

## Preferences for cancer investigations: a vignette-based study of primary care attendees

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### Summary

Within the UK we lag behind many European countries in cancer survival data. There have been many studies which have tried to understand this disparity further. How patients are selected for investigation has been scrutinised. This study looks at patient preferences for diagnostic testing for colorectal, pancreatic and lung cancer in primary care.

This is a vignette-based study. A vignette study is one that presents a hypothetical situation to participants and they respond and reveal their opinion, impression or social norm. This study recruited patients aged 40 or over from 26 general practices in three areas of England. Participants completed 3 of 12 possible vignettes. Four vignettes were written for lung, pancreatic and colorectal cancers. The vignettes outlined a set of symptoms and the percentage risk that these might indicate cancer at 1%, 2%, 5% and 10%. Note that the current NICE suspected cancer: recognition and referral guideline<sup>1</sup> states a cancer suspicion rate of 3% or above is required for 2 week wait referral for urgent investigation. The vignette also described the relevant testing process, probable treatment and possible alternative diagnosis and prognosis if cancer was found. The question posed to patient's base on these circumstances, was would they opt for diagnostic testing on the basis of the information in the vignette.

Symptoms lasting 6 weeks or more

Risk of cancer	Colorectal cancer	Lung cancer	Pancreatic cancer
1%	Diarrhoea on most days	Coughing on most days Unusually tired	Some stomach pains on most days Lost few pounds (~1.5-3kg) in weight
2%	Diarrhoea and stomach pains on most days	Coughing on most days A little out of breath walking up hills Lost a few pounds (~1.5-3 kg) in weight	Some stomach pain on most days Lost half a stone (3.2 kg) in weight
5%	Unusually tired A blood test shows anaemia	Coughing on most days Coughed blood once	Continuous stomach pain Lost half a stone (3.2 kg) in weight
10%	Intermittent bleeding from the back passage (rectal bleeding) A blood test shows anaemia	Coughing on most days Coughed blood a few times Lost half a stone (3.2 kg) in weight	Continuous stomach pain Lost 1 stone (6.4 kg) in weight

3469 participants completed 6903 vignettes. 88% of participants opted for investigation in their first vignette. Colorectal cancer had the strongest association between risk and investigation up take. Interestingly risk and investigation for lung and pancreatic cancer had a high up take on all risk percentages.

**Table 3** Number of participants who would choose to be investigated, by cancer and risk level

	Colorectal cancer		Lung cancer		Pancreatic cancer		All three cancers (first vignette only)	
	Responses	Choose to be tested	Responses	Choose to be tested	Responses	Choose to be tested	Responses	Choose to be tested
1%	572	462 (81%)	581	533 (92%)	582	525 (90%)	898	782 (87%)
2%	569	485 (85%)	571	531 (93%)	580	527 (91%)	838	738 (88%)
5%	580	496 (86%)	589	543 (92%)	572	526 (92%)	873	764 (88%)
10%	570	508 (89%)	582	537 (92%)	582	529 (91%)	860	768 (89%)
All	2291	1951 (85%)	2323	2144 (92%)	2316	2107 (91%)	3469	3052 (88%)

Age range analysis also showed that participants aged 60-69 were more likely to opt for investigation across all three cancer types. Those aged over 70 years old were least likely to opt for investigation. Other variables such as shorter travel time to testing centres, family history of cancer and high household income all led to increased likelihood of wanting investigation.

This showed that these participants expressed a clear preference for diagnostic testing across all cancer types and below the current UK guidance levels.

Impact: Cited 69 times

Research team:

Dr Jonathon Banks



He graduated from the University of the West of England in 1995 having completed a degree in sociology. He then went to Cardiff University and completed a PhD in the field of medical sociology that looked at the social and political dimensions of chronic fatigue syndrome. He joined the primary care unit at Bristol in 2002 and has undertaken a number of research studies including: an

evaluation of over the counter medicines and the role of the pharmacy counter assistant; evaluation of GP appointment systems; and the organisation of out of hours care. In recent years he has also taken on the role of project management alongside qualitative and mixed methods research. He is currently based in the NIHR Collaboration for leadership in Applied Health Research and Care West (CLAHRC West).

Willie Hamilton

#### Thinking points:

1. This study shows that patient's want investigation for cancer even despite a low risk. Do you think that doing more investigations in this population would increase the diagnostic rate of cancer?
2. Is there a mismatch between patient requirement and actual practicalities of waiting times and referral pathways?
3. Please discuss the 4 pillars of ethical practice in relation to outcomes in this paper
4. Consultation skills: Take a history and formulate a management plan of a patient presenting feeling unusually tired, bleeding from the back passage and weight loss. You suspect this might be colorectal cancer. Please discuss referral down the 2WW pathway and that this is the suspected cancer pathway
5. Understand what the 2WW pathway is and be familiar with the forms when you are in your GP placement
6. For further reading please see the current NICE suspected cancer: recognition and referral guidelines

#### References

1. NICE suspected cancer: recognition and referral guideline 2015 NG 12  
<https://www.nice.org.uk/guidance/ng12>