



# Brief opportunistic interventions by general practitioners to promote smoking cessation: A conversation analytic study

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## ABSTRACT

Very brief opportunistic interventions for smoking cessation are effective, cost-saving for health systems, and universally recommended in guidelines. However, evidence suggests that clinicians are reluctant to intervene, citing interactional difficulties. Only one UK study has specifically examined smoking discussions, within naturally occurring primary care consultations. However smoking cessation treatment was not available at the time. We examined existing datasets amounting to 519 video-recordings of GP consultations in England for instances of talk about smoking. We used conversation analytic methods to assess patients' responses to doctors asking about smoking, giving advice on smoking, and offering cessation treatment. In 31 recordings it was apparent that the patient smoked, and, in 25/31 consultations, doctors initiated the topic of smoking. They did so by asking about smoking status, commonly during the history-taking phase of the consultation. In many instances, these questions led to active resistance from patients against being placed in a discreditable category, for example by minimising their smoking. This was more pronounced when GPs pursued efforts to quantify the amount smoked. Thereafter, where doctors returned to the topic of smoking, they did so typically by linking smoking to the patient's medical condition, which likewise led to resistance. Guidance recommends that GPs advise on how best to quit smoking where patients are interested in doing so, but this was only evident in a minority of consultations. Where GPs offered support for cessation, they did so using interactional practices that minimised the need for the patient to respond and thereby accept. Interactional difficulties were found to be common in consultations between GPs and people who smoke when GPs' actions aligned with some VBA guidelines. Future research should examine when and how advice on how best to quit, and offers of support, should be delivered within primary care consultations.

## 1. Introduction

Over one billion people smoke, which makes it one of the main causes of preventable early disability and death in the world (GBD, 2019 Tobacco Collaborators, 2021), shortening life-expectancy and bringing forward disability by around 10–11 years (Pirie et al., 2013). Smoking cessation, even in mid-life or later, can prevent much of this early onset disease (Pirie et al., 2013), making cessation the focus of policies to reduce preventable smoking-related deaths in the next fifty years (Jha, 2020). Cessation is triggered by a range of tobacco control policies and by people's health and other concerns (Vangeli et al., 2011), but

providing support, either behavioural or pharmacological, can increase the likelihood of smoking cessation attempts succeeding (Cahill et al., 2013).

Iversen (2017) argued that sociological insights can contribute to decision-making regarding the type and delivery of smoking cessation support, highlighting the irrelevancy of a social-cognition approach to understanding and addressing (i.e. changing smokers' behaviour through education of risks) smoking behaviour, as people are typically aware of how smoking may affect their health (e.g. Butler et al., 1998). Instead, sociologists argue that the symbolic value people place on smoking, their accumulated dispositions over time, and constraints

Abbreviations: VBA, Very Brief Advice; CA, Conversation Analysis.

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within their lives are more fitting explanations for why smokers are willing or able to quit. Despite such evidence, previous models of how to communicate with patients about smoking rely on the social-cognition model (e.g. cf. Baum and Fisher, 2014; HOD, 2004, SoS, 2011; White et al., 2013). However, recently, the Very Brief Advice (VBA) Intervention approach, has acknowledged the redundancy (and counter-benefits) to detailing the reasons for quitting to patients.

VBA Interventions are designed to both prompt quit attempts and increase the chances of success (Aveyard et al., 2012; Stead et al., 2013), and to be cost-saving for health services (Feenstra et al., 2005). They now form the foundation of clinical practice guidelines around the world (NICE, 2018; US Preventive Services Task Force et al., 2021). In the US and other countries, clinicians are asked to do 5A's - Ask whether a person smokes; Advise a person to quit because of the health benefits; Assess readiness to stop smoking; Assist with cessation and Arrange follow-up. England has adopted a shorter and slightly different approach, termed the 3As - Ask a person whether s/he smokes, Advise on how best to quit, and Act on the patient's response (refer to a behavioural support programme and/or prescribe pharmacotherapy, if appropriate to do so) (Public Health England, 2020). The aim is that VBA can be delivered within 30 seconds, making it practicable for general practice, with a typical consultation length of 10 minutes.

Despite national guidance that such interventions should take place at every opportunity, rates remain low. Only eight percent of GPs report giving smoking VBA on a daily basis (Asthma UK and British Lung Association, 2021), with active offers of support being even lower (Brown et al., 2016; Chase et al., 2007; Jackson et al., 2020). This is the case even where the system pays GPs to intervene on smoking. The reasons appear to lie partly in clinicians' preferences and values, with clinicians expressing negative attitudes towards and experiences of implementing this kind of intervention on smoking (Sharpe et al., 2018; Vogt et al., 2005; Williams and Calnan, 1994). Moreover, half of the GPs in the UK report not having attended VBA training, which prompted Asthma UK and the British Lung Association (2021) to propose it should be compulsory.

What appears to be missing from discussions relating to VBA implementation is analysis of qualitative observational data on how it plays out in practice. This is surprising, as this type of evidence could potentially: dispel concerns on how patients may react to it; identify barriers/facilitators to VBA delivery; and, consequently, be used to inform training and guidance on how GPs can best deliver it in practice.

A small number of studies have focused on how discussions about other health behaviours (i.e., weight, alcohol consumption and physical inactivity) play out in practice. These studies were based on the direct observation of doctor-patient interactions in unmanipulated primary care consultations (see Albury et al., 2019 for a review; Bergen, 2020; Connabeer, 2021; Freeman, 1987; Halkowski, 2012; Pillet-Shore, 2006; Sorjonen et al., 2006). Three studies specifically examined smoking discussions in primary and secondary care settings in Denmark and Norway, respectively (see Guassora and Baarts, 2010; Guassora and Tulinius, 2008; Iversen, 2017). These studies have demonstrated how the language used during such discussions, can shape patient responses. Collectively, they highlight the importance of examining *how* health behaviours are discussed, not just whether they are discussed or not.

However, we know of only one UK study (Coleman, 1998), that specifically focused on how GPs discussed smoking with patients during (recorded and subsequently analysed) primary care consultations (Pilnick and Coleman, 2003, 2006, 2010). This study found that GPs commonly raised the topic of smoking by linking it to the patients' presenting or ongoing medical conditions. The authors argued that this approach led to displays of patient resistance not usually found in other

types of consultations. They also surmised that this resistive response was due to the moral implications this approach conveyed i.e. that the patients' were responsible for their health status, which in turn could undermine the legitimacy of asking for, and receiving, help. These findings echo those in the studies of other health behaviours listed above.

If such a moral stance is being conveyed, this would align with the position taken by Talcot Parsons (1951), a functionalist theorist, who argued that illness should be seen as a 'deviance' and that people should only have access to the 'sick role' and the special treatment associated with that role (including medical care) if they were not responsible for their problems and they were actively trying to get better. Irrespective of whether a GP intends to question patient legitimacy, these findings suggest a need to explore whether (and when) GPs talk, during VBA delivery, conveys such a message and how, in turn, patients manage this dilemma, as this may impact on the GPs ability to implement VBA.

Pilnick and Coleman (2010) reported that even when patients asked for help, clinicians confined their interventions to simple advice on the medical reasons for quitting. It is important to note that when data were collected, the current range of treatment options (e.g. nicotine replacement therapy, inhalators and stop smoking clinics) were not available. This raises the question of how applicable their findings are to current practice. In addition, the reproduction of their study data were restricted to basic verbatim transcripts only, as while the original video-recordings were used to inform analysis, there was no ethical permission to re-transcribe the transcripts once the verbatim transcription had been completed. Therefore, the authors were unable to include the important fine-grained details of talk-in-interaction, particularly around patient responses, in their transcripts and reported analyses.

Since then, UK guidelines on brief interventions for smoking have been developed that diverge from those in other countries. To understand how well these current guidelines map onto everyday practice in the UK and be able to either reinforce or suggest evidence-based change to this UK guidance or related training, observational studies of smoking discussions occurring within a UK primary care setting are needed.

Our study sought to address the lack of qualitative observational data on how smoking VBA plays out in current practice by analysing more recent datasets of video-recorded primary care consultations and detailed transcripts. Conversation analysis was employed due to its ability to explore when and how VBA was delivered and patients' responses.

## 2. Method

### 2.1. Data and participants

We screened two existing databases of primary care consultation recordings and verbatim transcripts with permissions in place for reuse: One in a Million (OiaM) (Barnes 2017) and Harnessing Resources from the Internet to Maximise Outcomes from GP Consultations (HaRI) (Seguin et al., 2018). OiaM provided 293 consultations from 12 practices in south-west England recorded in 2014–15 (Jepson et al., 2017) and HARI provided 226 recordings from 8 practices in London, and the south east of England, recorded in 2017–18. Our study was approved by North West- Greater Manchester NHS Ethics Committee (REC reference 17/NW/0687).

### 2.2. Coding of the 3As

The 519 transcripts were initially screened for all instances where smoking was discussed. All instances in which a GP first mentioned

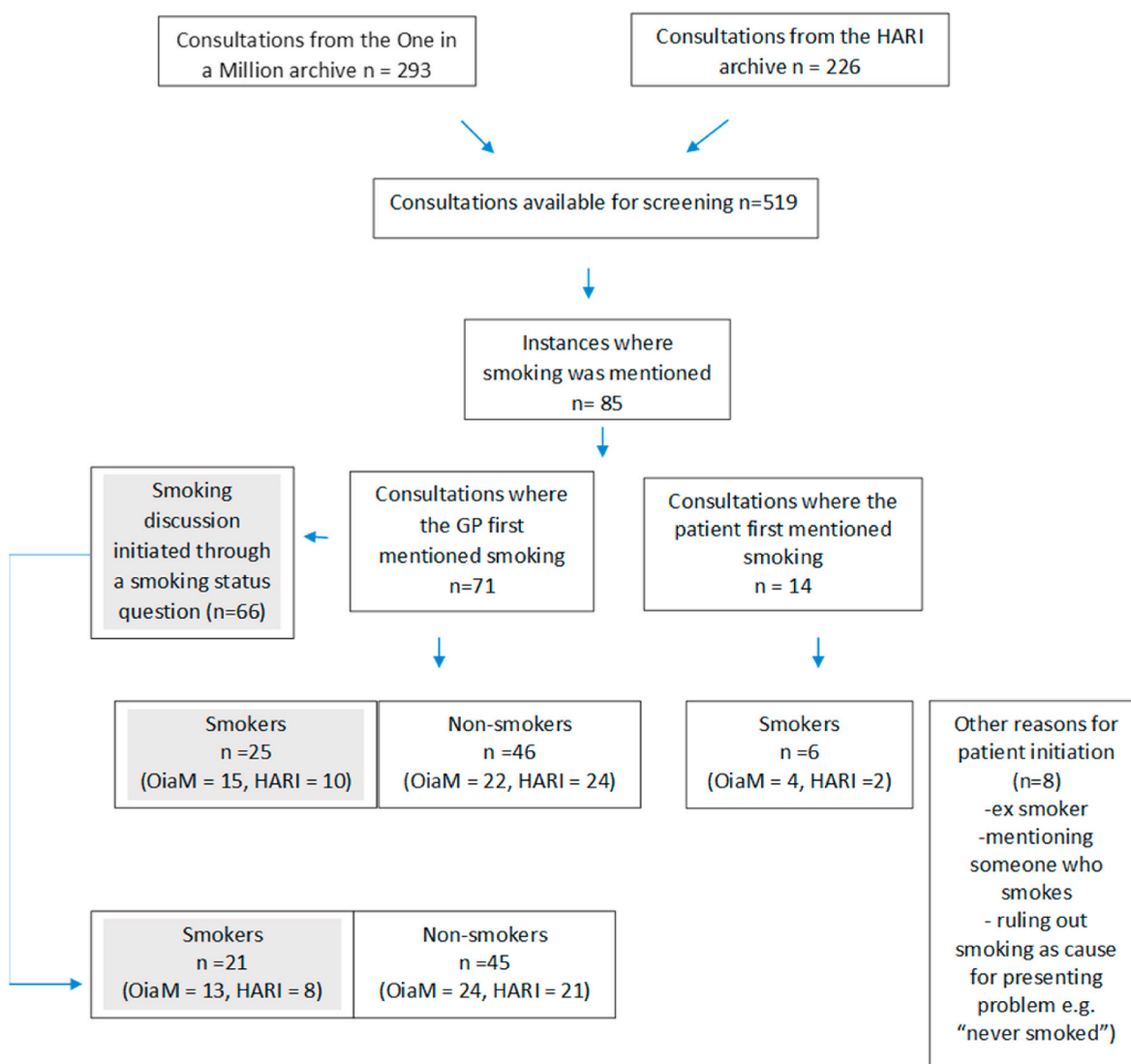


Figure 1. Screening process and sample for dataset.

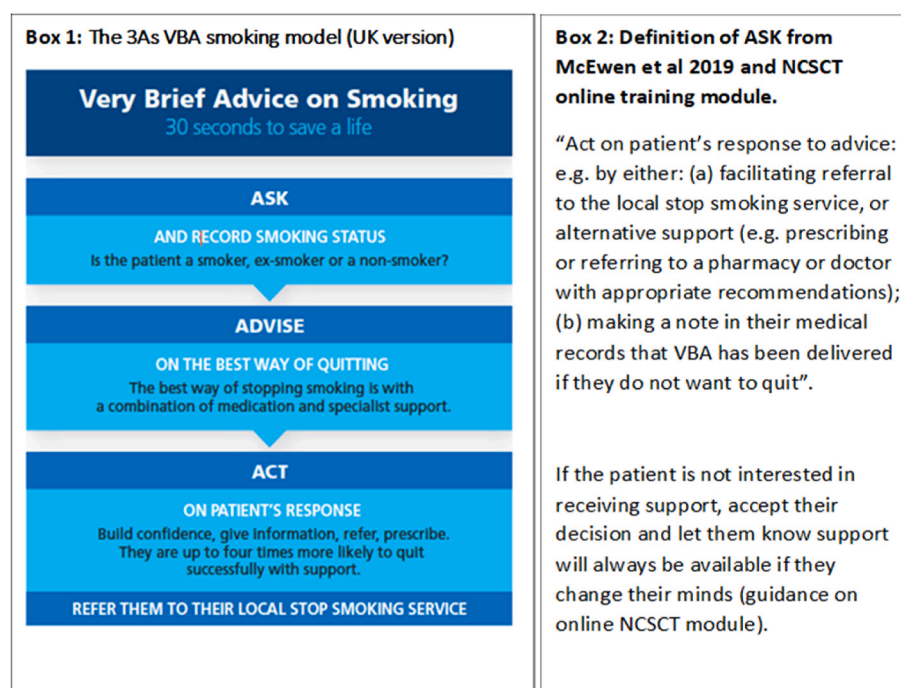
smoking, and it was evident that the patient smoked, were identified in preparation for coding against English guidance on smoking cessation. If the patient initiated the smoking discussion, it would not have been appropriate or necessary to ask about smoking status; consequently patient-initiated instances were omitted. Non-smoker instances were omitted too as there would not be reason to Advise or Act. We developed a coding system based on NCSCT's definition of each step (see Box 1), using a National Centre for Smoking Cessation and Training (NCSCT) visual outline of the 3As and their online 3As video training module (2018), and McEwen et al.'s (2019) description of the Act component. The Act component of the 3As required more complex coding than Ask and Advise, due to various actions being listed as possible, suitable Actions. In addition, to referring patients onto a stop smoking clinic or offering another form of support (e.g. prescribed medication), GPs' talk was coded as an Act if they: encouraged patients to continue with a current cessation attempt; reinforced patient talk that suggested

smoking cessation was possible or praised previous success with a smoking cessation attempt. These utterances aligned with 'building confidence', a response listed under Act in the simple model of the 3As. GPs' talk was also coded as Act if the GP managed a patient's decision not to receive support by accepting the decision and letting the patient know that support is always available if they change their mind. A second coder independently checked a third of all included instances.

It is important to note that since the study was completed the NCSCT's 3A's guidelines have been slightly updated (2021). The recent changes focused on the importance of acknowledging that access to smoking support can vary and altering support offers accordingly and on making it visually clearer, in their 3As visual model, on what to do if the patient is not interested in receiving support as well as what to do if they are interested (i.e., the Act step). However, these updates would not have altered the coding process (or results) in this study, as the actual steps have not been altered.

**Table 1**  
VBA results.

ID	Sample	Initiator	Reason(s) for visit	Location	Agenda	Ask, Advise, Act	Acceptance
1	OiaM 010103	GP	Patient requested discussion about blood test result (early onset of osteoporosis)	Post diagnosis explanation/ planning	Preventative – addressing lifestyle behaviours linked to presented issue	Ask and Act (support offered)	/
2	OiaM 011110	GP	Initial appointment for dementia patient new to GP practice	Examination	Safety – medication review (reason for visit)	Ask	/
3	OiaM 20201	GP	Repeat prescription for contraceptive pill	History taking	Safety – medication review (reason for visit)	Ask and Act (support offered)	/
4	OiaM 20209	GP	Lump on neck, itchy scalp and query about menstrual pattern	Examination	Exploring possible cause/ aggravator of presented issue	Ask and Act (support offered and confidence building)	/
5	OiaM 40412	GP	Chest infection, troubles breathing	Examination	Exploring possible cause/ aggravator of presented issue	Ask and Act (support offered)	/
6	OiaM 50714	GP	Medication review for recently prescribed anti-depressants. Patient recently found out she is pregnant - unsure of whether to continue with pregnancy	Post diagnosis explanation/ planning	Preventative – addressing lifestyles behaviours relating to a presented issue	Ask	/
7	OiaM 60813	GP	Coughing up blood	Problem presentation	Reviewing/explaining prior treatment decisions (related to presented problem)	Advise	/
8	OiaM 81306	GP	Chronic throat problems, difficulties swallowing, persistent cough	Problem presentation	Recollection of previous information (related to presented problem)	Act (support offered)	Acceptance by wife of patient
9	OiaM 091512	GP	Diarrhoea	End of consultation	Record check/encourage smoking cessation (unrelated to presented problem)	Ask, Act (confidence building)	/
10	OiaM 101710	GP	Repeat prescription for contraceptive pill	Examination	Safety – medication review (reason for visit)	Ask	/
11	OiaM 101809	GP	Repeat prescription for chronic lung condition	End of consultation	Smoking cessation (related to problem presentation)	Ask and Act (confidence-building)	Possible acceptance in the future
12	OiaM 111901	GP	Back pain and wheezy	History taking	Exploring possible causes/ aggravating factors	Ask and Act (confidence building, support offered, GP accepts patient decision not to receive support and tells patient that support is available in the future, if they change their mind).	/
13	OiaM 111914	GP	Ongoing bowel/bladder problems, breathing difficulties	History taking	Exploring possible cause/ aggravator of presenting issue	Ask, Act (confidence building)	/
14	OiaM 1112005	GP	Pre-pregnancy advice	History taking	Preventative – addressing lifestyle behaviours in relation to a presented concern	Ask, Advise and Act (support offered)	/
15	OiaM 122203	GP	Experiencing irregular toilet behaviour, recent x-ray results	History	Reviewing/explaining previous treatment decisions (related to presented issue)	Ask	/
16	HaRI 1.1.10	GP	Chronic back problem -patient enquiring into alternative to long term medication	Examination	Preventative – addressing lifestyle behaviour that may affect patient's concern – high blood pressure (currently on threshold of requiring medication)	Act (support offered)	/
17	HaRI 1.1.12	GP	Repeat medication request for nasal issue, chest infection	History taking	Exploring possible causes/ aggravating factors of presenting problem	Ask, Act (Confidence building)	/
18	HaRI 1.2.35	GP	Painful verruca on foot (infected)	End of consultation	Smoking cessation (unrelated)	Ask, Act (GP accepts patient not interested in support at the moment, and offers support in the future)	Possible acceptance in the future
19	HaRI 4.6.168	GP	Searing pain in ear – pressure and discharge	End of consultation	Smoking cessation (related to presented problem)	Ask	/
20	HaRI 4.6.173	GP	Results of biopsy and blood work. Prescriptions need to be signed	Post diagnosis explanation/ planning	Preventative - reducing risk factors of heart disease (related to presenting problem)	Advise and Act (support offered and confidence building)	/
21	HaRI 4.6.178	GP	Repeat prescription for contraceptive pill	History taking	Safety- medication risk (related to reason for visit)	Ask and Act (support offered and confidence building)	Possible acceptance in the future
22	HaRI 6.08.208	GP	Sore throat, bad headache	History taking	Exploring possible causes/ aggravating factors to presented problem	Ask	/
23	HaRI 8.10.287	GP	Follow up – patient just out of rehab: mental illness, alcohol dependency	Examination	Safety-medication risk (related to reason for visit)	Ask, Act (confidence building)	/
24	HaRI 8.10.300	GP	Diabetes review	Post diagnosis explanation/ planning	Preventative - reducing risk/ aggravating factors to presenting problem	Ask	/
25	HaRI 4.6.162	GP	Diabetes review, breathing difficulties	History taking	Exploring possible causes/ aggravating factors to presenting problem	Ask and Act (support offered)	Possible acceptance in the future



Box 1. Definitions of the 3As.

**Table 2**  
Summary of the prevalence of the 3As within the GP-initiated discussion-smoker sample.

Each of the three steps of the 3As	ASK (GPs initiated the smoking discussion by Asking about the patient's smoking status)	ADVISE (GPs Advised on the best form of support for a cessation attempt)	ACT (GP Acted by stating there was available support and/or confidence-building and/or accepting a patient's decision not to receive support and offering support in the future, if they changed their minds)
Number of occurrences within the 25 GP-initiated smoking consultations	21 (84%)	3/25 (12%)	17/25 (68%)

### 2.3. Conversation analytic inquiry

We re-transcribed all instances where the smoking status question was asked using Jeffersonian transcription conventions (Hepburn and Bolden, 2017), to render more detail in preparation for Conversation Analysis (CA). CA plays close attention to what participants are doing with their talk, drawing on knowledge of how talk is typically constructed to understand the unfolding action (Sacks et al., 1974). We used this method to identify talk practices that led to uptake of offers of support and to identify problem areas to address in future communication training. For each instance we examined where (in terms of activity phases) and how GPs topicalised smoking, the nature of patients' responses, and whether cessation support was offered.

## 3. Results

Eighty-five of the 519 consultations contained a mention of smoking. In 71/85 (83%) consultations the GP initiated the topic of smoking. In 66/71 (93%) of these instances, the GP asked about smoking status (Fig. 1). Although the prevalence of smoking was unknown in these consulting populations, smoking prevalence at this time in England was around 16% meaning around 84 people were likely to have been smoking at the time of the consultation.

### 3.1. Coding for Very Brief Advice

In 25 consultations in which a GP first mentioned smoking, it was evident that the patient smoked based on their talk (the patient confirmed they were a smoker in response to a smoking status question or didn't challenge a GP's assumption that they smoked and then replied to further smoking related GP talk with responses that indicated they smoked e.g., gave details on how much they smoked). This sub-set were used to code for presence or absence of the 3As, the coding results are presented in Table 1 and Table 2. However, this 'scorecard' distribution gives a misleading impression about the implementation of VBA, as we explore below.

### 3.2. Additional contextual details

In 7/25 instances, the GP implied they had pre-existing knowledge of the patients' smoking status and in two instances the GP explicitly checked their patients' records. In 18/25 (72%) consultations the GP explicitly foregrounded the patient's reason for visit or concerns disclosed in the consultation as a reason to bring up smoking, either because it was a possible cause/aggravator of their presenting condition or because it invoked a need to review risk factors/lifestyle behaviours (e.g., repeat prescription of contraceptive pill). In a further consultation, the reason for visit could be inferred as leading the GP to initiate a smoking discussion (chest infection and ongoing respiratory issues), but the link was less clearly made by the GP as the status question came at the end of the consultation.

GPs asked about smoking during the diagnostic (history taking and



examination) activity phase in 53/66 (80%) of instances where they enquired about the patient's smoking status. When the status question was asked in the diagnostic phase and the patient stated they were a smoker (13 consultations), the GP delivered at least one more 3As step in 7/13 consultations before continuing with other diagnostic activities.

In 7/21 (33%) consultations where the GP had asked about/checked smoking status as a means of initiating the smoking discussion, and the patient was a smoker, the GP did not follow up the patient's positive response with the Advise and Act component of the 3As.

There was only one consultation in which a GP did all three steps of VBA as recommended. This was a consultation with a couple who were seeking pre-pregnancy advice and to discuss one person's antidepressant medication. The Ask question occurred during the history taking phase. The GP then asked for some information relating to the reason for visit and then returned to the topic of smoking to first give advice on why the person should quit, then how best to quit (use of the stop smoking clinic at the surgery). The GP then ended the smoking discussion by suggesting the patient "just have a think" about taking up the offer of support (the Act), before switching to the topic of exercise within the same turn of talk. The entire smoking discussion lasted 2 min and 32 s.

In the 12 instances where the GP expressed that support was available to the patient, it was accepted only once, although this was by the

### 3.3. How did GPs ask about smoking status?

For our CA study, we included 66 instances where GPs asked about smoking. In these 66 instances, the smoking status question was predominantly positioned pre-diagnosis (i.e., history taking and examination) (53/66, 80%). By locating the smoking status questions here, GPs conveyed to patients that their smoking status was part of a larger, ongoing project (e.g., diagnostic work); potentially limiting further discussion at this stage. The location and design of these questions, therefore, indicated that only a minimal response was required, and that the reason for asking the status question was linked to their assessment of the patient's presenting concern or request. See Extract 1 below for an example.

Prior to Extract 1, the GP has mentioned that the patient sounds "wheezy". Within the extract, we observe the GP asking a series of history-taking questions relating to the patient's respiratory symptoms (lines 1–2, 11 and 16) whilst measuring his oxygen saturation (line 6). In line 19 the GP embeds the smoking status question – explicitly linking it to the action of the previous turns through the turn connector "and" (Heritage, 2009).

Extract 1 111901 (OiAM): Bad back and wheezy  
4:31 -4:56  
((GP looking at computer screen. Patient has finger pulse oximeter on.))

1 - DOC: >O:h so you are getting some phle::gm, what  
2 - ((Clicking computer mouse, looking at computer screen))  
3 [colour=is ↑tha::t?  
4 (0.3)  
5 PAT: .HHhh ↑U::r::↑gh::=↑Ur-uc:ht:: (. ) \*dunno? .ptck  
6 - DOC: ((Looks down at Oximeter then at screen))  
7 PAT: (\*can't remem-\*)  
8 DOC: \*↑O:::h==↑HHhhhhhh  
9 DOC: ((Smiles))  
10 PAT: Huh huh huh  
11 - DOC: >Do YOU SEE I::T< or a:re you >swallowing< it.=  
12 PAT: =I: ju↑s::(t) spi::ts it ou:t ↑o::r \*jus-\*(0.5)↑swa:llows  
13 PAT: ((Looks at screen, smiling))  
14 ↑i::t,  
15 (0.5)  
16 - DOC: Any ↑BLOO::DT:?  
17 (0.4)  
18 PAT: .PHhhh \*No:,\*\*  
19 - DOC: >No:, o↑kay<, (0.3) >and are you a< smoke::r?

smoker's wife, rather than the patient himself. In four consultations, the patient indicated that they *may* take up the support in the future. There was only one explicit rejection of support offered. In this consultation, the GP accepted the patient's decision and let them know the support would continue to be available, if they changed their mind (hence

In Extract 2 below, the patient's reason for the visit is to receive a repeat prescription of contraceptive pills. Prior to the smoking status question, the GP has begun a standard risk assessment.

Extract 2: 20201 (OiAM): Repeat prescription of contraceptive pill  
02:19 -02:25

1 DOC: ↑\*Mmn-° You're getting ↑o::n ↑well ↑with ↑i::t- >.HHhh<  
2 - >Okay what we need to do i::s<  
3 - check your ↑blood press↑ure?  
4 - ((Counts upcoming actions on fingers))  
5 (0.3)  
6 PAT: Ye:p,  
7 - DOC: Okay, (weigh↑t), .hhh and >ask< you a few other little  
8 - questions as well.=Do you ↑smo::ke?

aligning with the 3As guidance on what to do if the patient declined the support).

At line 2, "what we need to do is" functions as a list-preface followed by three items (Jefferson, 1990), epidemiologically relevant to the

decision to prescribe. The first two items, blood pressure (line 3) and weight (line 7), are delivered straightforwardly (no hesitations, perturbations, or additional lexical items). In contrast, what turns out to be a question about smoking status is initially veiled within the third and final item, “and ask you a few other little questions as well” (lines 7–8), which pre-emptively minimises the potentially delicate nature of the upcoming question by referring to it as “little.”

### Box 3: Examples of GPs' follow up quantification questions

“How much you smoking?”  
 “How many a day?”  
 “How many are you smoking now?”  
 “So how much do you smoke?”  
 “How much do you normally smoke?”  
 “How much are you smoking?”

Box 3. Examples of GPs' follow up quantification questions.

The most common grammatical format adopted for smoking status questions were information-seeking Yes/No interrogatives (YNI) (51/66 77%), please see Table 3 for further details on their design. Most YNI questions eliminated the need for a historical review of any previous smoking behaviour, conveyed no presupposition about the patient's current smoking status and did not contain a question preface that marked the upcoming question as potentially sensitive (Schegloff, 2007). In consultations where GPs did preface their YNI with a sensitivity marker (n = 5) they did so by minimising the importance of questions, ruling out reasons for asking other than it being routine (e.g. “just for our records ...” “just remind me ...”) or by seeking permission to ask (e.g. “do you mind me asking” ... “can I ask you?”).

An alternative grammatical format used for the status question were declarative statements such as “not (still) smoking” (n = 10), or declarative statements plus tag questions (n = 5). e.g., “you don't smoke Mrs X, do you?” (See Box 2). While YNIs seek information, declarative questions seek confirmation of a presupposition. “Still smoking”, for example, not only alludes to prior knowledge of status, but also presumes what the status is likely to be.

Importantly, all the question formats concerning the patient's smoking status, irrespective of whether they sought information or confirmation, were designed to require only a minimal yes/no response from the patient, rather than an expanded answer.

### 3.4. Follow-up quantification questions

One of the most commonly observed next steps by GPs, following smokers' responses to the smoking status question, was to follow-up with a quantification question (n = 12). Please see Box 3 for examples of quantification questions used.

Quantification questions sought a numerical representation of “rate of use” (Halkowski, 2012) e.g. “10 [cigarettes] a day”. These types of questions were predominantly delivered through ‘how’ prefaced questions, and oriented to the forthcoming response as one that would provide new information. However, in 2 cases, GPs used a “what” prefaced question (e.g. “what do you mean by a little”) to indicate clarification was needed on previously provided information. The information identified as requiring clarification, was non-numerical representations (e.g. “a little bit”) of how the patient smoked – provided in an (elaborated) response to a smoking status question (see section below on patient responses for more details).

In summary, both the position and composition of the smoking status question and follow-up quantification questions placed the topic of smoking firmly within the activity of information gathering.

### 3.5. Patients' responses to the smoking status and quantification questions

Patients typically departed from the normative constraints set by the design of the smoking status questions (15/21 consultations) by either providing a type-conforming response (e.g. “yes”) plus elaboration, such as “I know it's bad” or “I've been thinking of giving up” (4/15

Box 2: Types of formats used for the smoking status question

Question format	Yes/No interrogative (n=51/66)	Declarative (n= 10/66)	Declarative +tag question (n= 5/66)
Example	“Do you smoke?” “Are you a smoker?” “Can you remind me if you've smoked at all?” “Have you ever smoked?” “Have you stopped smoking?”	“And you don't smoke?” “And you're both still smoking?” “Don't smoke?” “Still smoking?”	“You're a <u>smoker</u> aren't you?” “You don't smoke do your Mrs X?” “And you don't smoke do you?”

Box 2. Types of formats used for the smoking status question.

consultations) or a resistive response (11/15 consultations).

Resistive responses challenged the (medical) agenda (Mishler, 1984; Stivers and Hayashi, 2010) imposed by the smoking status questions by: claiming that action had already been taken to address the issue (present in 5 consultations); by using social norms of smoking behaviour or using a social scenario to minimise and justify the smoking behaviour (present in 6 consultations) or by using indefinite frequencies to prevent exact quantification of their smoking (present in 10 consultations). In addition, one patient responded with a complaint, challenging a presuppo-

resisted providing a quantifiable amount that could be medically assessed through comparisons to other standards of behaviour (see Halkowski, 2012).

In Extract 3, below, a patient and their care worker (CW in transcript) are visiting the practice for the first time to organise prescriptions following the patient relocating. Immediately prior to where the extract starts, the GP asked permission to take the patient's blood pressure (which the patient agreed to).

**Extract 3 011110 (OiAM): Patient is new to practice, visiting with care worker to sort out prescriptions**  
5:08 -5:30

```

1  → DOC: Do you smo:::ke?
2      (1.0)
3  → PAT: >↑Sometimes,<
4  → DOC: So:me°ti::mes.°
5  → DOC: ((Nods and looks away))
6      (2.7)
7  → DOC: How of:te:n is s:o:::me↑fti::mes::f?
8      DOC: ((Initiates eye contact still getting equip ready))
9  → PAT: .Hhhh ↑No:::,=smph (0.5) not very muc:h.
10 → PAT: ((Shaking head))
11 → DOC: ↑Every ↑Dā:::Y?
12 → DOC: ((Putting on blood pressure strap))
13 → PAT: No:::↑[°not been [that much:::°)
14 → CSW: [No:::
15 → DOC: [Just pop your ↑ar:m out straight for me:?
```

sition of askability (Stivers, 2005): “why do you always have to ask that question”.

Seven GP-initiated smoker consultations only included the Ask component of the 3As. In one, the conversation was discontinued after strong resistance to both the smoking status and quantification questions. In other instances, patients' non-type-conforming resistive responses pre-emptively (but less forcefully) resisted progression of talk on smoking. The responses thereby appeared to anticipate awareness of the step-wise trajectory that these questions initiated.

### 3.6. Responding with indefinite frequencies

Some patients responded to a status question by contextualising their smoking behaviour through an indefinite frequency, which minimised their smoking behaviour e.g. ‘not a lot’, ‘sometimes’ or ‘hardly ever’. By providing this non-type conforming response in this location, the patient's talk resisted confirming a smoker identity and pre-emptively

The patient's response to the smoking status question (line 1), provides an example of a non-type-conforming response, “sometimes”; (line 3) which avoids dichotomous categorisation. In line 4, the GP offers a repeat receipt whilst nodding (line 5). In line 7, the GP goes on to ask a tailored quantification question “How often is sometimes?” This is notably said with a smile voice (marked by *f* symbol). However, the patient again (line 9) resists the terms of the question with “not very much”. In line 11, the GP pursues a response issuing a candidate answer question (Pomerantz, 1988) for confirmation, “Every day?” The patient disconfirms ‘not been that much’ without providing an alternative (line 13), which the carer confirms, (line 14), and the GP returns to examining the patient without revisiting the topic.

For a further example of how GPs attempt secure this information ‘on record’ see Extract 4, below where the GP moves from asking about smoking status to attempt quantification.

**Extract 4 111901 (OiAM): Bad back and wheezy**  
4:56 -5:15  
((GP looking at computer screen. Patient has finger pulse oximeter on and is looking at screen))

```

1  DOC: >No:, o↑kay<, (0.3) >and are you a< smoke::r?
2  DOC: ((Glances at pt, looks back at screen, starts to take off
3      oximeter, furrows eyebrows))
4  PAT: ((Glances at Dr, looks down at hands))
5  PAT: °°Yeah,°°
6  PAT: ((Looks at screen))
7      (0.4)
8  → DOC: °How° much are you smok↑i::ng?
9      ((Looking at screen))
10 → PAT: ↑Not ↑a ↑lo:t, and that ↑really is tha:t's genuine
11      °f(li::(hhhhke)f°, Been ↑trying to pack it i:n
12      PAT: ((Smiling))
13      DOC: ((Raises eyebrows, still looking at screen))
14      PAT: [(I really ↑ha::ve,)
15 → DOC: {(That's ALR↑I::GHT, ↑O::ne, ↑two::, ↑te::n, twen↑ty::?
16      ((Shakes head and briefly smiles, still looking at screen))
17      PAT: ↑TE:::N: I=↑s:'pe::c,
18      PAT: ((Glances at Dr))
19 → DOC: Te::n.
```



The patient responds to the quantification question (“How much are you smoking?” - line 8), with a negated positive, “Not a lot, and that really is that’s genuine” (line 10). The personal appeal, “and that really is genuine”, works to rule out negative inferences around the veracity of his answer. Despite this, the GP still pursues a specific metric (line 15), this time by modelling an option list of candidate answers that might satisfy their purpose-for-asking, from which the patient specifies ‘Ten’.

Patients’ responses to GPs’ quantification questions (that followed smoking status questions) also resisted their agenda by providing an indefinite frequency e.g. “not much,” rather than the sought after numerical rate/count. When such responses were given in this location (6/12 consultations), numerical conversions were also often pursued by GPs – giving weight to the suggestion that the agenda of quantification questions was to obtain a metric. These type of pursuits (both after status and quantification questions) were also observed by [Halkowski \(2012\)](#) in his study on doctors’ interactional work to elicit counts and rates of alcohol use (also see [Raymond and White, 2017](#) on ‘time-reckoning’ pursuits in response to ‘how long’ and ‘when’ questions).

Negotiating the medical relevancy of the smoking behaviour through reference to social categories/situations.

discussions between doctors and patients in Norwegian and Swedish secondary and emergency care visits ([Iversen, 2017](#)). Stating smoking only happened socially, at work or in one case, while they were in a rehabilitation centre (where there was ‘little else to do’) was used to downplay smoking behaviour – with the patient’s talk attributing the behaviour to a specific social situation, rather than to themselves.

### 3.7. Claiming action is already underway

Patients also actively resist further discussion about their smoking behaviour by orienting to the topic as redundant, due to the fact that they are already addressing it. In Extract 6, a young woman presented concerns about an ongoing (self-diagnosed) chest-infection and a need for a repeat prescription of an asthma inhaler. Before the extract starts, the GP took a history of her symptoms, previous medical decisions regarding asthma (diagnosis and prescriptions), and past history of chest infections. Prior to, and during, the occurrence of the smoking status question (line 5), the GP has been examining the patient.

**Extract 6 40412 (OiAM:) Chronic cough and asthmatic tendencies**  
2:54 -3:07

```

1  DOC:  *jO:~ka::y*, >and tthen we:'ll-< (just have a) lis:ten to your ches::t
2         jas twe::ll,
3         (0.8)
4  DOC:  ((After getting stethoscope starts to return to desk))
5 -  DOC:  Do you smo:(k::e?
6 -      (0.3)
7 -  PAT:  .Hh E::RM >yeah but I have< kind of tsto::pped over the last wee::k
8  DOC:  ((Begins to remove oximeter))
9  PAT:  'cause I just 'haven't been able te::r-
10         (0.5)
11 PAT:  ((Taps throat then briefly glances up at GP))

```

Another way that patients’ talk resisted potential negative judgement associated with smoking was by negotiating their membership of the category ‘smoker’. In Extract 5, below, we return to the consultation presented in Extract 2, where the patient was seeking a repeat contraceptive prescription.

We observe an early indication of the smoking status question generating interactional trouble through the delayed and perturbed start to the patient’s type-conforming response (lines 6–7). The patient flags an upcoming disjunctive shift “yeah but” ([Antaki, 2008](#)) before expanding her response “I have kind of stopped” (line 7), suggesting that the question is inapposite; making it harder for the GP to progress to advice-giving ([Shaw and Hepburn, 2013](#)).

**Extract 5: 20210 (OiAM): Seeking repeat prescription of contraceptive pill**  
(continuation of Extract 2)  
2:23-2:28

```

1  DOC:  Okay, (weigh:t), .hhh and t>ask< you a few other little questions
3         as well.=Do you tsmo::ke?
4         (0.7)
5 - PAT:  tE:::R, (0.5) tY::EA:::H, I (a:m) quite a casual smoker but
6         I do Smoke ye:t::h

```

Here the patient’s response to the smoking status question is delayed (pauses in lines 4 and 5) and marked by verbal perturbations (elongated “Er” and “yeah” line 5), which indicate difficulty in responding ([Jefferson, 1980](#)). This indication of trouble is corroborated by an extension to her type-conforming answer “yeah”, which negotiates membership away from the more problematic category of ‘smoker’ by aligning with a less problematic sub-category - ‘casual’ smoker (line 5). This category membership minimises the extent of her smoking and enables her to benefit from the ratification afforded by framing her behaviour as socially permissible.

This interactional strategy has also been found in smoking cessation

Claiming to have already performed an action that is advised by another has been identified as an interactional strategy for resisting the role of advisee ([Ekberg and LeCouteur, 2015](#); [Shaw and Hepburn, 2013](#)), and for resisting treatment recommendations ([Barnes, 2018](#)). Here, the patient is using the same strategy to pre-emptively resist forthcoming advice and/or a recommendation to quit. While it would be very difficult to refute the advantages of quitting smoking, the patient can use their claim of ‘firstness’ to challenge the relevancy of any such advice were it to follow. Claiming ‘firstness’ also manages the patient’s moral stake on this topic, as it removes the moral question of why they have not addressed this issue themselves ([Shaw and Hepburn, 2013](#)). By

stating prior action has been taken, the patient can portray herself as someone who wants to look after their own health and get better, i.e. as someone who is a ‘good patient’.

In conclusion, patients sometimes used their responses to the smoking status and quantification questions to challenge their appositeness by minimising the extent of their smoking or rendering potential next actions redundant. In the latter instances, patients oriented to an expectation of what canonical next steps the GP would take. Combined, the interactional features of the GPs’ topic initiating questions, and the work done by patients’ responses, frustrate the implementation of the smoking status question as a first step in smoking VBA.

### 3.8. How did GPs advise?

As reported in the coding results section, GPs advised patients on the best form of support (a combination of medication and specialised support - see Extract 7 for an example) in only 3/25 (12%) consultations. Patients responded to this type of advice by either receipting the information with a minimal token (e.g. “okay”) (n = 2) or by asking for further information (n = 1).

#### Extract 7 60813 (OiAM): Patient has been coughing up blood 3:33-3:55

```

1 → DOC: Okay, ↑MOS::T ↑people >who:se-< you- you're two and a
2 →      half times more likely to *successfully give u:p
3 →      if you co:me along to the clin[ic]. .Hhhhh
4   PAT:                                     [Yea::h.
5 → DOC: And the::y, (0.5) f:or two reasons.=↑One is they can
6 →      tal:k to you about i:t and {struc:t- hel:p you
7 →      s:tru:cture your giving up rather than you just doing
8 →      it ↑throu:gh (.) shee:r (mi:ght-)willpower,
9   PAT: Yea:h,
10 → DOC: U::m and the ↑other is that they can pres*↓cri:be ↑you
11 →      ↓stuff: ↓as ↓we:ll ↓which ↓just ↓makes ↓it ↓a ↓bit
12 →      ↓easie:r*.
13  PAT: O↑ka::y,
```

If applying a broader definition of ‘Advise’ than was used in the initial coding process (as an utterance that just gave information on support options, not on what support works best), then Advise could have been coded in 11/25 (44%) GP-initiated smoker consultations. The most frequent type of support mentioned in both uses of the Advise step was stop smoking clinics (n = 9/11). The extent of information given by the GP on what help the clinic provided, varied substantially. The clinic was either briefly mentioned or specific details were given about what type of support they provided. In other coded Advise talk, GPs mentioned treatments that were available, but did not associate them with the stop smoking clinic (n = 2/11).

Advise talk was typically located as part of an extended sequence following the initial smoking status question. In the consultations (n = 6/11) in which the (broad and more specific) advice followed immediately after the smoking status question, the GP linked the patient’s presenting problem and smoking: a), immediately before giving the advice (in 4 consultations) b), straight after delivering advice (one consultation) and c), after stating the (general) importance of quitting (one consultation).

In 4/11 consultations the GP moved on to another activity (related to the presented concern) prior to re-topicalising smoking. GPs often reintroduced smoking within treatment planning, sometimes by linking back to the presenting problem and their smoking behaviour before

proceeding to give advice. These ‘split’ discussions were typically started pre-diagnosis and returned to post-diagnosis in the treatment planning phase of the consultation.

Advising on the reasons why a patient should quit smoking is a step that the NCSCT specifically recommends against using (NCSCT, 2018), and was not counted as an instance of Advise in this dataset. However, we observed that GPs did give treatment implicative advice (advising patients on why they should quit by linking smoking to one of the patient’s health issues, often the presenting issue, and hence implying quitting could form part of a treatment plan – Bergen, 2020) in 13 consultations and gave plain advice (stating that quitting would be good for their health generally – Bergen, 2020) in 3 consultations. There was observable active resistance – an overt, verbalised challenge (see Stivers, 2005) to both of these types of advice giving (n = 8/16, 50%). The resistance did not challenge the link, but downplayed the seriousness of the smoking, highlighted other contributing causes to the health issue, prioritised another health issue that stopping smoking may negatively effect (their weight) or referred to reasons why quitting would be difficult. GPs advised on why patients should quit without detailing how support could assist them (either by providing information on the best forms of support or by just listing forms of support) in 6 consultations.

### 3.9. How did GPs act?

The NCSCT training module on the 3As (2021) recommends that the final Act step is tailored to the patient’s response. If patients are ready to take action, then the GP can either refer them onto a specialist or arrange a further appointment to review treatment options. If the patient is not ready to stop smoking, then the GP can use the Act step to emphasise that support is available in the future, when the patient is ready to try quitting.

The only format used to recommend smoking cessation support in GP-initiated smoker consultations was an offer. Nearly all offers (n = 9/12, 75%) adopted a conditional format e.g. “if you want to”, framing the offer as anticipatory – a response to future readiness. The offers followed displays of patient resistance within the preceding smoking discussion in 8/9 consultations.

Extract 8 provides an example of a patient resisting a conditional offer of smoking support. Immediately prior to this part of the consultation, a discussion on the patient’s presenting concern (a painful verruca) has drawn to a close. While issuing the prescription, the GP makes reference to a note on the patient’s medical records stating they smoke – using this as a means of transitioning into a smoking status question.

**EXTRACT 8 P1GP2R35 (HaRI): Painful verruca**  
**3:14 – 4:08**  
*((GP just finished viewing medical records and explaining how to use prescribed treatment.*

1     DOC:    Y:e::|a::h, I can see here that you  
2     DOC:    *((Points to screen, faces Pt and imitates smoking))*  
3     DOC:    smo:::ke. Do=[|you:::?  
4     PAT:    [Sometimes.  
5     DOC:    (But-) [|yea:::]h.  
6     PAT:    [M- |U:::R],{>|Only (like really when) I had a drink  
7             but yeah I do do smoke yea::h.  
8     DOC:    |Hmm::mn.  
9             (0.4)  
10    DOC:    You haven't thought about jus::t givi::ng °°|it |u:p,°°  
11    DOC:    *((Shakes head, gets prescription form, keeps eye contact))*  
12             It's [not |good for you.])  
13    PAT:    [Na:::h don't (it-)].  
14             *((Tilts head, lifts one side of mouth + cheek*  
15             *in dismissive gesture, shifts gaze down, stops eye contact))*  
16    PAT:    I jus- no I suppose not no not really;  
17             (0.3)  
18    DOC:    £You do(h)n't really wants to st|°[op it:..°  
19    PAT:             [|NA:::h. >Obviously I  
20    PAT:             *((Slightly smiling))*  
21             don't want to< stop TOO: mu:ch:::,  
22    PAT:             *((Folds arms))*

*((19 lines omitted))*

41    DOC:    °(|That |is |i:t°|finished),  
42             (1.6)  
43    PAT:    Lovely. [Thank you-  
44    DOC:    *((Handing over prescription))*  
45    DOC:    [If you |cha:nge your |mi::nd and you w:ant to sto::p  
46    PAT:    *((Gathering belongings))*  
47    PAT:    we ca:n |alwa:ys he::lp.  
48    PAT:    *((Looks at GP))*  
49    PAT:    Lovely. I'll- >I'll come back down then<.=THANK you  
50    PAT:    *((Stands up and walks towards door))*

Here the patient employs an indefinite frequency to reply to the smoking status question –line 4 and claims the categorisation of a social smoker – line 6. In line 10, the GP asks a negatively framed declarative question, “You haven’t thought about just giving it up,” that is advice-implicative (Shaw et al., 2015). In response the patient produces an elongated ‘Nah,’ abandoning a possible account, ‘I jus-’, with a qualified confirming ‘no not really’ (lines 13–16). The GP then pursues this response with a further negative declarative question at line 18 presupposing the basis for the patient’s resistance that the patient confirms. A little later, we see the GP offering support - contingent on a change of

state regarding patient desire (“If you change your mind and you want to stop, we can always help” –lines 45, 47), displaying a sensitivity to earlier patient resistance.

However, this offer format was also used when there had not been a prior resistance. Extract 9, below, provides an illustration. The patient has not been adhering to their diabetes medication, and the consultation has already been running for 21 min prior this point. However, prior to the discussion presented, the patient has, in response to a smoking status question, indicated a desire to quit.

**EXTRACT 9 P4GP6R162 (HaRI): Asthma and diabetes**  
**21:12 – 21:30**  
*((GP just finished prescribing asthma and diabetes medication)).*

1     DOC: I think th- that's enough to start you off  
2     [otherwise it's ] gonna be >too much< (.) u::m so=  
3     PAT: [°yea:h° ↑ha ↑ha]  
4     DOC: that's ↑your ↑ventolin inhaler (.) the space:r (.) and the glipizide  
5     PAT: ↑all right  
6 –     °and then >we'll take it from there°< (.) we do also have a >stop  
7 –     smoking clinic< here as ↑↑we::ll, (0.4) which you can book into:: (.)  
8 –     ↑if- whether you want to do that straight awa::y or if you want to  
9 –     (0.4) get these appointments out the way first [but],  
10    PAT: [°↑le]t's get this  
11       out the way°  
12    DOC: °↑okay°

Following prescribing, at line 6, the GP asserts that the practice has a stop smoking clinic. However, there is no immediate uptake from the patient. They then extend the turn with an increment 'which you can book into'. Still with no uptake, the GP then presents two alternative options (booking into the stop smoking clinic now or later); orienting to the possibility that the patient might not be ready to take action. The patient opts to defer action on smoking for now.

Overall, the design features of GPs' offers of support for smoking cessation conveyed low agency and endorsement of the recommended action (Stivers and Barnes, 2018). It was often unclear what patients' thought about, or intended to do about, these offers. Within our data, there were few instances of GPs pursuing a response to an offer of smoking cessation support. In one instance, the GP followed-up a non-response by clearly stating that they wanted them to quit and linking a discussed health issue (high blood pressure) with smoking. In another case, a GP followed a non-response with an explanation of why the stop smoking clinic provided the best chance of successfully quitting, plus linked the presenting problem to smoking. The lack of pursuit of a response stands in marked contrast to how health professionals normally pursue a response to treatment recommendations (Stivers and Timmermans, 2020). We observed GPs sometimes restricting the opportunity space for patients to respond (by undertaking concurrent activity, such as writing and handing over a prescription or rapid/latched topic shifts and/or through a lack of clear cues in turn design to mobilise patient response (e.g. rising intonation or a tag question at the end of the offer).

The Act of framing smoking cessation support as future based, within consultations where patients demonstrated resistance to the topic beforehand, arguably aligns with the 3As recommendation to accept when the patient is not ready and ensure they know support will still be available if they change their mind. However, in this data set, GPs were

typically not responding to patients' responses to the Advise step (Advise only preceded an offer of support (Act) in 1/12 consultations), but were instead tailoring their 'Act' step in response to their first step, Ask, or other interactional actions they had taken (e.g. the quantification questions they asked). This raises the question of whether they were truly tailoring their Act step to patients' preferences regarding smoking cessation support or were pre-emptively making interactional choices based on initial 'problematic interactional steps. Furthermore, without a response to the Advise step or a pursuit of a response to the offer of support, GPs were left without an indication of what the patient intended to do. In addition to possibly delaying action, this outcome may have hindered their ability to tailor follow up smoking discussions.

#### 4. Discussion

Through combining content coding for the 3As with conversation analysis, we examined the distribution of VBA in video-recorded primary care consultations, and how its delivery can be consequential for the trajectory of smoking discussions with patients. The three steps as envisaged in the brief intervention guidance occurred in only one consultation. GPs commonly assessed patients' smoking status, but usually in the context of ruling in/out causative factors to a presenting problem pre-diagnosis – potentially invoking a moral stance and creating a combative environment from the outset. This suggestion is supported by the frequency in which the smoking status and quantification questions led to patient resistance. These resistance displays shaped the unfolding trajectory of smoking discussions, resulting in conditional offers of cessation support, responses to which were seldom pursued. Smoking cessation guidelines and training may therefore wish to consider encouraging GPs to initiate smoking discussions through other means, which are less likely to lead to resistance.

**Table 3**  
Details on yes/no interrogative questions used to ask about smoking status.

	Types of yes/no interrogatives used by GPs to enquire about smoking status						
	YNIs conveyed no presuppositions about the patient's current smoking status				YNI questions revealed an epistemic stance by indexing prior knowledge		
Number of occurrences in the 51 consultations in which a YNI was used to ask about smoking status	"Do you" framed questions	"Are you" framed questions	"Have you ever/were you ever/if you've ever" framed questions	"Are there any smokers in your family?"	"Do you still" framed questions	"Are you still" framed questions	"Have you stopped" framed questions
	35	6	4	1	2	2	1
Inclusion of additional lexical item such as "at all", "at the moment and years ago"	n = 14					/	/



GPs also commonly gave advice, mostly on why the patient should stop (to reduce health risks) than advising on the best ways to stop smoking. This approach is more akin to US guidelines, which advocate this activity, rather than English guidelines, which advocate simply advising on how to stop smoking. Advising people on why they should stop smoking was often followed by active resistance. This finding corroborates sociological work that discredits the use of a social cognition model (that proposes understanding of harm is the issue and education is the answer) and findings from earlier work on recorded consultations, where advising people presenting with smoking-related health problems on why they should quit led to overt resistance (Pilnick and Coleman, 2003). Contrastingly, Bergen (2020) found that advice relating to behaviour change may be more acceptable to patients in (US) primary care consultations (at least in comparison to plain, unrelated advice) when the physician frames the advice as 'treatment-implicative' (a format which uses the epistemic authority the physician has on the medical issue, to demonstrate the necessary deontic authority to advise a patient on their behaviour/lifestyle). Such conflicting findings perhaps highlights the need for cross-cultural comparative studies on specific behaviours/lifestyle discussions.

The interactional challenges of addressing smoking may have contributed to GPs electing to use recommendation formats (and deliveries) that framed the patient as the instigator of the action and making this something for the patient to decide in the future. Connabeer (2021) found that GPs frequently used 'if then' conditional constructions to manage anticipated or actual difficulties in giving advice during lifestyle discussions. This suggests that the use of conditionals may be a broader strategy, by GPs, on how to manage interactional difficulties during lifestyle discussions.

We have highlighted common interactional problems in smoking discussions. For example, asking about smoking appears to be helpful for GPs in establishing a relevant epidemiological factor linked to diagnostic probabilities, but a delicate matter for patients. GP records contain a relatively recent record of smoking status of almost all patients (Gao et al., 2022), and most GP computer systems in use in the UK display this during the consultation. Whether the patient has stopped smoking in the past year or two since the last update has little bearing on the probability of, for example, smoking-related cancer. An alternative, which is arguably more epidemiologically relevant, is for GPs to ask whether a person has ever smoked, which may not carry the same potential for generating resistance.

GPs may also benefit from further research on: 1), whether the 3As approach to Advising (by detailing why support offered would provide the best opportunity for them to succeed in their smoking cessation attempt) leads to less resistance than their more common approach of linking health problems to smoking and 2), whether different action formats, are more successful in eliciting uptake from patients. Future behaviour change interventions could then be built combining evidence with relevant sociological theory, which, in turn, could inform policy recommendations – ensuring tobacco policy is based on what *works* in practice, as well as on what action is wanted/needed and why.

There are limitations to this study. We examined over 500 patient consultations, but the prevalence of smoking among them was unknown. We were also unable to assess how patients responded to a VBA intervention as conceived because no such examples were observed. Lastly, we chose to focus our analyses on GP-initiated discussions and did not examine consultations where the patient first mentioned smoking. A further study examining smoking discussions in this type of context may yield insights on how this situation may affect the suitability of 3As steps and/or how they should be delivered.

In conclusion, our findings have illustrated how common ways of talking about smoking during primary care consultations can lead to resistance and halt progressivity. Describing the value of stop smoking support, making a clear unambiguous offer of support, and seeking commitment were rare. New guidance is needed to address this; however, developers should consider the interactional difficulties that

following idealised recommendations (which do not reflect how patients may respond), may engender in clinical practice.

## Credit author statement

**Hannah Wheat:** Conceptualization, Methodology, Investigation, Formal analysis, Writing – original draft, **Rebecca Barnes:** Formal analysis, Supervision, Writing – review & editing, **Paul Aveyard:** Writing – review & editing, Supervision, **Fiona Stevenson:** Writing – review & editing, **Rachna Begh:** Funding acquisition, Formal analysis, Writing – review & editing, Supervision.

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## Conflicts of interest

Authors declare no conflicts of interest.

## Data availability

The authors do not have permission to share data.

## References

- Albury, C., Hall, A., Syed, A., et al., 2019. Communication practices for delivering health behaviour change conversations in primary care: a systematic review and thematic synthesis. *BMC Fam Pract* 20, 111. <https://doi.org/10.1186/s12875-019-0992-x>.
- Antaki, C., 2008. Formulations in psychotherapy. In: Peräkylä, a., Antaki, C., Vehviläinen, S., Leudar, I. (Eds.), *Conversation Analysis and Psychotherapy*. Cambridge University Press, pp. 26–42.
- Asthma UK, British Lung Foundation, 2021. A Breath of Fresh Air: Research into the Training Needs of UK GPs on Very Brief Advice for Smoking Cessation. Retrieved on March 1, 2022 from. <https://www.asthma.org.uk/55d7e859/globalassets/campaigns/publications/vba-on-smoking-cessation-final.pdf>.
- Aveyard, P., Begh, R., Parsons, A., West, R., 2012. Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance. *Addiction* 107 (6), 1066–1073. <https://doi.org/10.1111/j.1360-0443.2011.03770.x>.
- Barnes, R.K., 2018. Preliminaries to treatment recommendations in UK primary care: a vehicle for shared decision making? *Health Communication* 33 (11), 1366–1376.
- Barnes, R.K., 2017. One in a Million: A study of primary care consultations. <https://doi.org/10.5523/bris.13sq4s0w66l1x20sye7s47wv>.
- Baum, F., Fisher, M., 2014. Why behavioural health promotion endures despite its failure to reduce health inequities. *Sociol. Health Illness* 36 (2), 213–225.
- Bergen, C., 2020. The conditional legitimacy of behavior change advice in primary care. *Soc. Sci. Med.* 255, 112985 <https://doi.org/10.1016/j.socscimed.2020.112985>.
- Brown, J., West, R., Angus, C., Beard, E., Brennan, A., Drummond, C., Hickman, M., Holmes, J., Kaner, E., Michie, S., 2016. Comparison of brief interventions in primary care on smoking and excessive alcohol consumption: a population survey in England. *Br. J. Gen. Pract.* 66 (642), e1–e9. <https://doi.org/10.3399/bjgp16X683149>.
- Butler, C.C., Pill, R., Stott, N.C.H., 1998. Qualitative study of patients' perceptions of doctors' advice to quit smoking: implications for opportunistic health promotion. *BMJ* 316, 1878–1881.
- Cahill, K., Stevens, S., Perera, R., Lancaster, T., 2013. Pharmacological interventions for smoking cessation: an overview and network meta-analysis. *Cochrane Database Syst. Rev.* 31 (5), CD009329. <https://doi.org/10.1002/14651858.CD009329.pub2>.
- Chase, E.C., McMenamin, S.B., Halpin, H.A., 2007. Medicaid provider delivery of the 5A's for smoking cessation counseling. *Nicotine Tob. Res.* 9 (11), 1095–1101. <https://doi.org/10.1080/14622200701666344>.
- Coleman, T., 1998. Anti-smoking advice in general practice consultations: A description of factors influencing provision of advice and the development of a method for describing. Unpublished MD Thesis. University of Leicester.
- Connabeer, K., 2021. Lifestyle advice in UK Primary Care consultations: doctors' use of conditional forms of advice. *Patient Educ. Counsel.* 104 (11), 2706–2715.
- Ekberg, K., LeCouteur, A., 2015. Clients' resistance to therapists' proposals: managing epistemic and deontic status. *J. Pragmat.* 90, 12–25.
- Feenstra, T.L., Hamberg-van Reenen, H.H., Hoogenveen, R.T., Rutten-van Mölken, M.P., 2005. Cost-effectiveness of face-to-face smoking cessation interventions: a dynamic modeling study. *Value Health* 8 (3), 178–190. <https://doi.org/10.1111/j.1524-4733.2005.04008.x>.



- Freeman, S.H., 1987. Health promotion talk in family practice encounters. *Soc. Sci. Med.* 25 (8), 961–966.
- Gao, P., Aveyard, P., Lindson, N., Hartmann-Boyce, J., Watkinson, P., Young, D., Coupland, C., Clift, A.K., Harrison, D., Gould, D., Pavord, I.D., Smith, M., Hippisley-Cox, J., 2022. Association between smoking, e-cigarette use and severe COVID-19: a cohort study. *International Journal of Epidemiology* 028. <https://doi.org/10.1093/ije/dyac028>.
- GBD 2019 Tobacco Collaborators, 2021. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. *Lancet* 397 (10292), 2337–2360. [https://doi.org/10.1016/S0140-6736\(21\)01169-7](https://doi.org/10.1016/S0140-6736(21)01169-7).
- Guassora, A.D., Baarts, C., 2010. Smoking cessation advice in consultations with health problems not related to smoking? Relevance criteria in Danish general practice consultations. *Scand. J. Prim. Health Care* 28 (4), 221–228.
- Guassora, A.D., Tulinus, A.C., 2008. Keeping morality out and the GP in: consultations in Danish general practice as a context for smoking cessation advice. *Patient education and counselling* 73 (1), 28–35.
- Halkowski, T., 2012. 'Occasional' drinking: some uses of a non-standard temporal metric in primary care assessment of alcohol use. In: Beach, W.A. (Ed.), *Handbook of Patient-Provider Relationships: Raising and Responding to Primary Concerns about Health, Illness, and Disease*. NY Hampton Press, pp. 321–329.
- Hepburn, A., Bolden, G.B., 2017. *Transcribing for Social Research*. Sage.
- Heritage, J., 2009. Questioning in medicine. In: Freed, A.F., Ehrlich, S. (Eds.), *Why Do You Ask?: the Function of Questions in Institutional Discourse*. Oxford University Press, pp. 42–68.
- HOD (Ministry of Health and Care Services in Norway), 2004. *Nasjonale Faglige Retningslinjer for Røykeavvenning I Primærhelsetjenesten*. Sosial- og helsedirektoratet, Oslo.
- Iversen, C., 2017. Now or never: smoking cessation discussions in the face of serious illness. *Sociol. Health Illness* 39 (8), 1330–1348.
- Jackson, S.E., Garnett, C., Brown, J., 2020. Prevalence and correlates of receipt by smokers of general practitioner advice on smoking cessation in England: a cross-sectional survey of adults. *Addiction* 116 (2), 358–372. <https://doi.org/10.1111/add.15187>.
- Jefferson, G., 1980. On 'trouble-premonitory' response to inquiry. *Socio. Inq.* 50 (3/4), 153–185.
- Jefferson, G., 1990. List-construction as a task and a resource. In: Psathas, G. (Ed.), *Interaction Competence*. University Press of America, pp. 63–92.
- Jepson, M., Salisbury, C., Ridd, M.J., Metcalfe, C., Garside, L., Barnes, R.K., 2017. The 'One in a Million' study: creating a database of UK primary care consultations. *Br. J. Gen. Pract.* 67 (658), e345–e351. <https://doi.org/10.3399/bjgp17X690521>.
- Jha, P., 2020. The hazards of smoking and the benefits of cessation: a critical summation of the epidemiological evidence in high-income countries. *Elife* 9, e49979. <https://doi.org/10.7554/eLife.49979>.
- McEwen, A., Pooler, J., Lionis, C., Papadakis, S., Tsiligianni, I., Anastasaki, M., Sherahiev, U., 2019. Adapting Very Brief Advice (VBA) on smoking for use in low-resource settings: experience from the FRESH AIR project. *J. Smok. Cessat.* 14 (3), 190–194. <https://doi.org/10.1017/jsc.2019.4ur>.
- Mishler, E.G., 1984. *The Discourse of Medicine: Dialectics of Medical Interviews*, vol. 3. Greenwood Publishing Group.
- NCSCT, 2018. Very Brief Advice Training Module. Retrieved on March 1, 2022 from. <https://www.ncsct.co.uk/publication/very-brief-advice.php>.
- NCSCT, 2021. Very Brief Advice on Smoking Plus (VBA+). Retrieved on September 19, 2022 from. <https://elearning.ncsct.co.uk/usr/docs/VBA+.pdf>.
- NICE, 2018. Stop Smoking Interventions and Services - NICE Guideline [NG92]. Retrieved on March 1, 2022 from. [www.nice.org.uk/guidance/ng92](http://www.nice.org.uk/guidance/ng92).
- Parsons, Talcot, 1951. Illness and the role of the physician: a sociological perspective. *Am. J. Orthopsychiatry* 21, 456–460. <https://doi.org/10.1111/j.1939-0025.1951.tb00003.x>.
- Pillet-Shore, D., 2006. Weighing in primary-care nurse-patient interactions. *Soc. Sci. Med.* 62 (2), 407–421.
- Pilnick, A., Coleman, T., 2003. I'll give up smoking when you get me better': patients' resistance to attempts to problematise smoking in general practice (GP) consultations. *Soc. Sci. Med.* 57 (1), 135–145. [https://doi.org/10.1016/S0277-9536\(02\)00336-2](https://doi.org/10.1016/S0277-9536(02)00336-2).
- Pilnick, A., Coleman, T., 2006. Death, depression and 'defensive expansion': closing down smoking as an issue for discussion in GP consultations. *Soc. Sci. Med.* 62 (10), 2500–2512.
- Pilnick, A., Coleman, T., 2010. 'Do your best for me': the difficulties of finding a clinically effective endpoint in smoking cessation consultations in primary care. *Health* 14 (1), 57–74. <https://doi.org/10.1177/1363459309347489>.
- Pirie, K., Peto, R., Reeves, G.K., Green, J., Beral, V., 2013. Million Women Study Collaborators. The 21st century hazards of smoking and benefits of stopping: a prospective study of one million women in the UK. *Lancet* 381 (9861), 133–141. [https://doi.org/10.1016/S0140-6736\(12\)61720-6](https://doi.org/10.1016/S0140-6736(12)61720-6).
- Pomerantz, A., 1988. Offering a candidate answer: an information seeking strategy. *Commun. Monogr.* 55 (4), 360–373. <https://doi.org/10.1080/03637758809376177>.
- Public Health England, 2020. Smoking and Tobacco: Applying All Our Health. Retrieved on March 1, 2022 from. <https://www.gov.uk/government/publications/smoking-and-d-tobacco-applying-all-our-health/smoking-and-tobacco-applying-all-our-health>.
- Raymond, C.W., White, A.E.C., 2017. Time reference in the service of social action. *Soc. Psychol. Q.* 80 (2), 109–131.
- Sacks, H., Schegloff, E.A., Jefferson, G., 1974. A simplest systematics for the organization of turn-taking for conversation. *Language* 50, 696–735.
- Schegloff, E., 2007. *Sequence Organization in Interaction: A Primer in Conversation Analysis*, 1ST edition, vol. 1. Cambridge University Press.
- Seguin, M., Hall, L., Atherton, H., Barnes, R., Leydon, G., Murray, E., Pope, C., Zieband, S., Stevenson, F.A., 2018. Protocol paper for the 'Harnessing resources from the internet to maximise outcomes from GP consultations (HaRI)' study: a mixed qualitative methods study. *BMJ Open* 8 (8), e024188.
- Sharpe, T., Alsahtane, A., Ward, K., Doyle, F., 2018. Systematic review of clinician-reported barriers to provision of smoking cessation interventions in hospital inpatient settings. *J. Smok. Cessat.* 13 (4), 233–243. <https://doi.org/10.1017/jsc.2017.251>.
- Shaw, C., Hepburn, A., 2013. Managing the moral implications of advice in informal interaction. *Res. Lang. Soc. Interact.* 46 (4), 344–362.
- Shaw, C., Potter, J., Hepburn, A., 2015. Advice-implicative actions: using interrogatives and assessments to deliver advice in mundane conversation. *Discourse Stud.* 17 (3), 317–342. <https://doi.org/10.1177/1461445615571199>.
- Sorjonen, M.L., Raevaara, L., Haakana, M., Tammi, T., Peräkylä, 2006. Lifestyle discussions in medical interviews. In: Heritage, J., Maynard, D.W. (Eds.), *Communication in Medical Care: Interaction between Primary Care Physicians and Patients*. Cambridge University Press, Cambridge.
- SoS (National board of health and welfare in Sweden), 2011. *Nationella Riktlinjer För Sjukdomsförebyggande Metoder: Tobaksbruk, Riskbruk Av Alkohol, Otillräcklig Fysisk Aktivitet Och Ohälsosamma Matvanor*. Socialstyrelsen, Stockholm.
- Stead, L.F., Buitrago, D., Preciado, N., Sanchez, G., Hartmann-Boyce, J., Lancaster, T., 2013. Physician advice for smoking cessation. *Cochrane Database Syst. Rev.*, CD000165 <https://doi.org/10.1002/14651858>, 2013. Issue 5.
- Stivers, T., 2005. Parent resistance to physicians' treatment recommendations: one resource for initiating a negotiation of the treatment decision. *Health Commun.* 18 (1), 41–74. <https://doi.org/10.1207/s15327027hc1801.3>.
- Stivers, T., Barnes, R.K., 2018. Treatment recommendation actions, contingencies, and responses: an introduction. *Health Commun.* 33 (11), 1331–1334.
- Stivers, T., Hayashi, M., 2010. Transformative answers: one way to resist a question's constraints. *Lang. Soc.* 39, 1–25. <https://doi.org/10.1017/S0047404509990637>.
- Stivers, T., Timmermans, S., 2020. Medical authority under siege: how clinicians transform patient resistance into acceptance. *J. Health Soc. Behav.* 61 (1), 60–78.
- US Preventive Services Task Force, Krist, A.H., Davidson, K.W., Mangione, C.M., Barry, M.J., Cabana, M., Caughey, A.B., Donahue, K., Doubeni, C.A., Epling Jr., J.W., Kubik, M., Ogedegbe, G., Pbert, L., Silverstein, M., Simon, M.A., Tseng, C.W., Wong, J.B., 2021. Interventions for tobacco smoking cessation in adults, including pregnant persons: US preventive services task Force recommendation statement. *JAMA* 19;325 (3), 265–279. <https://doi.org/10.1001/jama.2020.25019>. PMID: 3346434.
- Vangeli, E., Stapleton, J., Smit, E.S., Borland, R., West, R., 2011. Predictors of attempts to stop smoking and their success in adult general population samples: a systematic review. *Addiction* 106 (12), 2110–2121. <https://doi.org/10.1111/j.1360-0443.2011.03565.x>.
- Vogt, F., Hall, S., Marteau, T.M., 2005. General practitioners' and family physicians' negative beliefs and attitudes towards discussing smoking cessation with patients: a systematic review. *Addiction* 100 (10), 1423–1431. <https://doi.org/10.1111/j.1360-0443.2005.01221.x>.
- White, C., Oliffe, J.L., Bottorff, J.L., 2013. Tobacco and the invention of quitting: a history of gender, excess and will-power. *Sociol. Health Illness* 35 (5), 778–792.
- Williams, S.J., Calnan, M., 1994. Perspectives on prevention: the views of general practitioners. *Sociol. Health Illness* 16, 372–393. <https://doi.org/10.1111/1467-9566.ep11348775>.