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Title page

Safety-netting communication during telephone consultations: an observational study using recorded consultations

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Abstract

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Background

In 2024, one-third of NHS GP consultations in England were by telephone. While remote consulting can be convenient for patients and GPs, it may increase diagnostic uncertainty. Safety-netting advice (guidance on when and how patients should seek further medical help) is a tool used to mitigate clinical risk, but its delivery during telephone consultations has not been studied in detail.

Aim

Evaluate the communication, documentation, and patient recall of safety-netting advice in GP telephone consultations.

Design and setting

Observational study of 96 recorded telephone consultations from seven practices in South West England during 2023-24.

Method

Consultations were coded using a validated Safety-netting Coding Tool. Regression models explored factors associated with safety-netting advice. Patient recall was assessed using post-consultation questionnaires.

Results

There were 93 instances of safety-netting advice, delivered in 60.4% (58/96) of consultations applying to 43.4% (72/166) of problems. Safety-netting advice was mostly GP-initiated (95.7%, 89/93), delivered during treatment planning (66.7%, 62/93), and included specific elements (64.5%, 60/93). Delivered safety-netting advice was documented in 64.2% (34/53) of consultations with notes available. Written advice was rarely used (4/96 consultations, all text messages). Patients correctly recalled the presence of safety-netting advice in two-thirds of consultations when it was given. Safety-netting advice was more likely to be provided by younger GPs (<45 years; OR=5.09, p=0.011).

Conclusion

Safety-netting advice was common but inconsistently delivered, documented, and recalled in GP telephone consultations. Opportunities exist to improve the consistency, documentation, and use of written advice to support patient understanding, recall, and safety in remote care.

How this fits in (4 points)

- Safety-netting advice is a key strategy to manage diagnostic uncertainty, but prior studies have not examined it in detail during telephone consultations.
- In this study, GPs gave safety-netting advice in 60% of telephone consultations – a rate comparable to face-to-face consultations – but often only verbally with inconsistent documentation.
- Safety-netting advice was more likely to be delivered by younger GPs, while patients' variable recall of advice indicates potential gaps in communication.
- These findings suggest opportunities to improve the consistency and communication of safety-netting through digital innovations such as AI-scribes or prompts, which could generate written advice for patients and prompt GPs when safety-netting advice is omitted.

Single sentence summary (typically 20 words)

Safety-netting advice was delivered in 60% of GP telephone consultations, but delivery, documentation and patient recall were inconsistent.

Introduction

In 2024, a third of general practitioner (GP) appointments in England were conducted by telephone, a figure comparable to pre-pandemic levels in 2019.[1-3] This represents a marked shift from the 'remote by default' model adopted during the COVID-19 pandemic in England.[2] When used appropriately, telephone consulting can improve access, support continuity, and provide an efficient way to deliver healthcare.[4] It may also help lower the carbon footprint.[5] However, telephone consultations lack visual cues – a key element of clinical assessment – and they are typically shorter, cover fewer problems, involve less information gathering and advice giving, and allow less rapport-building than face-to-face assessments.[6,7] Consequently, telephone consulting is often perceived as higher risk, particularly for undifferentiated problems, and may increase diagnostic uncertainty.[2,8,9]

Safety-netting is a key strategy to manage diagnostic uncertainty, particularly in remote consulting.[9-11] Roger Neighbour first described this as an in-consultation reflective tool, where clinicians considered '*what if*?' scenarios, including the possibility of missed or incorrect diagnoses.[12] The term has since been applied to a range of clinical activities, but 'safety-netting advice' is synonymous with Neighbour's original description and defined as *"information shared with a patient or their carer, designed to help them identify the need to seek further medical help if their condition changes, worsens or they have further concerns about their health."*[13]

Previous studies of recorded consultations have examined safety-netting communication during face-to-face GP consultations[14,15] and physiotherapy consultations.[16] Analyses of recorded telephone consultations have reported only whether safety-netting was present or absent,[17,18] but none have explored in detail how it is communicated.

This study aimed to examine when and how GPs communicated safety-netting advice in telephone consultations, explore their views on its utility, and assess patients' recall. Findings were then compared with face-to-face consultations to identify opportunities to improve practice.

Methods

Data

Consultations were obtained from the *One in a Million Telesafe* research archive.[19] Full details are reported elsewhere.[19] Briefly, GP practices in South West England that routinely recorded all telephone consultations were recruited and primary healthcare professionals (HCPs) within them were invited to participate. In total, 28 HCPs from 7 practices consented, allowing the research team access to their recorded consultations with consenting patients. Participants also completed a pre-study electronic questionnaire collecting demographics and views on safety-netting advice (supplementary materials).

Patients were invited by post or text if they had a telephone consultation within the past 14 days with a participating clinician and met eligibility criteria. These included adults (≥18 years) consulting for themselves, excluding those receiving end-of-life care, lacking capacity to consent, or unable to consult in English. Patients were asked for consent to allow retrieval of their consultation recording and medical records from one month before to three months after their consultation, and to complete a post-consultation survey (supplementary materials) online or on paper. Consultations were collected between April 2023 and June 2024.

Coding

The content of consultations, including the number of problems discussed, was coded using the 'Complex Consultations' toolkit by four authors (AS, JL, HT, CS).[20] Problem types were coded using the International Classification of Primary Care (ICPC version-3)[21] and checked by the first author. The audio files of all consultations were screened for safety-netting advice by two coders (PE and JL or AS). Safety-netting episodes were coded by the first author, using the validated Safety-netting Coding Tool (SaNCoT).[13] Inter-rater reliability of SaNCoT coding by this research team is reported elsewhere.[13,22,23] Notably, SaNCoT differentiates between safety-netting advice (conditional follow-up, where a symptom or condition must occur for further help-seeking) and unconditional follow-up. Follow-up included planned appointments with a healthcare professional for that problem and related investigations (e.g. blood tests). SaNCoT also distinguishes between generic advice

(e.g. "*if it gets worse or doesn't improve, please come back"*) and specific advice, which names a new symptom or condition (e.g. *haemoptysis, chest pain, spreading redness*) or specifies a timeframe (e.g. "*if it's not better in two weeks, please come back*"). Minor adjustments were made for this study (supplementary materials); for example, the patient response code "nods only" was excluded because it is not applicable to telephone consultations.

Software and statistical analysis

SaNCoT codes from Microsoft Excel were transferred to Stata version 19.5MP for analysis, where univariable and multivariable logistic regression models were applied to generate odds ratios (OR) and 95% confidence intervals (CI). Mixed-effects models accounted for clustering of problems within patients, patients within GPs, and GPs within practices. The Stata code used to generate results is available online.[3] Jupyter Notebooks with Python were used to concatenate data from the per-problem to the per-consultation level.

Results

Patient and consultation characteristics

Table 1 summarises GP, patient and consultation characteristics. Consenting patients consulted with one of 20 participating GPs. There were slightly more female GPs (n=12, 60%), most were partners (n=14, 70%) and most reported a white ethnicity (n=17, 85%). Each GP contributed a mean of 4.8 consultations (SD 5.6; median 2.5; range 1–20). More consultations came from practices in the least deprived areas (65.6%, IMD deciles 9–10) than the most deprived (28.1%, IMD deciles 1–2).

Ninety-six telephone consultations with ninety-three unique patients were included; three patients had two consultations each. Most patients were white (93.5%) and female (63.4%). The mean patient age was 63.7 years (SD 16.4; median 69; range 18–94). Consultations involved a mean of 1.7 problems (SD 1.0; median 1; range 1–5), with 44.8% classified as multi-problem (≥2).

Table 1. GP, patient and consultation characteristics

Three patients had two separate telephone consultations. Data in brackets report n per consultation (double counting the three patients with two consultations each). IMD = Index of Multiple Deprivation

Patient sex (n=93)	**n**	**%**	**GP gender (n=20)**	**n**	**%**
Male	34 (35)	36.6%	Male	8	40.0%
Female	59 (61)	63.4%	Female	12	60.0%
Patient age (n=93)			**GP age (n=20)**		
18-34	9	9.7%	18-34	2	10.0%
35-49	9	9.7%	35-49	13	65.0%
50-64	21 (22)	22.6%	50-64	5	25.0%
≥65	53 (55)	57.0%	≥65	0	
Not reported	1	1.1%	Not reported		
Patient ethnic group (n=93)			**GP ethnicity (n=20)**		
White	87 (90)	93.5%	White	17	85.0%
Other	3	3.2%	Other	3	15.0%
Not reported / prefer not to say	3	3.2%	Not reported / prefer not to say	0	
Consultations with (n=96)			**GP role (n=20)**		
Partner	86	89.6%	Partner	14	70.0%
Salaried GP	9	9.4%	Salaried GP	5	25.0%
GP Registrar	1	1.0%	GP Registrar	1	5.0%
Number of problems per consultation (n=96)			**Consultations practice IMD Decile (n=96)**		
1	53	55.2%	1 (most deprived)	20	20.8%
2	22	22.9%	2	7	7.3%
3	17	17.7%	5	6	6.3%
≥4	4	4.2%	9	42	43.8%
			10 (least deprived)	21	21.9%

Safety-netting per consultation

Safety-netting advice was provided in 60.4% of consultations (58/96), while 77.1% (74/96) included some form of follow-up. In five consultations without safety-netting advice, the GP planned a same-day face-to-face review. Almost all consultations (92/96) included either safety-netting or follow-up, and 41.7% (40/96) had both.

Safety-netting per problem

Table 2 summarises safety-netting advice and follow-up by problem type. Most problems had either safety-netting advice or follow-up (83.7%, 139/166). 24.1% (40/166) had both, but clinicians more often arranged follow-up (64.5%, 107/166) than provided safety-netting (43.4%, 72/166).

Table 2. Safety-netting and follow-up frequency by types of problem raised.

ICPC-3 = International Classification of Primary Care, third edition.

Problem Type (ICPC-3)	No of problems		Follow-up present		Safety-netting advice present		Safety-netting advice and / or follow-up present	
	n	(%) total	n	(%)	n	(%)	n	(%)
A – General	31	(18.7)	20	(64.5)	13	(41.9)	25	(80.6)
B - Blood, blood-forming organs and immune system	4	(2.4)	3	(75)	2	(50)	4	(100)
D - Digestive system	17	(10.2)	9	(52.9)	4	(23.5)	11	(64.7)
F - Eye	2	(1.2)	0	(0)	1	(50)	1	(50)
G - Genital system	17	(10.2)	13	(76.5)	8	(47.1)	16	(94.1)
H - Ear	2	(1.2)	0	(0)	1	(50)	1	(50)
K - Circulatory system	16	(9.6)	14	(87.5)	9	(56.3)	15	(93.8)
L - Musculoskeletal system	19	(11.4)	15	(78.9)	9	(47.4)	18	(94.7)
N - Neurological system	6	(3.6)	4	(66.7)	3	(50)	6	(100)
P - Psychological, mental and neurodevelopmental	7	(4.2)	3	(42.9)	4	(57.1)	6	(85.7)
R - Respiratory system	7	(4.2)	3	(42.9)	5	(71.4)	6	(85.7)
S - Skin	13	(7.8)	7	(53.8)	5	(38.5)	10	(76.9)
T - Endocrine, metabolic and nutritional system	13	(7.8)	9	(69.2)	4	(30.8)	11	(84.6)
U - Urinary system	9	(5.4)	7	(77.8)	3	(33.3)	8	(88.9)
W - Pregnancy and childbearing	2	(1.2)	0	(0)	1	(50)	1	(50)
Z - Social problems	1	(0.6)	0	(0)	0	(0)	0	(0)
Total	166		107	(64.5)	72	(43.4)	139	(83.7)

Factors associated with safety-netting advice

Table 3 summarises factors associated with safety-netting advice. In univariable modelling, safety-netting advice was less likely when problems were assessed later in the consultation (OR=0.54 per unit increase, CI=0.33–0.91, p=0.020) and more likely when assessed by GPs aged <45 years (OR=3.56, CI=1.11–11.39, p=0.033). A weak association was seen for problem acuity, with higher odds for acute rather than chronic problems (OR=2.67, CI=0.95–7.55, p=0.063).

In multivariable modelling, GP age remained significant (OR=5.09, CI=1.45–17.89, p=0.011), while problem order was weaker (OR=0.60 per unit increase, CI=0.35–1.04, p=0.067). A weak association was also observed for patient deprivation, comparing least deprived (IMD 9–10) with most deprived (IMD 1–2) practices (OR=3.37, CI=0.93–12.25, p=0.065). No significant associations were found with first presentation, follow-up, patient age, or gender.

Table 3. Factors associated with safety-netting advice. SNA = Safety-netting advice. *Multivariable model and univariable age model exclude 1 patient where the patient's age was not available.

Variable Category	Covariate	Univariable modelling (n=166 problems)*					Multivariable modelling (n=165)*		
		N	% SNA	OR	95% CI	p	OR	95% CI	p
Problem	**Acuity**								
	Chronic	82	37.8	1			1		
	Acute (includes acute flare of chronic problem)	84	48.8	2.67	(0.95 to 7.55)	0.063	1.69	(0.57 to 5.02)	0.344
	First Presentation								
	Not first presentation	127	44.1	1			1		
	First presentation	29	44.8	1.46	(0.45 to 4.77)	0.527	1.18	(0.34 to 4.07)	0.792
	Unclear	10	30.0	0.38	(0.06 to 2.45)	0.307	0.38	(0.05 to 2.80)	0.345
	Order assessed by GP								
	1	96	51.0						
	2	43	39.5						
	≥3	27	22.2						
	Per unit increase	-	-	0.54	(0.33 to 0.91)	0.020	0.60	(0.35 to 1.04)	0.067
	Follow-up								
	No follow-up discussed	59	54.2	1			1		
	Follow-up discussed	107	37.4	0.49	(0.21 to 1.14)	0.097	0.62	(0.25 to 1.55)	0.306
GP	**GP age**								
	45 years or older	91	35.2				1		
	Less than 45 years	75	53.3	3.56	(1.11 to 11.39)	0.033	5.09	(1.45 to 17.89)	0.011
Patient	**Patient age***								
	Less than 65 years	71	45.1	1			1		
	65 or more years	94	41.5	0.63	(0.21 to 1.88)	0.405	0.98	(0.33 to 2.93)	0.975
	Patient gender								
	Male	56	39.3	1			1		
	Female	110	45.5	1.60	(0.55 to 4.66)	0.389	1.39	(0.47 to 4.11)	0.550
Practice	**Practice Deprivation**								
	Least deprived (IMD 9-10)	100	40.0	1			1		
	Middle (IMD 5)	9	66.7	4.62	(0.49 to 43.5)	0.181	9.5	(0.86 to 105.4)	0.067
	Most deprived (IMD 1-2)	57	45.6	1.46	(0.43 to 4.95)	0.541	3.37	(0.93 to 12.25)	0.065

Content of safety-netting advice

Across the 58 consultations with safety-netting advice, 93 instances were observed (Table 4). Most were GP-initiated (95.7%, 89/93) and delivered during treatment planning (66.7%, 62/93) or closing stages (20.4%, 19/93). Most advice contained specific elements (64.5%, 60/93). Advice delivered during the closing stage of consultations (20.4%, 19/93) was usually generic (68.4%, 13/19), whereas advice during the diagnosis (8.6%, 8/93) and treatment planning stages (66.7%, 62/93) was mainly specific (100%, 8/8; 69.4%, 43/62). Patients were usually advised to seek further help at their GP surgery (77.4%, 72/93), either by returning to the practice (69.4%, 50/72) or the same GP (30.6%, 22/72). Few were told to call NHS 111 (2.2%, 2/93) or 999 (7.5%, 7/93).

Delivery of safety-netting advice

When safety-netting advice was given, it was usually verbal (93.1%; 54/58 consultations, 67/72 problems). Four consultations included written advice: in one, the GP texted advice after the call due to a poor phone line; in two, they sent a text link to a self-help app (known to contain safety-netting advice); and in another, they shared a secondary care letter for one problem and texted a website link for another, both of which contained written safety-netting advice.

Table 4. Content of safety-netting advice across all instances (n=93). *Two multiple cases included recontacting the GP practice or 111, and recontacting the GP practice or district nursing team. Inc.= includes, cons=consultation, OOH = out of hours.

Question	Codes	Frequency	Percent
Applicable to problem, treatment/management or both	**Problem**	62	66.7
	Treatment / management	17	18.3
	Both	14	15.1
Stage of Consultation	**Establishing reason for consultation**	0	0.0
	Gathering information	2	2.2
	Delivering diagnosis	8	8.6
	Treatment planning	62	66.7
	Closing	19	20.4
	Post-consultation (text or call back)	2	2.2
Initiation	**Patient**	4	4.3
	Clinician	89	95.7
Format	**Conditional + course of action** (e.g. if X happens, do Y)	87	93.5
	Conditional warning only (e.g. I would only be worried if X happened)	6	6.5
Strength of endorsement	**Weaker** (can, could)	24	25.8
	Neutral	47	50.5
	Stronger (must, should, etc)	22	23.7
Number of conditionals / symptoms to look out for (e.g. worsening pain, symptoms persist, new weakness)	**1**	60	64.5
	2	17	18.3
	3	5	5.4
	4	1	1.1
	≥5	10	10.8
Generic or specific advice	**Generic** (problems, issues, concerns, worse)	33	35.5
	Specific (cough up blood, chest pain…)	45	48.4
	Both generic & specific	15	16.1
Action advised	**No Action** (conditional warning only)	6	6.5
	Contact other in-hours medical service	2	2.2
	Return to practice	50	53.8
	Return to same GP	22	23.7
	Contact OOH service	1	1.1
	Contact emergency services	7	7.5
	Unspecific 'medical help'	3	3.2
	Multiple*	2	2.2
Focus of action	**No action** (conditional warning only)	6	6.5
	Patient (*"you come back")*	34	36.6
	Clinician (*"I will have another look at it")*	29	31.2
	Both (*"you come back, and I will have another look at it")*	24	25.8
Timescale of action	**Not specified**	60	64.5
	Named / fixed time ("*2 weeks*")	28	30.1
	Immediate (*"go straight to A&E")*	5	5.4

Patient response at the end of the safety-netting advice	**No response** (inc. 1 post-cons text message)	9	9.7
	Resists / misaligns	24	25.8
	Acknowledgement / acceptance	60	64.5

Symptoms to look out for

Across 93 safety-netting instances, patients were advised to look out for 182 symptoms/conditionals. The mean number per episode was 1.96 (SD 2.03; median 1; range 1–13) and per problem 2.60 (SD 2.62; median 1; range 1–16, excluding repeats of the same symptom).

Table 5 shows the frequency of symptoms/conditionals patients were advised to look out for. The most common category was a new specific symptom (e.g. "*you start coughing up blood*"), present in 28.1% of consultations (27/96). The second was persistence of current symptoms (24.0%, 23/96 consultations), of which 73.9% (17/23) included a timeframe.

Table 5. Symptoms to look out for as part of safety-netting advice.

SNA = safety-netting advice. *includes repeat verbalisations within the same consultation.

Category	Frequency in all consultations* (n=182 conditionals)	Frequency per consultation (n=96)	
	N	n	% (per cons)
New specific symptom: *"numbness", "breakthrough bleeding", "black out", "vomiting", "having problems with passing urine", etc…*	83	27	28.1
Current illness / symptoms persist	36	23	24.0
Without a timeframe *"if it doesn't work…"*	12	6	6.3
With timeframe *"if it persists after three months…"*	24	17	17.7
Other non-specific: *"develop new symptoms", "if you need", "not tolerating it"*	18	14	14.6
Worsening / increase in severity of symptoms	14	12	12.5
Return of previous symptoms	9	4	4.2
Concerns / worried / struggling	7	7	7.3
Problems / issues	6	6	6.3
Unwell	4	4	4.2
Haven't heard about an appointment	3	3	3.1
Changes	2	2	2.1

Documentation

Of consultations with safety-netting advice, consultation notes were available for 91.4% (53/58). Documentation of advice was found in 64.2% (34/53) of these consultations, covering 58.2% (39/67) of problems. In two cases, no verbal advice was observed, but the documentation could be interpreted as if it had been discussed.

Patient recall of safety-netting advice

Of 96 consultations, 90 patients answered the question: *"Did the healthcare professional say what to do if your problem did not improve or got worse?"* Among the 55 consultations observed to include safety-netting advice, 69.1% (38/55) of

patients correctly recalled receiving it, 14.5% (8/55) did not, 5.5% (3/55) were unsure, and 10.9% (6/55) felt the question did not apply.

Of the 35 consultations where no safety-netting advice was observed, 37.1% (13/35) of patients still reported receiving it, while 28.6% (10/35) correctly said they had not, 11.4% (4/35) were unsure, and 22.9% (8/35) felt the question did not apply, giving a total of 62.9% (22/35) non-affirmative responses.

Healthcare professional opinions

A total of 28 HCPs completed the clinician pre-study questionnaire. Of these, 20/28 had consultations with consenting patients. Supplementary Table S1 summarises both groups' responses.

Most clinicians (27/28, 96.4%) agreed or strongly agreed that safety-netting advice is an important part of their consultations and benefits patient care. Most clinicians (26/28, 92.9%) reported giving verbal safety-netting advice in at least half of their consultations, with 42.9% (12/28) reporting doing so 'often [50–69%]', 28.6% (8/28) 'most of the time [70–89%]' and 21.4% (6/28) 'almost always [≥90%]'. Only 7.1% (2/28) reported giving it 'sometimes [25–49%]'. In contrast, written safety-netting advice was used less frequently: 42.9% (12/28) said they gave it 'rarely [<25%]', 28.6% (8/28) 'sometimes [25–49%]', 7.1% (2/28) 'often [50–69%]', 10.7% (3/28) 'most of the time [70–89%]' and 10.7% (3/28) 'almost always [≥90%]'.

Views were mixed on whether safety-netting advice increases patient demand: 46.4% (13/28) of clinicians disagreed, while 42.9% (12/28) neither agreed nor disagreed. The most common reason given for providing safety-netting advice was an equal balance of patient care and medico-legal considerations (53.6%, 15/28), followed by '*mostly patient care, some medico-legal cover'* (39.3%, 11/28).

Discussion

Summary

This study provides the first detailed analysis of safety-netting communication during UK GP telephone consultations. Safety-netting advice was given in 60% of

consultations, covering fewer than half of problems, and documented in around two-thirds of these consultations. It was predominantly verbal, clinician-initiated, and most often delivered during treatment planning or closing phases of consultations. Advice in treatment planning tended to include specific elements, whereas closing-phase advice was usually generic. Patients were typically advised to seek further help at their GP practice. Safety-netting was more commonly given by younger GPs (<45 years). Patient recall was variable, and written advice was rare. Most clinicians regarded safety-netting as important, motivated by patient care as well as medico-legal considerations.

Strengths and limitations

The strengths of this study include the use of real-world data from routinely recorded GP telephone consultations. Broad inclusion criteria captured a wide range of consultation types and presenting problems. Coding was guided by a validated safety-netting tool (SaNCoT), with each consultation reviewed at least twice to ensure consistency and reliability. Robust statistical methods, including mixed-effects models, accounted for clustering at the problem, patient, and clinician levels. Although a Hawthorne effect (clinicians altering behaviour due to awareness of being studied) cannot be excluded, clinicians were unaware of which patients would participate, so any behaviour change would have needed to be sustained across all telephone consultations during the study period.

Detailed limitations of the archive are reported elsewhere.[19] Briefly, consultations were unevenly distributed across practices, resulting in an overrepresentation of patients from the least deprived areas. This may limit generalisability, although lower response rates from more deprived areas are a well-recognised research challenge.[24,25] In our sample, there were more female GPs and patients. The GP distribution reflects the proportion of licensed female GPs in the UK (57.7% in 2025).[26] Consultation numbers by patient gender were consistent with Atherton's study (61.2% female) of 38,714 telephone consultations involving practices in the same geographical location.[27] However, the skew towards white patient participants in our data was greater than in Atherton's study.[27] This may reflect difficulties recruiting a diverse sample, although the small sample size makes this hard to judge.

Some practices also experienced technical issues that prevented extraction of recordings for all 123 patients who consented to join the study, reducing the number available for analysis and limiting statistical power. Finally, the clinical appropriateness of safety-netting advice in each consultation was not assessed.

Comparison with existing literature

Safety-netting patterns in this study were similar to 318 face-to-face consultations from the original One in a Million study in 2014–15 (Table S2).[14] Rates of safety-netting per consultation (60.4% vs 64.5%) and per problem (43.4% vs 46.3%) were comparable, as were patterns of generic advice in closing phases, specific advice during treatment planning, and advice more often given for earlier problems and by younger GPs. Documentation was slightly higher in this study (58.2% vs 45.0% per problem), and a greater proportion of instances contained specific advice (64.5% vs 47.2%). This may be related to changes in safety-netting practices over time, consistent with out-of-hours data (2013–2020) showing increasing documentation and more specific advice in later years.[23] Additionally, GPs are more likely to document safety-netting when giving specific rather than generic advice and in single-problem consultations,[14,22] both of which were more prevalent in this dataset. Telephone consultations may also offer more flexibility to complete notes during or after the call; two-thirds of GPs were audibly typing while consulting[19] and consultations were shorter than in One in a Million, potentially allowing more time for documentation if appointment lengths were similar.[19,28]

Compared to other studies, the rate of safety-netting per consultation in this study is similar to 50 telephone recordings from Scottish General Practice in 2008 (43%)[17], but lower than in 53 follow-up consultation recordings collected during 2017-18 (96.2%, 51/53).[18]

Implications for research and practice

This study highlights opportunities to strengthen safety-netting in telephone consultations. While most clinicians recognised its importance for both patient care and medico-legal protection, delivery and documentation were variable. These gaps

may pose risks for patients and clinicians, particularly given previous research linking absent safety-netting in remote consultations to serious harm.[29]

Our study also highlights that GPs usually retain clinical responsibility for patients, with patients uncommonly advised to seek help outside their GP surgery. We did not assess the clinical appropriateness of the destinations advised, so our findings describe patterns rather than judging which option was safer or more efficient. Future work could examine scenario-based clinical consensus on the appropriateness of safety-netting advice and which services patients should be directed to.

Improving the consistency and clarity of safety-netting communication could enhance patient care and support medico-legal protection in both face-to-face and remote consultations. Technological innovation may help; for example, AI tools could detect when safety-netting advice is absent and prompt clinicians in real time.[30] Written after visit summaries (AVSs) are valued by patients,[31,32] yet remain rare in the UK compared with the USA.[33] A realist evaluation in UK general practice found AVSs were most useful when safety-netting advice was important, but were too time-consuming for routine use in 2021.[31,34] Recent technological advances mean AVSs can be generated automatically using AI-scribes, which can also produce patient-friendly documentation, effectively combining the clinician note and AVS. Finally, further evaluations could test whether generative AI can translate abbreviated GP notes into understandable advice, addressing the finding that around one-third of patients given safety-netting advice did not recall it.

Further research should evaluate the impact of safety-netting advice on patient outcomes, including its role in preventing harm and reducing unnecessary reconsultations. Future studies could also examine the effect of written or multimodal advice on help-seeking and safety, and how digital technologies might be integrated into remote consulting to support safe, efficient, patient-centred care.

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AI Statement

Generative AI (ChatGPT 4o, 4o1, 4.5, 5, 5.1, 5.2) was used in the editing process of the manuscript and writing / amending Stata / Python code. PJE takes overall responsibility for checking any AI outputs were accurate and not plagiarised.

Ethical approval

NHS research ethical approval was obtained reference number: 22/SW/0139

Competing interests

None declared

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