#### **Original Research**

# Exploring UK doctors' attitudes towards online patient feedback: Thematic analysis of survey data

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#### Abstract

**Introduction:** Patients are increasingly using online platforms to give feedback about their health-care experiences. Online feedback has been proposed as a way to drive transformative change in the health service through informing choice and improving quality. Attitudes held by health-care professionals influence the uptake of new technologies. Understanding these attitudes is essential in exploring the potential of online patient feedback as a standard feedback mechanism. This study explores the content of free-text comments left by doctors responding to a survey with the aim of understanding their attitudes towards online feedback.

**Methods:** A cross-sectional online questionnaire was completed by 1001 UK primary and secondary-care doctors. Doctors were given the opportunity to leave a free-text comment about online patient feedback. Doctors' attitudes towards online patient feedback were identified and explored using thematic analysis. Descriptive statistics and chi-square tests were used to examine demographic differences between those doctors who left a comment and those who did not.

**Results:** Thematic analysis identified five key interrelated themes: anonymity, confidentiality, representativeness, moderation/regulation of online feedback and platform type. The characteristics of those leaving a comment very closely matched those of the entire survey sample.

**Conclusion:** Across the comments, the most prominent finding was a general scepticism and caution towards online feedback, with most of the key themes relating to the perceived limitations and challenges. Further work exploring ways of addressing and verifying online comments without breaching confidentiality could provide valuable information to health systems seeking to drive improvement through patient online feedback.

#### **Keywords**

Internet, feedback, comments, physicians, policy

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#### Introduction

Online patient feedback is a growing phenomenon,<sup>1</sup> and policymakers are increasingly encouraging its use as a driver of health-service change.<sup>2–4</sup> The successful uptake of new initiatives in health care is influenced by the attitudes of health-care professionals.<sup>5,6</sup>

There are a variety of established online patient feedback platforms, and in the UK, for instance, the National Health Service (NHS) website incorporates a feedback mechanism.<sup>7</sup> There are also services commissioned by the NHS to provide patients with a platform for providing feedback, such as IWantGreatCare<sup>8</sup> and Care Opinion.<sup>9</sup> Furthermore, the NHS also

commissions feedback that can be provided both online as well as through a paper-based survey such as the Friends and Family Test.<sup>10</sup>

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In addition to these formalised services, social-media platforms such as Facebook and Twitter also offer patients a route to provide feedback.<sup>11</sup>

The potential of online patient feedback as a driver of transformative change is influenced by the views held by frontline staff<sup>6</sup> (such as doctors, nurses and allied health-care professionals), who are both the subjects of the comments and in the best position to respond to them. Understanding the potential of online patient feedback as a driver of transformative change relies on understanding the attitudes that health-care service providers hold towards it.

Doctors are a key stakeholder group when considering online patient feedback, and research to date has shown that that doctors are generally wary of online patient feedback.<sup>12–16</sup> Many perceive it to be largely negative and question its legitimacy as a driver of healthservice change. Furthermore, a survey conducted by the authors of this paper (H.A., J.F. and J.P.) demonstrated that doctors had more negative attitudes towards online feedback compared to nurses.<sup>17</sup> There has, however, been little in-depth exploration of the reasons behind doctors' attitudes towards online patient feedback.

In order to further our understanding of doctors' attitudes towards online patient feedback, this study explored free-text comments left by doctors who participated in the survey conducted by the authors and reported elsewhere.<sup>17</sup>

This study had the following aims: (a) to determine the characteristics of doctors who provided a free-text comment and to compare their characteristics to the entire survey sample as well as the population of registered doctors in the UK; and (b) to analyse the freetext comments thematically with the aim of exploring, identifying and characterising the attitudes held by doctors who completed the survey towards online patient feedback. Characterising these reasons may help inform efforts to address concerns around the use of online patient feedback as a basis on which to make service changes.

#### **Methods**

We conducted a cross-sectional self-completed online questionnaire to identify UK doctors' attitudes towards online patient feedback.<sup>17</sup> A detailed description of the wider survey methods and findings has been published elsewhere.<sup>17</sup>

#### Survey sample

The survey was sent to registered doctors practising in the UK. It was administered to a quota-sampled<sup>18</sup> a broadly representative group of secondary- (across specialties) and primary-care doctors.

*Survey instrument.* The development of survey questions drew on previously conducted research, policy documents and reports by online feedback organisations to determine key areas of interest. Furthermore, the survey underwent two piloting phases. The first phase involved guidance and feedback from the company commissioned to administer the survey to doctors (a company with extensive experience in surveying doctors). In the second phase, individual local clinicians and a lay member of the wider study provided feedback on the wording and order of questions through each iteration of the survey.<sup>17</sup>

The survey included eight questions on demographic and professional characteristics which preceded the questions about online patient feedback. In the survey, online patient feedback was defined as feedback captured on Internet reviews and ratings sites or via social media (such as in Tweets on Twitter or in posts on Facebook or a discussion forum such as Mumsnet).

Respondents were then asked six questions, using Likert-type scales<sup>19</sup> about their beliefs about the usefulness and representativeness of online patient feedback and whether they perceived it to be largely positive or negative (see Appendix 1). Doctors were also asked whether they had received any online patient feedback about themselves or an episode of care with which they were involved. Free-text data were collected via the following optional question which appeared at the end of the survey: 'If you would like to leave a comment about online patient feedback, please do so here'.

*Data collection.* The survey was distributed in July 2016 via Doctors.net.uk, a UK online portal and network for the medical profession with more than 200,000 members.<sup>20</sup> Doctors.net.uk has been widely used in academic surveys of doctors.<sup>21,22</sup> Doctors received an email invitation to participate in the survey based on their demographic and professional characteristics as collected by Doctors.net.uk. Invitations were sent until 500 primary-care and 500 secondary-care doctors were recruited.<sup>17</sup>

*Analysis.* We calculated summary descriptive statistics for demographic and professional characteristics of those participants leaving a free-text comment. We used chi-square associations using IBM SPSS Statistics for Windows v25 (IBM Corp., Armonk, NY) for (a) differences between doctors who provided a free-text comment and the remainder of the survey sample that did not, and (b) the differences in sex and age between the doctors who provided and free-text comment and the entire population of licenced doctors in the UK in 2016.<sup>23</sup> These are doctors who are registered and licenced to practice with the General Medical

Council, which is the public body that maintains the official register of medical practitioners in the UK.<sup>24</sup>

We applied thematic analysis<sup>25</sup> to the free-text data. Comments were read, organised and coded using NVivo v11 (QSR International, Warrington, UK). Coding in qualitative research is the process of identifying features of interest in the data.<sup>25</sup> The coding framework was developed iteratively during analysis which followed a six-step process laid out by Braun and Clarke<sup>25</sup> of: familiarisation, generation of initial codes, search for themes, review of themes, definition of themes and a final report.<sup>25</sup> In order to familiarise themselves with the data, one researcher read and initially coded all of the data using NVivo 11. These codes were reviewed and then discussed and refined with a second researcher who independently coded a sample of the data. The coding framework was drawn from the data, as well as informed by the survey questions and themes highlighted in the wider literature on patient feedback.<sup>12,16</sup> For instance, some survey questions related directly to attitudes about representativeness and the type of platform used, and this was taken into account in the coding framework. Once coding was complete, the two researchers collaboratively created conceptual maps, and key themes were identified and defined through discussion and explored by revisiting the data. This further analytic process to generate higher-level themes was conducted outside of NVivo. The final set of themes was then reviewed and discussed with a third researcher. We drew on the concept of saturation<sup>26</sup> to ensure that the analysis stage was complete.

#### Results

#### Participant characteristics

Of the 1001 doctors who completed the survey, 378 (37.8%) provided a free-text comment. The demographics of those leaving a comment very closely matched those of the entire sample of the 1001 doctors who responded to the survey (see Table 1). This was explored using chi-square associations in relation to age (p = 0.345), sex (p = 0.740), full-time versus parttime working (p = 0.946), and whether they worked as a GP or in a hospital setting (p = 0.345). When we compared the doctors who provided a free-text comment with the entire population of doctors in the UK, they differed in terms of age (p < 0.001) and sex (p < 0.001).

Of those leaving a comment, 102 (27%) said they had personally received online patient feedback about them as an individual practitioner, 127 (33.6%) had not and 149 (39.4%) said they did not know.

 Table 1. Characteristics of doctors who responded to the questionnaire and of those who left a free-text comment.

Demographic characteristics	Of full sample (%; <i>N</i> =1001)	Of the subsample who left a free text comment (%; <i>N</i> =378)
Sex		
Male	64.8 (649)	64 (242)
Female	35.2 (352)	36 (136)
Age (years)		
<30	0.9 (9)	1.1 (4)
30-39	33.7 (337)	28.8 (109)
40-49	36.1 (361)	36.8 (139)
50-59	22.6 (226)	25.1 (95)
$\geq$ 60	6.8 (68)	8.2 (31)
Working hours		
Full time	74.2 (743)	74.1 (280)
Part time	25.8 (258)	25.9 (98)
Setting		
General practice	50 (501)	47.6 (180)
Hospital	50 (500)	52.4 (198)

## Qualitative findings

We identified five key themes: anonymity, confidentiality and ability to respond to feedback, representativeness and moderation/regulation of online feedback. Themes such as representativeness and platform type are very closely linked to questions posed in the survey (see Appendix 1). Other themes such as anonymity, confidentiality and ability to respond to feedback and moderation/regulation of online patient feedback were not directly linked to survey questions but may well have emerged due to the tone set up by the survey. These themes are described in detail below.

Anonymity. Anonymity was largely seen as a negative feature of online patient feedback. It was also seen as a barrier to its usefulness as a driver for change in health services for two reasons. First, anonymous comments cannot be verified and put into context, making it difficult to know whether the feedback provided was accurate or representative of overall patient experience. This also makes the decision about whether to act on it more difficult. Second, the protection that anonymity confers individuals was thought to encourage negative, aggressive or malicious comments. This occurs in a context where doctors are limited by patient confidentiality in their ability and right to respond.

If anonymous may encourage patients to feedback who would otherwise be reluctant to do so. Is likely to be very skewed. Consultant (male, aged 40–49)

I think online patient feedback is only useful if the details of the patient is known. I'm aware anonymity is important. However, it would not be possible to review back the cases if no details are provided. It is therefore impossible to learn from the event whether is good or bad. Consultant (male, aged 30–39)

#### Confidentiality and ability to respond to feedback.

Confidentiality emerged as a challenge to the value of online patient feedback and affected doctors' ability to respond to them. Directly responding to patient feedback on public sites through contextualising, explaining and addressing it risks breaching patient confidentiality. This was expressed as a concern that doctors do not have the right or ability to reply. This interacted with the issue of anonymity where anonymous comments are perceived as being more likely to be hostile and harmful to their practice while doctors are limited by confidentiality in their ability to respond to or defend themselves against negative feedback. While negative feedback ordinarily calls for a response, the issue of confidentiality further complicates the decision about whether to act on online patient feedback.

There are serious concerns over such feedback. It can be a way that disaffected patients can undermine the role of doctors. As doctors we cannot respond to such negative comments or contextualise them (if it is possible to identify the situation) as this could breach patient confidentiality. This is in contrast with the likes of hotels/restaurants on websites such as TripAdvisor. General Practitioner (female, aged 50–59)

Due to confidentiality we cannot respond adequately to reassure other patients and the comments can be very damaging to staff and doctor patient interactions. General Practitioner (female, aged 40–49)

*Representativeness.* Respondents questioned whether online patient feedback represented the opinions and experiences of the general population. This was a further reason for cautious consideration of whether online patient feedback is a valid basis on which to make changes to their overall practice. In particular, they reported beliefs that either online patient feedback tends to be an outlet for sharing negative feedback; or that it only reports the extremes of patient experiences (only very positive or very negative accounts). It was also suggested that online patient feedback does not represent the views of those who may not have access to the Internet, such as older people.

Only people who feel really strongly are likely to leave feedback so you disproportionately get those who are very unhappy as they wish to moan somewhere. Those who are very happy are more likely to just tell you face to face. The majority who are fine with everything won't bother to leave feedback. General Practitioner (female, aged 30–39)

I do not think my elderly patients are that resourceful to give the Internet feedback unless their family/carers help them. Consultant (female, aged 40–49)

*Moderation/regulation of online feedback.* Respondents expressed a desire for online patient feedback to be formally moderated or regulated. This was largely to prevent deliberately harmful or offensive comments ('trolling'), and to verify the accounts posted online. This theme was identified in the context of recognising the potential usefulness of online patient feedback where doctors felt that it could be useful if it was moderated and verified.

It has a potential to be extremely useful however would need to be regulated against trolls etc. Junior Doctor (male, aged 30–39)

If it is to be accepted then there has to be a robust system of checking and confirming details. Consultant (male, aged 40–49)

We often receive NHS choices reviews of mixed positive and negative experiences. Some justified, some not. Because there is no refereeing of what is put on as regards verification I feel online views should be regarded with healthy questioning. General Practitioner (male, aged 50–59)

*Platform type.* The potential and validity of online patient feedback as a driver of positive transformative change was recognised, particularly if it was received through an official NHS platform where the accounts could be moderated and/or verified. Some, however, questioned its potential as a driver of health-care policy change. Respondents also expressed concerns

that feedback from sources such as social media sites are difficult to keep track of and too public to address without compromising confidentiality.

People use Twitter to complain and SHOUT LOUDLY so they can get what they want – if the practice had a Twitter account, we'd have to staff it, and I can't see how 140 characters would ever do either the patient or the practice justice. Facebook generates a page about us that we have no control over and occasionally people leave feedback on. It is usually negative, when our GP Patient Survey suggests the opposite is true. Salaried GP (male, aged 30–39)

The future; we should embrace it. Consultant (male, aged 40–49)

I think there should be online feedback on NHS site rather than on social media. And if patients specifically want to see the reviews booking an appointment to see a particular doctor then they could find the reviews there. And patients should be allowed to leave the feedback only after seeing the consultant. Not everybody should be given an access to write the review (only patient and relatives). It will then reflect the true picture. Consultant (male, aged 40–49)

### Discussion

A subsample of 378 doctors provided a free-text comment about online patient feedback. We identified five key themes in these comments: anonymity of comments, inability to respond without breaching confidentiality, representativeness, moderation of feedback and type of platform. In line with previous work in both the UK and elsewhere,<sup>12–14</sup> our analysis supports the hypothesis that doctors feel wary of online patient feedback, perceive its content to be largely negative, question whether it represents the patient population and thus whether it should drive service changes.

Recent work indicates that doctors' views on the representativeness of online feedback may be justifiable. Only 8% of those using the Internet have provided online feedback, with this proportion not being representative of the general population.<sup>1</sup> The impact of these comments, however, needs to be considered. This same work also showed that 42% of people report having read online patient feedback, suggesting that this unrepresentative feedback could have a widespread impact in shaping perceptions of health-service delivery.

The perception that most online feedback is negative is not supported by previous work which shows that most is largely positive in nature<sup>27,28</sup> and covers similar areas to those obtained through more traditional feedback routes.<sup>29</sup> Furthermore, it has been demonstrated that motivations for leaving feedback are more likely to be for praising a service rather than making a complaint.<sup>1</sup> It is worth noting that a study by Brookes and Baker examining the content of patient feedback left on NHS Choices found that while most feedback is positive, the interpersonal skills of medical staff were one of the most frequently negatively evaluated aspects of care.<sup>27</sup> Negative evaluation of interpersonal skills may therefore resonate more strongly with clinicians (because it is commenting on something personal about them as individuals) compared to a positive evaluation of something less personal, such as administrative processes or waiting times. This perhaps explains the perception that online feedback is negative and the view that it may encourage personal attacks.

The issue of whether anonymity encourages more negative feedback has not yet been explored in relation to online patient feedback. A review exploring the role of anonymity in student online peer review found that anonymity can encourage more critical feedback and that people tend to be more honest and less anxious about expressing their opinions.<sup>30</sup>

A study by Speed et al.<sup>31</sup> exploring patient feedback noted that anonymity was perceived very differently by patients and clinicians. Anonymity was perceived to be essential for providing effective feedback by patients who worried that their identification could compromise future care. Professionals, however, were concerned about the potential for reputational damage, in a context where anyone can provide feedback. Further concerns related to the public availability of the feedback and that it may not be in accordance with the medical opinion of the professional.<sup>31</sup> These fears are echoed in our findings and discussed further in relation to practitioners' ability to respond. Anonymous comments are difficult to contextualise and therefore difficult to respond to or act on. Clinicians are also obliged to protect patient confidentiality, further limiting their ability to respond to feedback delivered online.

Existing literature has not yet explored the role that the type of platform on which patient feedback is shared has on using such feedback for driving healthservice change.

### Strengths and limitations

The free-text data generated in this study provide insight into the perspectives of doctors on an increasingly relevant topic area. The anonymity of the survey allowed respondents to share their views openly within their role as a medical professional.

The survey used quota sampling which was used to increase the representativeness of the sample but which also carries its own limitations.<sup>18</sup> It was also administered

online which may have favoured those who are more comfortable using online technologies. Our findings are limited to the perspectives of doctors who work in the UK NHS, and perspectives may be different in other health systems. Analysis showed that the doctors who provided a free-text comment were not representative of the population of licenced doctors in terms of age and sex at the time the survey was administered.

Free-text comments are limited in their content and were preceded by survey questions exploring behaviours relating to online patient feedback. It is worth noting that the comments may be open to anchoring bias.<sup>32</sup> A free-text comment was provided by less than half of the survey sample, thus increasing the potential for bias.

There are a number of different ways in which online patient feedback can be analysed, some of which have explored patterns within the comments in greater depth.<sup>33,34</sup> In this study, the comments were disaggregated from the demographic information which meant that these were analysed as two separate data sets. This set-up limited the extent to which we could explore associations between the demographic characteristics and the content of the comments. This reflected the exploratory and post hoc nature of this investigation into freetext comments which were provided as part of a larger survey. Similar exploratory approaches have been taken elsewhere.<sup>35</sup>

#### Implications for research and practice

Given their influence on the implementation of new initiatives in health-care settings,<sup>5,6</sup> further efforts should focus on exploring the attitudes of health-care professionals towards online patient feedback in greater detail. In order to explore experiences more fully, any future study collecting in-depth information could sample broadly across different health-care professional characteristics to ensure the inclusion of a wide range of views. Further research could also focus on the role of platform type in clinicians' perceptions of online patient feedback. It may also be useful to explore the potential of platforms that enable addressing and verifying online feedback while preserving patient confidentiality. Such a platform could provide valuable information to health systems seeking to drive improvement through online patient feedback. We view this work as aiding hypothesis building and suggest that it might be used to design a study that explores the identified themes in more detail.

## Conclusions

Of the 1001 doctors who completed the survey, 378 provided a free-text comment. The characteristics of those who provided a comment closely matched those

of the entire survey sample but differed with respect to age and sex when compared to the population of registered doctors in the UK. We observed scepticism and concern from UK doctors about how online patient feedback is left and handled and by whom. The representativeness and anonymous nature of online feedback were widely perceived as barriers to its usefulness. The latter is striking, as anonymity is often cited as one of the benefits to the consumer who may worry that identifiable feedback could affect their care. Doctors felt their right to respond to online patient feedback was limited by confidentiality and the anonymous nature of online comments. The perceived validity of feedback was influenced by the platform, with doctors recognising the potential of online feedback should it be moderated and validated. Some of the concerns held by doctors are contradicted by research evidence (e.g. the perception that the majority of online feedback is negative<sup>28</sup>), while others, such as the role of platform type, are as yet unexplored.

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**Ethical approval:** The survey of doctors was approved by the Central University Research Ethics Committee at the University of Oxford.

**Contributorship:** H.A. and J.P. conceptualised, designed and supervised the delivery of the survey, interpreted the data and commented on and edited drafts of the manuscript. A.T. and H.A. compiled and analysed the free-text comments and drafted the manuscript. J.F. conducted the analysis and interpretation of the wider survey, reviewed the qualitative coding framework and commented on drafts of the manuscript. All authors approved the final manuscript as submitted.

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## **Appendix 1: Survey questions**

## Q1 Positive rating of online patient feedback

In the grid below, please indicate your level of agreement with each statement.

Please select one response per statement

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Online patient feedback on experiences of NHS care which is captured on Internet reviews and ratings sites is useful to help the NHS improve services	0	0	0	0	0
Online patient feedback in social media (such as in Tweets on Twitter or in posts on Facebook or a dis- cussion forum like Mumsnet) is <b>useful to help the NHS</b> <b>improve services</b>	0	0	0	0	0

## Q2 Negative rating of online patient feedback

In the grid below, please indicate your level of agreement with each statement.

Please select one response per statement

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Online patient feedback on experiences of NHS care which is captured on internet reviews and ratings sites is generally negative	0	0	0	0	0
Online patient feedback in social media (such as in Tweets on Twitter or in posts on Facebook or a dis- cussion forum like Mumsnet) is <b>generally negative</b>	0	0	0	0	0

## Q3 Usefulness of online patient feedback

In the grid below, please rate the frequency that applies to each statement.

Please select one response per statement

	Never	Rarely	Sometimes	More often than not	All the time
You encourage your patients/their carers to leave feed- back on Internet reviews and ratings sites?	0	0	0	0	0
Your organisation feedback Internet reviews and com- ments left by patients/carers to you or your team?	0	0	0	0	0
You make a change to your practice because of feedback from Internet reviews and ratings sites?	0	0	0	0	0

## Q4 Representation of patient views

How representative of patient views do you think online patient/carer feedback is?

Please select one option

Very unrepresentative	(1)
Somewhat unrepresentative	(2)
Neither unrepresentative nor representative	(3)
Somewhat representative	(4)
Very representative	(5)

# Yes (1) No (2) I don't know (3)

## Q6 Ever left online feedback about you

Have patients/carers ever left online patient feedback on an Internet review or ratings site about you as an individual practitioner?

Yes	(1)
No	(2)
I don't know	(3)

## Q5 Ever left online feedback about care

Have patients/carers ever left online patient feedback on an Internet review or ratings site about an episode of care in which you were involved?