yes, why don't we try that?

R: So if I start off every other night, see how it goes.

I: Yes, but only take the two amitriptyline when you're not having an alcoholic drink. Do not take the two if you're going to have a vodka.

R: Don't even have a little one?

I: No.

R: Yes, that's understood.

I: How's about that?

R: Yes. At least you've explained, properly, so I know if I'm going to be doing naughty or not [laughs].

I: Yes. Sometimes it's just a little bit of time to explain things, isn't it?

R: Yes. I mean I know the doctors don't have the time. And even when, if you're in hospital and they come on their rounds, they're already looking to go to the next patient along.

[18]

R: You don't, you don't fix it if it's not broken.

I: It's not broken.

Clinical pharmacist C

Nature of the interactions examined
Four telephone consultations (3-25 minutes).

Opening and sharing the agenda
Efforts sometimes hampered by a lifestyle and adherence focus introduced by the pharmacist. In a consultation lasting 8 minutes, the pharmacist asks an open, potentially agenda setting question very early on; "how are you with your health? How do you feel things are?" [1]. The patient opens up about being tired, describing his aches and pains allowing the pharmacist an insight into the relationship between his health and his work as a builder. The pharmacist listens attentively then asks a series of separate questions about diet, exercise, smoking and drinking which do not always connect well to what has just been said [2]. The patients says he would like to give up smoking, though refuses an offer of help, "I'd prefer to do it of my own, sort of, volition". The pharmacist repeats a very similar opening question after this discussion adding an invitation, "is there anything… […] …you'd like to change… […] …you'd like to improve?" [3] to which the patient again responds by talking about aches and pains relating to work. The pharmacist listens but is not in a position to offer anything except to ask him to, "keep an eye on it and […] if it does worsen […] we can just investigate a little bit" [4].

In a consultation lasting 3 minutes with a patient who pulled over when driving, the pharmacist opens the floor in the most perfunctory way at the very end, asking if he "had any other questions or concerns" to which he answers "None at all …" [5]. During the consultation he mostly answers "fine" to a series of enquiries. In a challenging conversation lasting 14 minutes during which the patient hands the phone to his partner for a spell, a patient who says he has been told he has to drink, "Every single day, if I…if I don't, um, doctors have told me my…it will kill me," has a clear agenda to get his medication issue sorted. He opens with it and raises it in response to the pharmacist's opening enquiry which is framed in terms of managing "difficulties" with "some of your lifestyles, you know, um alcohol" [6]. The pharmacist opens a consultation lasting 25 minutes to the patient's concerns at the beginning, but then jumps right in with a question on adherence. The patient responds by saying he takes the medication and introduces his agenda; he is unsure sure whether the medication is working and has concerns about symptoms following heart surgery. The pharmacist clearly acknowledges and discusses the concerns [7].

Raising the subject of alcohol
In a consultation with a patient post heart surgery the pharmacist raises alcohol in asking about his medication routine, including "everybody does [have a drink]." He responds that he might have one but "…I'm not a drinker." [8] In the other three consultations, enquiring about alcohol is connected to "lifestyle" topics as a means of establishing the legitimacy of its discussion. In the 3-minute consultation, after moving quickly through the other topics, alcohol is introduced by reference to the records of his units-per-week consumption. The pharmacist uses humour following on from his response to an enquiry about exercise, in which the patient mentioned the steps he managed to take on his recent holiday, "we don't count holidays." He laughs and there

is an enquiry about how he manages drinking with his medication to which he again answers, “fine”. The pharmacist explores patterns of drinking, and the patient’s answer guards against the potential threat of being called “a binge drinker” [9]. In the 8-minute consultation, after a series of lifestyle topics, the patient initially responds to an enquiry about his drinking with minimising talk. The pharmacist presses further, asking “Okay, is it…is it one night, two nights, er, every weekend? What…what’s the usual pattern?” The patient talks about having a “good few pints” at home, qualifying this is not to excess. The pharmacist says, “absolutely fine” and asks if he is comfortable with this, to which he replies it is not a problem and this thread is dropped [10].

Connecting issues clinically

The pharmacist reassures patients that she is not here to tell them what to do. She explicitly raises the idea of “alcohol as a drug” in the context of it interfering with his other medications, however, she does not move from there into any specifics. One patient appears confident that this would not be an issue for him as he is “very, very wary and keen about that also, yeah, drink-driving and drowsiness and that, oh, yes… […] Very keen, it’s me job …” [11]. There is a missed opportunity in the 8-minute consultation to explore concerns about tiredness and the gastric problems for which the patient had been taking medication in relation to drinking. In a consultation with a self-described “registered alcoholic”, the pharmacist meets the issue head on, raising alcohol almost immediately, embedded as an aspect of lifestyle. The pharmacist works to appear non-judgemental and offer support. [13] Questions about drinking are positioned in terms of medication routine. The pharmacist goes further in this consultation in expressing concerns about the interaction of alcohol with an antidepressant, returning to the same point, several times [14].

Counselling microskills

In all of the consultations the pharmacist works hard to appear non-judgemental and show that they are listening, using short reflections, affirmations and summaries. Their responses acknowledge feelings as well as facts, “I’m sorry to hear that …”

Patient perspectives

One interview. A patient who self describes as a “registered alcoholic” taking Sertraline, Zopliclone and thiamine describes a sympathetic, personable consultation which sorted out issues with delivery of medication. Gives effusive praise to the pharmacist comparing them favourably with a GP: “I know [they’d] look after me.”

Audio recording excerpts

[1]

I: Lovely, fantastic, thank you. Okay, so just generally, how…how are you with your health? How do you feel things are?

[2]

Patient explains fatigue from building work followed be question about diet then is asked about exercise:

I: Okay, so just to, kind of, continue with that, what would you say…how would you say your ex…exercise levels are? Do you manage with…with you working so much or…?

R: Erm, I don't really exercise out of work. I've got a...quite an active job. I...I...I work in building. I'm a builder so I've got quite a manual job.
I: Okay.
R: So I am...I am very active through the day.
I: Right.
R: Erm, which is why I don't really exercise in the evening.
I: Yeah.
R: I don't think I need to, to be honest.

[3]
I: Okay, that's absolutely fine. So, just generally, how do you feel, kind of, overall, health, lifestyle, is there anything...
R: Erm...
I: ...you'd like to change...
R: ...I...
I: ...you'd like to improve, you'd like to...?

[4]
I: Right, okay, er, just...just do keep an eye on it and, you know, if it does worsen, er, please do...
R: Yeah.
I: ...let us know and we can...you know, we can just investigate a little bit.

[5]
I: Fantastic, that's really good. Okay, that's great. Um, er, do you have any other questions or concerns today, Mr []?
R: None at all, love.
I: Nothing?
R: No.
I: Ah, that's great. Well, thank you so much for speaking to me today and I appreciate that you've, you know, that you've pulled over and that you've taken time out to speak to me, so I do appreciate it.

[6]
I: That's great, thank you so much. So, um, currently, Mr [], how are you, um, managing with, er, just your kind of day life to life, um, obviously with being...

R: Um...
I: ...er, difficulties with, you know, some of your lifestyles, you know, um, alcohol...
R: Oh, no, er, well, um, but the worst thing is we live in, um, like, um, a big block and, um, we live on the top floor and the lift goes down and so sometimes I can't even get out, but I need my medication, you know, each day because I'm a registered alcoholic.

I: Right

[7]

I: So, er, as I say this review, it's all about you, you know. It's whatever's the most important thing to you, anything about your medication or your health that you want to discuss. I'm not here today to tell you do this, don't do this, do this...
R: Yeah, yeah...
I: ...this is about you...
R: ...I understand.
I: ...and just how your whole lifestyle and how you manage everything, okay. Okay. So, just generally, erm...so, erm, do...do you take...erm, you're on medication for, erm, hypertension, which is blood pressure. Erm, do you take your medication regularly?

[...]

I: But, you know, erm, it's good that you raised these other symptoms that you're having. And to me it seems like at the moment this is the thing that's the most troubling for you, and it's causing you the most concern.
R: Yeah, yeah, yeah...
I: And it's...
R: ...you know.
I: ...it's affecting you the most...
R: Yeah, yeah.
I: ...at the moment, okay.
R: You know.
I: So, it's bothering you the most. So, because you have mentioned...so, this, kind of, sweating...

[8]
I: So, when you are taking your medication, erm, are you...how do you fit in...if you're going to, say, for example...I mean everybody does. For example, if you're going to have a drink that day, how do you fit the drink into the...with the medication?

[9]
I: Lovely, that's absolutely fine. So I think we last had you on record as, um, drinking about eight units, um, per week of alcohol, um...
R: Oh, yeah, something like that.
I: [Laughs].
R: [Laughs].
I: So, er, holiday aside, we don't count holidays [laughs].
R: [Laughs] Oh, right, yeah.
I: Holidays aside, um, currently how do you manage kind of your drinking with your medication?
R: Yeah, fine, love.
I: Great.
R: Er, absolutely, yeah, yeah, yeah.

I: Okay, so roughly would you say in a week how many times, I mean, it doesn't have to be, you know, the same every week, but roughly in, um, in a week, how many times would you say you drink?
R: Er, you're gonna call me a binge drinker, I, er, only when I'm not working next day.

[10]
I: So, erm, how are you with your…with your alcohol drinking, Mr []?
R: Erm, I just drink, generally, on a weekend.
I: Yeah.
R: Erm, I don't dr…I don't drink…er, I don't drink all that much, to be honest.
I: Okay.
R: Erm, it's not…I'm not…I don't drink daily or anything like that.
I: Right, okay.
R: But I do like to…I do like to have, sort of, one…one night…one night a week…
I: Yeah.
R: …where I will have…where I will have, sort of, a good few pints.
I: Alright, okay, so… Okay, is it…is it one night, two nights, er, every weekend? What…what's the usual pattern?
R: Er, it depends. Some…sometimes I can go for a couple of weeks but gen…generally, sort of, on a Friday night, I'll have a few beers. I like…
I: Oh.
R: …get like…get like ten cans and, sort of, drink most of them [laugh].
I: Oh, right, okay. Is that, kind of, at home or is it…
R: Just…
I: …do you…
R: …at home.
I: …go to the pub?
R: Yeah, just at home, yeah. Yeah.
I: Oh, right, okay, so, erm, d…are you drinking during the week at the moment at all?
R: Not really, no. No, no, every now and then I might have the odd can but if I do, I would…I don't drink to excess. I might have just one or two, er, at most. Er, but it's only re…it's only on the very, very odd occasion that I do that.
I: Oh, right, okay. Okay, that's absolutely fine. Okay, so do you feel…erm, are you comfortable with how much you're drinking at the moment or do you feel…?
R: Yeah, yeah, I don't think it's…I don't think it's an issue…
I: Oh…
R: …or it's…
I: …right…
R: …a problem…
I: …yeah.
R: …yeah.
I: Okay, that's absolutely fine. So, just generally, how do you feel, kind of, overall, health, lifestyle, is there anything…

[9]

R: …I'm all right with it, yeah. I don't go silly.
I: No, Mr Line, I'm not here to kind of, you know, tell you how much to drink, how not to drink, but I just want to…
R: Yeah.
I: …help you, you know, just take your medication safely…
R: Yeah, yeah.
I: …and just provide you with any information that you might need, um…

[10]
I: Oh, right, okay, that's absolutely fine, and how do you feel, erm…is that how you want to continue? Do you need any support in reducing, if that's…
R: Erm…
I: …what you want to do?

[11]
I: Yeah, I mean, we do see, um, we do see alcohol as just a…another drug really in the sense that, you know, it's just sometimes it…it can, um, interfere with your medication a little bit.
R: Yeah, yeah.
I: So, yeah, so we just want to make sure that you're taking it all safely. So, er, we would just…
R: Oh, yeah. [Laughs].
I: Yeah, so we would just advise that, you know, that you take…if you're gonna…if you're going to have a drink just to have it at different times and obviously, you know, if you are a driver just to look out for kind of drowsiness or anything like that in the morning when you…
R: Oh, so yeah, I'm very, very wary and keen about that also, yeah, drink-driving and drowsiness and that, oh, yes…
I: Mm.
R: Very keen, it's me job, love, so, you know.
I: No worries, and if ever…as I say, if ever you need any more, you know, support, you know, some…any more advice or information, you know, you know where we are if you want to contact us, okay?
R: Oh, yeah, yeah, no problem, yeah.

[12]
I: That's great, thank you so much. So, um, currently, Mr [], how are you, um, managing with, er, just your kind of day life to life, um, obviously with being…
R: Um…
I: …er, difficulties with, you know, some of your lifestyles, you know, um, alcohol…

[13]
I: Lovely, okay. So Mr, er, Mr [], if, you know, if I just kind of confirm to you I'm not here to, you know, tell you what to do with your drink, how to…I just want to make sure, um, that you're just taking everything as safely as possible, and just to see if…
R: Oh, yeah.

I: ...there's any way that I can support you and listen to you and just, you know, see if there's anything that we can do at our end from the practice just to give you that support.
R: Oh...
I: Okay?
R: That would be absolutely brilliant.

[14]
I: Thank you. So, um, [], because you are taking sertraline and you are taking other medication, um, how are you managing to fit that in with your alcohol taking, drinking, sorry?
R: Um, [inaudible], um, well, basically I tried to take, um, a drug overdose, um, um, a...a...a bit ago, and now I can only get my medication...I have to get, um, like every Monday and they'll only give so much, um, because I was in, um, intensive care.

[...]

I: Sure, okay. Okay, so, um, it's good to know that, um, Jason. But can I just go back to, um, the previous point of just if you are taking medication, how are you managing to, um, because alcohol, it can interact with lots of medication, so I just want to...
R: Um, um...
I: ...I just want to give you advice on...yeah?

[...]

I: All right, okay. Just, you know, just as your pharmacist, um, and somebody who, um, is concerned about your care, Jason, I would just...you know, it's a good way of seeing alcohol as something else that is a little bit like, I would say, a medicine or a drug that, you know, we take, um, just in the sense that it can interact with your medication. So just, um, just for me to know that you are taking it safely, my advice would be that you just, um, don't take them together, just because of the potential interaction.
R: I...I know, er, and seriously, love, um, like I said, I won't lie to you, um...
I: Okay.
R: ...even...even when I'm asleep at night-time, it could be two, three in the morning...
I: Yeah.
R: There's, um, there's a glass there at the side of me...
I: Yeah.
R: ...and I'm half-asleep and I...and I drink.
I: Yeah.
R: I...I...I have to drink.

Clinical pharmacist D

Nature of the interactions examined
Two face-to-face recordings (10 and 34 minutes)

Opening and sharing the agenda
Patients are given the opportunity early on to raise their own issues; "so how are things for you, is there anything in particular that you would like to discuss, any particular issues or problems?" [1] While the initial response is "fine", the patient goes on to raise recent queries about medication and tiredness. The pharmacist treads carefully and later introduces the prospect of measuring blood pressure at home, without pushing it when the patient does not seem keen to take it up. In the other consultation, asking, "so how are you and how are things going?" leads into a substantial discussion of the patient's general health and social situation [2]. The patient has their own expansive interpretation of the term 'lifestyle' introduced earlier by the pharmacist, "when you're talking about lifestyle… […] …I've got everything working against me in that sense" [3].

Raising the subject of alcohol
The pharmacist asks for permission to include alcohol "later" [4] in these consultations and it is raised as an additional lifestyle topic [5]. Towards the end of the first shorter consultation the approach elicits short answers [6]. In the longer consultation the patient discusses their drinking patterns in depth, including having different drinks in different contexts. The pharmacist explains they see alcohol as part of "the drug regime as well. […] 'Cause it can interact with medication" [7]. Asking if drinking has ever "affected how you take your medicines at all?", is met with humour by the patient, shared by the pharmacist, and followed by non- judgemental normalising talk as the patient considers how much they are drinking [8].

Connecting issues clinically
There is some very basic exploration of alcohol in the first consultation without clearly establishing drinking patterns or quantities and possible hooks are missed for both alcohol and blood pressure. The patient is superficially receptive to an invitation for change, confirming they already alternate their drinks as suggested, a response which may also be a dismissal [9]. A more comprehensive discussion in the second consultation may have given the patient something to consider further in connecting COPD, smoking, and drinking. A suggestion that the patient might want to measure out her drinks like they do in a pub is batted away assertively and with humour by the patient who guards against being accused of heavy drinking [10]. Both parties agree that asking about this is part of the pharmacist's job, providing a social repair to minimise discomfort [10].

Counselling microskills
The pharmacist uses a blend of OARs and includes reflections and short summaries. In the second consultation they manage to generate momentum in the discussion through use of reflections and acknowledging the patient's feelings about their circumstances.

This shows the pharmacist keeping things friendly and open while developing and making sense of a complex picture.

Patient perspectives

No patient interviews secured.

Audio recording excerpts

[1]

I: Yeah? Great. Erm, so how are things for you, is there anything in particular that you would like to discuss, any particular issues or problems?

R: Erm, I'm fine with the medication that I've been on, I've been on all that for quite a while.

I: Okay.

R: Erm, I did check in with the GP the other week, I don't know, it was GP or pharmacist, and said, could I reduce any of the, erm, hypertensive medication?

I: Yeah.

R: But they said, no, because the BP was fine now so just leave it as it was.

I: Okay.

R: Er, I did have a, a message a while ago and I think that was from the GP, erm, querying the thyroxine, saying that I needed to keep a closer eye on it, so I had my bloods done, maybe two weeks ago.

I: Hmm mm.

R: So just seems to be some sort of query about the thyroxine and I don't understand what that is.

I: Okay, I can have a look for you…

[2]

I: Yeah, um, so how are you and how are things going?

R: Um, God, um, with the HRT, I…I think it's better, but I mean, it's hard to know with it. Um…

I: So in terms of HRT, is it the Sequi patches?

R: So I've just got a new prescription…

I: Mm-hm.

R: …and it's all the same patch, but the first prescription I had were two different patches, so I don't know if that's an accident or whether they've just changed it.

I: Oh, were you on, um, patches for both?

R: Yeah.

[3]

I: … Um, so you're here for a medication review, and if it's okay that I can talk about lifestyle a bit as well.

[…]

R: Well, yeah, yeah, 'cause when you're talking about lifestyle…

I: Yeah.

R: …I've got everything working against me in that sense…

[4]

I: Erm, and then I'll send some information as well, erm, to you. Okay, so, erm, yeah, in terms of these medication reviews then, so it's just a chance for us to, erm, help you look after your health and make sure that your medicines are working as safely...
R: Yeah.
I: ...and as effectively as possible for you. Erm, and is it okay to talk about alcohol later on in the consultation as well?
R: Yeah, that's fine, yeah.

[5]
I: Okay, um, and then in terms of, like, lifestyle then, um, so alcohol-wise, um, how much are...so we sort of...

[6]
I: Great. Okay, and then, in terms of, erm, alcohol then. So...
R: Hmm mm.
I: ...erm, you said that you drink about two to three times per week.
R: Hmm mm.
I: Erm, [pause] is that at home or is it out and about?
R: Er, both.
I: Both. Okay, and when you do drink what type of things are you drinking?
R: Er, just wine, red, er, not red wine, white wine.
I: White wine, okay.
R: Hmm mm.
I: Erm, and [pause] it's two to three times per week then, isn't it, and...
R: Hmm mm.
I: ...have you ever found, erm, that it affects how you take your medicines at all?
R: No.
I: No, okay. Erm, [pause] and have you ever, sort of, suffered, you know, have you ever stopped taking your medication, maybe, because...or missed a dose because you had been drinking?
R: No.
I: No. Okay, erm, not a problem because, er, yeah, I guess it's just, erm, just letting you know that with alcohol it can enhance the effect of some drugs.
R: Hmm mm.
I: So with your blood pressure medication, erm, it can cause low blood pressure in that...
R: Oh, right.
I: ...temporary, erm, form.
R: Hmm mm.

[7]
I: Yeah, okay. [Laughs] Um, okay, and yeah, 'cause what...as like pharmacists, we see alcohol as, like, part of...
R: Yeah.
I: ...the drug regime as well.
R: Right, yeah.
I: 'Cause it can interact with medication.

R: Yeah.

[8]
I: Has it ever sort of affected how you take your medicines at all?
R: Probably made me forget to take them. [Laughs].
I: Yeah. [Laughs]. Yeah.
R: Um, but yeah, I mean, like I say, I have gone through times where I've drunk more...
I: Yeah, yeah.
R: ...when life's harder...
I: Yeah.
R: ...I...I tend to drink more.
I: Yeah.
R: It's just how it is.
I: Yeah.
R: Um, but yeah, I think I'm all right at the minute.
I: Yeah.
R: So...
I: Yeah, 'cause we all...it's all...it's a part of, like, lifestyle that we all seem to...[inaudible].
R: Yeah, I know I could do...but, er, like we all could, can't we, you know?
I: Yeah.
R: Um, but yeah...
I: Yeah.
R: I mean, I don't have many vices so it is what it is.
I: Yeah. Yeah, um, 'cause, yeah, in an ideal world, you know, in terms of alcohol, we'd like to keep it to a minimum where possible, just due to, like, interaction of medication...
R: Yeah, and I am on a fair bit...

[9]
I: Erm, and I guess, erm, [pause] do you feel that [pause] you could maybe, erm, alternate between, er, alcoholic drinks when you do go out? You could have...
R: Yeah, yeah. I do that as well.

[10]
I: Definitely. Um, yeah, 'cause I guess it's just, er, when you are at the pub with, like, alcohol, you obviously use measures and things.
R: Yeah.
I: At home...
R: Oh, yeah, I'm sure my measures are not...
I: [Laughs] Yeah.
R: ...like the pub ones. [Laughs].
I: So I guess that could be potentially something that you could introduce if you wanted to, like...
R: I don't think I'm...

I: [Laughs].
R: I…I'm not…nowhere close to alcohol levels yet. [Laughs] I don't need to be monitoring too much.
I: Yeah. [Laughs]. No, no, absolutely. Yeah, we just like to sort of touch on that.
R: Of course, I know, it's you just doing your job, yeah.
I: Yeah. Yeah, perfect.

Clinical pharmacist E

Nature of the interactions examined
Four face-to-face reviews including physical health checks (7-37 minutes).

Opening and sharing the agenda
There is a marked change between the earlier recorded consultations and the final one. In the shortest consultation, which followed a medication change, the pharmacist asks how the patient has been. The patient's response, "eating sensibly", is followed by a short exchange, then the conversation is paused while the pharmacist checks measurements [1]. The rest of the consultation follows a pharmacist-led question and answer format in a warm interpersonal style ending before more physical health tests are administered. Another patient is unclear why he has been asked to attend but is agreeable to answering questions about his medication and confirms he is happy with things as they are when asked this at the end [2]. A patient asked at the start of another consultation to, "summarise what…what you're here for" tells the pharmacist that they want to increase pain medication [3].

In contrast, in the most recent consultation, the pharmacist tells the patient this consultation is following up on one medical condition, but they can chat wider and asks what is on their mind that day. The patient raises a range of physical and mental health issues and his personal, social and economic circumstances that have implications for his health [4]. The pharmacist discloses their own fear of letting people talk and not having anything to offer and the patient reassures it is helping with his headache and that he does not usually show his emotions [5]. The pharmacist listens empathetically before asking the patient where they should focus today [6]. The patient arrives at the problem that initiated the consultation, and the pharmacist offers a general review of medicines to see what "crops up" from that [7].

Raising the subject of alcohol
Alcohol is raised "in terms of lifestyle" in an early consultation followed by asking "does that have any impact on your health, or any of your medicines?" to which the patient says no and explains how they manage this [8]. One enquiry is linked to a prior conversation about overdoing it on holiday in which the patient is more focused on a chest infection than alcohol [9]. In another the patient mentions thiamine when talking through his medication routine in the context of having had a "drink problem" in the past. The pharmacist explains why it was prescribed [10]. They discuss how the patient used to drink and how he drinks now and when asked if drinking affects his medication routine, the patient says no [11]. In the last consultation the patient is invited to talk about their own alcohol history (see below) separately from the wider discussions of his conditions and medication towards the end of the consultation [12].

Connecting issues clinically
The possible role of alcohol in presenting issues is somewhat overlooked. Patients disclose drinking histories and patterns but opportunities to discuss this in relation to, for example, diabetes and blood pressure management are not taken up. The patient in the last consultation considers his son's relationship with alcohol to be life threatening.

He says he very rarely drinks himself now and this is discussed in relation to amounts consumed rather that in relation to current medication for pain, sleep apnea, and gastric issues. The pharmacist assumes awareness of interactions without much exploration and offers help asking if the patient has ever come to, "…the point where you think, oh I'd like to stop and I can't?" The patient declines this offer, in the context of the failure of services to help his son [12].

Counselling microskills

The pharmacist becomes more open and attentive generally, rather than listening for particular red flags, in later consultations. They use open questions, provide encouragement, and make some short summaries. The final consultation shows they are beginning to incorporate deeper reflections: "So that's a lot to, to carry, isn't it?" [6]. Some of the consultations pick up from prior interactions and look ahead to future ones.

Patient perspectives

Four interviews. Patient feedback was framed by prior experiences with health professionals. They appreciated the time afforded and a sense of not feeling rushed, "the doctor, you get ten minutes (PMAC 6); "I always feel really rushed … I don't get half the things out, and then I forget what I've said" (PMAC10). Interviewees appreciated feeling heard, "… definitely listening and … was quite switched on" (PMAC 5); "…just dead relaxed … I don't normally talk to people … but I ended up talking for ages …I felt really good when I left" (PMAC 10). Patients were not uncomfortable talking about alcohol but did not see its applicability to them if they drank "sensibly" (PMAC6). One spoke about feeling "guilty" in the past and lying about it (PMAC1). A patient with diabetes appreciated the "advisory" approach taken in contrast to the usual "lecturing" about alcohol; "[They] at no point said, you should not do this, you should not do that … just … it's advisable that you cut down … It's advisable when you're taking that particular medication to do a certain thing" (PMAC5). This patient was mixing alcohol with amitriptyline and gabapentin to enhance pain control and did not recall discussing interactions between alcohol and pain medications in their consultation (PMAC5).

Audio recording excerpts

[1]

I: … Great. So, um, saw you last week. We've changed a couple of your medicines, how have you been since?
R: I've been great. Yeah. Been eating sensibly.
I: Uh-uh.
R: I had my first good meal last night, probably the first day.
I: What…what…what did…what did you have?
R: Like a tortilla, a tortilla with meat.
I: Mm, mm.
R: I mean, when I ate it, I regretted it but [laughs].
I: Right, tell me about that.
R: So, just sort of that full, you know what I mean?
I: Okay.

R: That...
I: So...so, over the rest of the week, since we chatted last time, you said you'd changed your diet...
R: Was trying to eat whatever, kind of like trying salads...
I: Brilliant, okay.
R: Some with meat.
I: And that's...and have you managed to use that machine...
R: Yeah.
I: ...to measure your blood sugars?
R: Aye, I've done the readings.
I: Oh, great, let's have a look at them. [papers rustling] [pause]

[...]

I: [laughs] Okay. Um, well, I've sort...I'll do a blood pressure check and a couple of physical health checks. I'm going to stop the, er, recording now. Have you got any further questions for me?

[2]

I: Right, so, so do you know why you're here today?
R: Er, I think it's about me medication.
I: Right [laughs]. And so we've asked you to come in.
R: Yes.
I: Okay, lovely. Um, thinking about your medication at the minute, how are you managing it?
R: It's no problem.
I: No problem. And I'm just going to quickly flick through your records, see what our last few consultations were about. Oh, I see. So one of my colleagues on the...had a phone call on the tenth and there are a couple of issues. Your blood pressure was up a bit, so I think that's part of today, we'll check your blood pressure.
[...]
I: I'm thinking about the, the original point of the consultation with the medicines. Are you happy with how we've got things...
R: Yeah.
I: ...set up at the minute?
R: Yeah.

[3]
I: Great. Well, thanks so much, and thank you for allowing me to record this convers-, consultation for the...
R: Mmm.
I: ...SMR that we're talking about. Great. So could you just...can you summarise what...what you're here for?
R: Yeah, um, I'm...I'm getting increased pain, my mobility is getting less, and, um, I'm...I spoke to the, erm, hospital consultant about my diabetes a couple of

weeks ago. He has sent me a blood test form, erm, for to get some more bloods to be sent in, and, um, I'm here to ask if I can increase my pain, erm, er, it's...in the painkiller, um, that I'm taking now.

[4]

I: Brilliant, okay. So, um, I've asked you to come back in to talk about your restless legs.

R: Yep.

I: Um, but we've got time to chat about anything really, about your, your medicines and other...

R: Yeah, that'd be brilliant.

I: ...stuff. Is there anything on your mind today?

R: Em, it's everything ...

[5]

I: I think there's a... So sometimes I get nervous about, um, if I get people to talk too much and I can't...

R: [Laugh].

I: ...help...I can't help them. But actually one of the things I'm learning through this process is about actually I don't have to fix people's problems, I'm just allowing you space to talk...

R: That's good, yeah, yeah.

I: ...can sometimes be useful.

R: It is. It's, um...

I: It's, it's therapeutic.

R: I've had a... I've got a cracking headache today, but I know it's easing a bit because I am talking.

I: Hmmm hmm.

R: I'm sort of like, you know. But I don't normally show my emotions. I don't...

I: Hmmm hmm.

[6]

I: Th-that's a lot, yeah.

R: Yeah.

I: So that's a lot to, to carry, isn't it?

R: It is.

I: A lot...a lot of things to think about. In terms of [clears throat] if you could...if, if I've sort of said to you today, we...

R: Mm.

I: ...we can certainly try and touch on as much of that...

R: [Laugh].

I: ...as possible, what's the most important thing to try and get out of today?

[7]

R: Look at my legs then. Just forget everything else. I'll, I'll just get on with what I can do, you know?

I: So some...sometimes what I would do is I would sort of...

R: [Clears throat] [sniff].
I: ...try and take a general overview of the medicines...
R: Yeah, yeah, yeah.
I: ...like, a review of all your medicines. Um, and then if we're happy with them, we'll think about maybe one or two different...
R: Yeah.
I: ...areas to cover. And maybe while we're going through the medicines, we'll, we'll have a think, and if anything crops up and you think...
R: Hmmm hmm.
I: ...today I really want to get on top of...

[8]
I: Erm, and in terms of lifestyle, you don't smoke.
R: No.
I: Erm, [pause] you said you have a drink on a Friday night.
R: Have a bottle of wine on a Friday night.
I: Yeah. And...and does that have any impact on your health, or any of your medicines?
R: No. No. Erm, I...I account for it, when I take my insulin, erm, of an evening. So I might take a little bit more. Or I might take my metformin later; I normally take the metformin at lunchtime.
I: Okay.
R: Take in the morning.
I: Yeah.
R: And take it later on in the day. But if I'm possibly going to have a drink on a Friday night, erm, I'll keep my metformin to a bit later.
I: Okay. And do...do...and let's say you have your bottle of wine, erm, [pause] do you...are you going to test your sugars more frequently?
R: Yes.
I: Yeah.

[9]
I: ... And so, and...and we talked a little bit last week about your...you had a great holiday in Spain, but you'd probably overdone it a bit, which might have contributed to your blood sugars going awry.
R1: Yeah, just...probably came on through the night, more or less, I just couldn't breathe. And I was in air conditioning, but I don't know what it was, but it was [inaudible].
R2: That was a chest infection.
I: A chest infection, yeah.
R1: Well, yeah.
R2: [Name's] talking about your diabetes.
I: But...but that, well, that's important because it's linked together. I think...I think you've been, you're more vulnerable to chest infections if we don't get on top of your blood sugars. And I think you...you'd sort of had...you'd...you'd gone away when you were abroad and had quite a few vodkas and...

R1: Yeah. [laughs]
I: ...er...had...has that changed at all over the last week? Have you...have you...changed your drinking habits?
R1: I don't drink at all through the week. Or...through, well, when we're at home I should say.
I: So, it doesn't...nothing at all this last week?
R1: No. Not even a fizzy drink.
I: Grand. How do you feel about that?
R1: Well, I've got to admit, sometimes I've had a drink, say a glass of lemonade or something like that but, I just forget about it.[laughs]
I: But you don't miss the alcohol side?
R1: No, no, no.
R2: We don't drink through the week when we're at home anyway.
R1: No, just drink on holidays.
R2: It's just on holidays.
I: On holiday, okay.

[10]
R: Thank you. And there's a little bottle... I had a drink, er, a drink problem years ago...
I: Uh-huh.
R: ...and I ended up on these tablets, I forget what they're called, and I've got about 20 bottles of them, but they've stopped sending them now.
I: Okay. Is that thiamine?
R: It could well be.
I: It's a vitamin tablet, yeah. Sometimes, if you're, if you're drinking regularly, your levels of B vitamins can go down a bit.
R: I ended up in rehab, I think.

[11]
I: Okay, grand. And, and in terms of how, how you are, how you manage your medicines, does that have any impact on anything?
R: No, none whatsoever. I've had some this morning, all of them.
I: All your tablets, great, okay.
R: No problem.

[12]
I: ...what about...w-we've mentioned alcohol, and so tell me a bit about your alcohol history or...
R: Em, obviously, I used to drink when I was, like, in my twenties and everything, you know, like everybody, you know, sort of like...

[13]
I: But it sounds like you're very aware of the kind of impact on your medicines and...
R: Yeah, yeah, yeah, yeah, yeah.

I: ...you and driving and risks. Um, so that sounds all very sensible. Um, is there anything you, you would want help-wise with drink or alcohol? You ever had...come to the point where you think, oh I'd like to stop and I can't?

R: No, nothing like that.

I: No.

R: No. Because I've had help with... Like, it's, it's totally different with my son, this thing, we've gone to, like...

I: Hmmm hmm.

R: ...parent classes, which help with your alcohol things and everything. It still doesn't work 'cause I enable him with his drink, and I know he's...

I: Mm.

R: Basically, I know he's going to die. I've tried to get that used to my head because he just won't stop.

Clinical pharmacist F

Nature of the interactions examined

Two face-to-face consultations (18 and 22 minutes).

Opening and sharing the agenda

In both consultations the pharmacist invites patients to tell them about their medications [1, 2]. This, and related enquiries about whether they help and how they affect them on a daily basis, lead to wide-ranging discussions including aspects of the patients' lives not directly connected to medication. The open question, "So how are you mood wise at the moment?" [3] is asked in the context of taking an antidepressant. Towards the end of this consultation, the pharmacist offers the patient the floor, and the patient takes the opportunity to return to an early discussion for more information and reassurance [4]. The other consultation follows a similar pattern. At two points the patient explicitly compares this experience positively against other encounters with healthcare professionals [5, 6]. The pharmacist reassures that if they can't help directly, they can send a message to one of the doctors [5]. This opens a new discussion of the patient's worries about her throat [7].

Raising the subject of alcohol

In one consultation, alcohol is raised after medicines in what is flagged as the "lifestyle" section recalling, "Erm, you mentioned that you like to have a bottle of wine if you're feeling a little bit… […] low" [8]. This produces a discussion of the patients drinking patterns, with the patient assuring the pharmacist, and guarding against implicit judgement, that they do not drink "strong wine" [8]. The pharmacist shows they are alert to the possibility of appearing judgemental, taking pains to reassure the patient that their drinking is "fine", "sensible", a "social thing" that "most people do" [8]. Normalising talk is here mixed with reassurance that potentially risky drinking is "sensible". No links to medication are drawn during the alcohol discussion. In the other consultation, the patient who is drinking heavily raises alcohol a few times, first in the context of taking omeprazole, eating and being sick [9].

Connecting issues clinically

There is no attempt to draw out connections between alcohol and the patient's medication (opioids, an antidepressant, bladder medication and thyroxine) in the first consultation. The other patient raises alcohol saying a neighbour helps them manage their medication [9], allowing the pharmacist to ask about how drinking affects their routine [10]. The patient discusses the wider context of their drinking – that they use it as a "coping mechanism" – and that they have tried Alcoholics Anonymous but found it ill-suited to them [11]. The patient reveals a lot about symptoms and difficulties that might be linked to drinking that are not explored including anxiety, voice/throat concerns, amitriptyline for pain and problems sleeping. Pulling the focus away from these specifics, the pharmacist asks if they would like any help to change their drinking,

“Not necessarily [to] stop as such, but do you feel like it's a problem? Do you feel like you would like to?” [12].

Counselling microskills

There are examples of the pharmacist using all of the microskills including good use of reflections, particularly in the second consultation; “you feel like you’re in a bit of a circle … you find it difficult to talk to a group of people” [13]. In this consultation, the pharmacist clearly summarises the patient’s position with regard to their drinking, the key issue the patient is concerned about, and what the pharmacist will do as a result of the consultation [14].

Patient perspectives

One patient interview (the heavier drinker). The interviewee said they had not had a review in such depth before and have felt “rushed” and “fobbed off” by doctors. “[The pharmacist] sat and … listened […] And she went more into it … I appreciated [their] help and input” (PMAC9).

Audio recording excerpts

[1]

I: I'm a pharmacist in the practice and you've just been invited in for a review of your medications. Erm, you've consented to take part in the study and you are being recorded...

R: Yeah.

I: ...erm. So if you, if you want to withdraw at any time...

R: No, it's alright.

I: ...you're able to. So tell me about your medications?

[2]

I: Okay. So as I've already said, you've been invited in just for a review of your medications today. So can you tell me about your medications?

[3]

I: So how are you mood wise at the moment?

[4]

I: Brilliant. Erm, and is there anything else concerning you at the moment?

R: No, nothing at all. Just the... Is the water works a common thing?

[5]

I: Yeah, and that's what that one does for, for you. That's what it mainly works on. So if... It sounds like your main symptom is in your chest...

R: Yeah.

I: ...from your anxiety and your panic attacks, so that's probably why you're on the Propranolol, erm, because that can help with the heart. Let me just see. Because again, I can send the message to obviously...that same doctor might not have started that medication but I can just say you've been to see me, this is what we've talked about...

R: Yeah.

I: ...is there anything you think we can...

R: Yeah, fine, yeah.

I: ...do, you know, to...

R: Yeah, help, help...

I: ...help.

R: ...to ease it, yeah.

I: Yeah, absolutely. 'Cause we, we don't want you to be suffering.

R: You see, when I, when I come and I speak to him I don't...I'm not able to tell him half of it. It's like he hasn't got time and I feel... And, and if there's half a dozen things or three or four things...

I: Yeah.

R: ...it...he hasn't got time. And especially like your knock-down and that, it was like... I'd come in and mentioned one thing to him and then I'd want to...and it's...

I: Yeah.

R: Out the door.

I: I know what you mean. My appointments are longer, so it is a bit easier for me to have conversations...

R: Well, this is how...

I: ...with people.

R: ...yeah. Well, you can see I'm alright talking to you. But what...

I: Yeah.

R: ...with him it's like oh, you're here for this.

I: Yeah.

R: And that's it.

I: Feels like it's a bit of a rush, does it?

R: Yeah.

I: Yeah.

R: And he hasn't got time.

I: Yeah. They'll say come with one thing to one appointment.

R: Yeah. But that was like getting an appointment every...in three weeks' time.

I: Yeah.

R: 'Cause it's not an emergency.

I: H'mmm. Yeah. Well if, if at the end of our little chat about medications, if there's anything else that you feel like you want to ask me today, you can, because even if I can't help, I can always send a message to one of the doctors to see how they think is the best way to proceed. So at the end I'll ask you if there's anything else...

R: Yeah.

[6]

R: Is that it? Are we done?

I: Yeah. If there's any...if there's nothing else, I can help you with today, then yeah, that's, that's great.

R: No, brilliant. I, I've got...I usually just sit here and... But I've got, I've got a few things off as well myself.

[7]

I: Yeah. Erm, so like I said before, is there anything else that you want to talk about today that's not medication related that I might be able to get an answer for you? Or...

[8]

I: Yeah. That's fine. So I mentioned at the beginning as well that we would talk about lifestyle a little bit. Erm, you mentioned that you like to have a bottle of wine if you're feeling a little bit...

R: Yes.

I: ...low.

R: But not strong wine.

I: Yeah.

R: 'Cause I get...that's what thingy I don't like being, over... If I'm on my own.

I: Yeah.

R: So I just drink very slight...just very weak wine.

I: Yeah.

R: I just make...pretend it's a bit stronger.
pretend it's a bit stronger.

I: [chuckles] And how does that fit kind of into your lifestyle?

R: If my friend comes around, who has just lost her son, thirty four, to drugs...

I: Oh gosh.

R: ...er, so she's... Erm, we have maybe a bottle each.

I: Yeah.

R: Erm, but it's not every night or anything like that.

I: Yeah, that's fine.

R: My son just looks into my rubbish and sees how many bottles are in there.

I: [chuckles] And is he...does he worry about that?

R: I thinks he...I think he does, yeah. Erm, but he's lovely with...and he's horrible with me. Mother, erm, have you just had a cigarette? Yeah. I go outside on the balcony for my cigarette. Well mum, just make sure you go out. You've just had this decorated, blah-blah-blah. Just nag...just go... And that's him, just concern.

I: Yeah.

R: So I just take no notice. I think what...but I don't drink a lot.

I: No, it sounds like you're drinking sensibly.

R: Yeah. It's...

I: So it's not a problem.
R: Everybody likes... You like a glass of wine.
I: Yeah, I do like a glass of wine.
R: Yeah. Yeah.
I: I think most people do.
R: Yeah.
I: It's an enjoyable thing to do. So like you've got company...
R: Yeah, yeah.
I: ...it's a social thing to do...
R: Yeah.
I: ...isn't it? And that's fine.

[9]
R: And I am sick a lot. But yeah, so I'll have one after dinner as well. But even then, it's sometimes not enough. But that's...I put it down to the drink.
I: Right. You think...
R: With the acids and not eating properly.
I: Okay.
R: I live alone.
I: Right, so you don't... You don't feel like you eat properly.
R: No. It's pointless, isn't it, for one.
I: Do you know, you're the second person that's come in and said that today...
R: Yeah.
I: ...and I know exactly what you mean, 'cause I used to live on my own and it is a chore, isn't it...
R: Yeah.
I: ...when you've got to do it all yourself.
R: Cook, cook a dinner for yourself...well, a full cauliflower...
I: Yeah. What sort of things do you eat then?
R: Er, ready meals. Usually me neighbour will take me shopping, when he feels like it. But he also looks after me pills for me.
I: Okay. Sorts them out for you. Make sure that you...
R: Yeah. Well, if I'm drinking too much or I don't know if I've took them or then I'll take too many or I'll...and he's pretty good like that.
I: Yeah.
R: So he'll take them off me, because I'm...have I took it?
I: Yeah.
R: Have I took it? Then I haven't took two, then I've took two too many.
I: So how does he manage them for you?
R: He brings them over every day.
I: So just what you need for that day?
R: He is next door, yeah.
I: Okay.
R: Yeah.

I: So then you know that if it's gone it's gone, and if it hasn't gone you haven't taken it yet, 'cause he just brings...
R: Or, or I have to text, have I had it?
I: Yeah.
R: I've brought it an hour ago.
I: Yeah.
R: Well, yeah.

[10]
I: So you mentioned you think it's the drinking. Do you feel like the alcohol does affect your ability to manage your medicines and remember whether you've taken them or not?
R: Yeah, definitely, a lot to do with the alcohol, yeah. And, and me own state of mind. That much goes on in me head, there's that...it's just working three hundred miles an hour. I've got a hundred thoughts an hour and trying to dissect everything is usually... I stress myself out. If I haven't got something to worry about, I find something.
I: Yeah.
R: And I, I'm one of them, and it ends up making me a nervous wreck.

[11]
R: So it's like...it...when things like this go on I really can't cope.
I: H'mmm. And is that where alcohol comes in?
R: Well it does, it comes in more. Yeah.
I: Do you think it's...
R: Stress. Calms me down...
I: Yeah. A coping...
R: Yeah.
I: ...a coping mechanism.
R: And then I'm ill the next day until I start again. It's...
I: Do you feel like you're in a bit of a circle?
R: Yeah. Yeah. I, I have tried this groups and that what doctors have tried to put me onto. But they're not my thing.
I: No.
R: I [inaudible 9:43], I have tried, I did the...I went on walks with them and things. But, no.
I: You're not...you find it difficult to talk to a group of people?
R: I, I have done it, yeah. I have, I have done it with, with AA here, but I'm, I'm not comfortable with it.
I: H'mmm.
R: And I can't do the appointments.
I: Yeah.
R: It's...no. I just can't do it. Especially with strangers and that, it's...

[12]

I: Is there anything that you think might help you to...

R: Er...to, to stop drinking?

I: Not necessarily stop as such, but do you feel like it's a problem? Do you feel like you would like to?

R: I do need...I, I need a drink.

I: Yeah.

R: I am...I, I started years ago. I used to run pubs.

I: Right.

R: I used to work fulltime, I used to be really active and that. But since I come to [Place] it's like everything...I came with the Women's Aid, and in a bad relationship, and that's when they go me sorted out with everything that was going on with me, 'cause I didn't even realise...

I: Yeah.

R: ...what, what state I was in myself.

I: H'mmm.

R: Which I was pretty bad. So considering from them to here, brilliant.

[13]

I: H'mmm. And is that where alcohol comes in?

R: Well it does, it comes in more. Yeah.

I: Do you think it's...

R: Stress. Calms me down...

I: Yeah. A coping...

R: Yeah.

I: ...a coping mechanism.

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I: Do you feel like you're in a bit of a circle?

R: Yeah. Yeah. I, I have tried this groups and that what doctors have tried to put me onto. But they're not my thing.

I: No.

R: I [inaudible], I have tried, I did the...I went on walks with them and things. But, no.

I: You're not...you find it difficult to talk to a group of people?

R: I, I have done it, yeah. I have, I have done it with, with AA here, but I'm, I'm not comfortable with it.

[14]

I: But you're happy with that way of life at the moment?

R: Yeah. Yeah. I'm... Yeah. I feel like I'm, I'm healing there...

I: Yeah. That's fine. So at the moment everything's kind of how you would like it to be, you don't feel like you need any additional support from us. Other than obviously changing these medications if we can...

R: Er...

I: ...that'll help things in that respect.
R: No, not really, no. Just get me, erm, tablets sorted out, me head sorted out so I can sleep, and...
I: Yeah.
R: ...painkillers.
I: Yeah. So if we can try and...so today from what you're telling me, that sorting the pain is top of the list.
R: And [inaudible], and sleeping.
I: Yeah.
R: Or else I can't sleep. If it's not me leg, it, it's me head.
I: Yeah.
R: And constantly waking up all night long.
I: So right, so that's fine. So I will send the message to the doctor. I'll say that you've been seeing me for a medication review, we've had a conversation about the Amitriptyline, it's not really helping with the pain or the sleeping.