The delivery of a behaviour change intervention for early cancer diagnosis and safety netting in primary care: The ThinkCancer! feasibility study

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Background

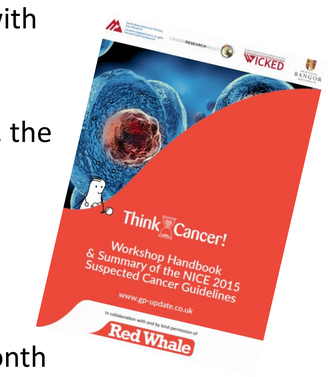
Wales has relatively poor cancer outcomes compared to other western countries, with lower referral rates and late diagnosis being key factors. Early diagnosis is crucial in improving cancer outcomes and survival, and with almost two thirds of cancers being diagnosed through the GP referral route, primary care plays a significant role in the cancer diagnosis pathway.

ThinkCancer! is a complex behaviour change intervention which aims to improve early diagnosis in primary care, and is delivered in the form of a workshop targeted at the whole general medical practice team. The workshop consists of three sessions: one for clinical staff focusing on early cancer diagnosis and safety netting, one for reception staff to raise awareness around red flag symptoms and a final session bringing all staff in the practice together to develop a bespoke practice Cancer Safety Netting Plan (CSNP) and to appoint a Cancer Safety Netting Champion (CSNC). Participating practices were sent a workshop package containing a ThinkCancer! handbook, containing all the resources used for the workshop, as well as further external resources regarding early diagnosis and safety netting, such as NICE guidance and learning resources.

The main objective of the study was to establish the feasibility of the ThinkCancer! intervention. This involved the testing of primary outcome measures, including Two Week Wait (2WW) Referral Rate and the Primary Care Interval (PCI), and the methods used to collect these data. In addition, the traditional feasibility criteria of recruitment, retention, fidelity, acceptability, adherence and barriers and facilitators to the intervention will be examined using RAG criteria.

The Study

- Practices across Wales were initially invited to take part in the study in January 2020, with workshops to be delivered in one session, face-to-face at GP surgeries.
- Recruitment was temporarily put on hold as the pandemic hit in March 2020, however, the workshop was rapidly adapted so that it could be delivered remotely to practices and recruitment was opened again in August 2020
- Target recruitment of 23-30 practices, randomised 2:1 intervention versus control.
- Baseline practice characteristics were collected via questionnaire and repeated at 6 month follow up. Primary care intervals (PCI), 2-week wait (2WW) referral rates, conversion rates and detection rates were collected at baseline and 6 months post-randomisation.
- Participant feedback was collected via electronic evaluation forms following each workshop. Participants were also asked to complete an adapted Normalisation Measure Development (NoMAD) questionnaire 2 months post-workshop
- Individual staff members from both intervention and control practices were interviewed



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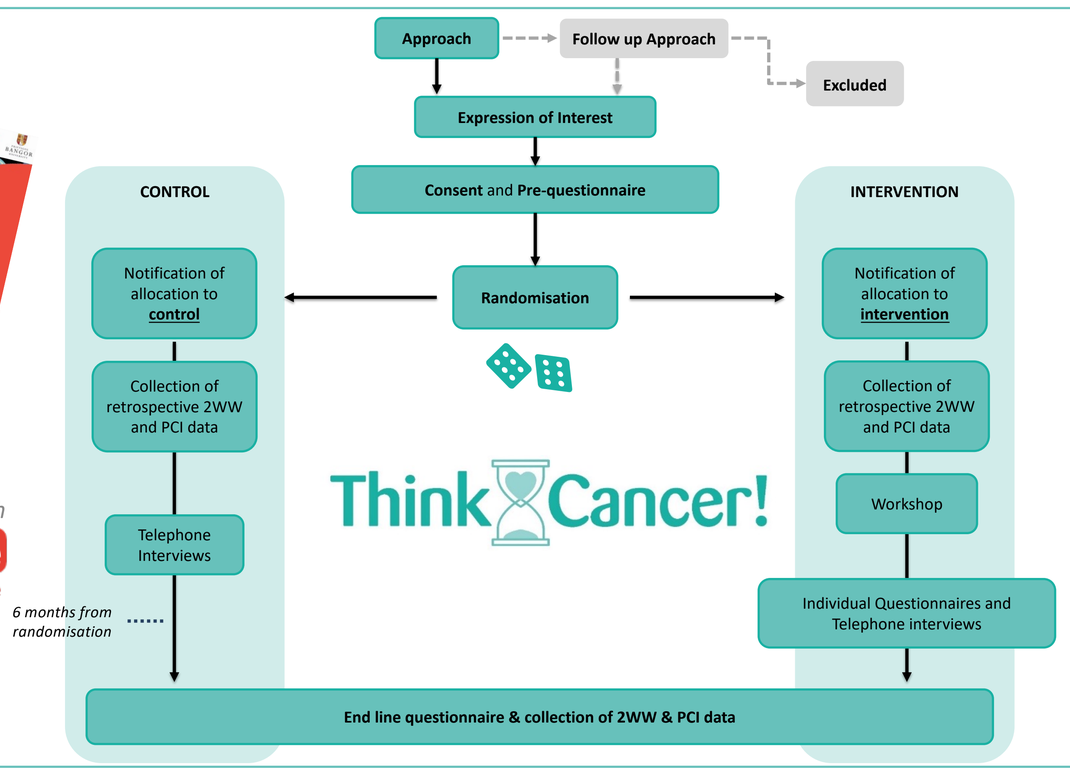

Results

A total of 30 practices from across all seven health boards were recruited to the trial, hitting the upper recruitment target. Twenty-one practices were randomised to the intervention and 19 workshops were delivered. Three practices had all three sessions delivered in one workshop; the remaining 16 practices had their workshop spread out over separate sessions. Twenty-four (80%) practices returned the clinical data at baseline, and a total of 22 (70%) practices completed the clinical data collection at follow up. In particular, practices found the PCI data collection very time-consuming, and the ability to collect these data was further compounded by the loss of protected time, increased workload and staff availability. These challenges also meant that it was difficult to confirm workshop dates that were convenient for the practices, with only 26% of practices arranging workshop dates within the 6-8 week post-randomisation window.

Health Board	EOI Received	Randomised	Completed Follow Up
BCUHB	15	11	9
C&V	12	9	4
CT	3	3	2
POWYS	2	1	1
ABUHB	6	3	3
SBUHB	3	1	1
HD	4	2	2
TOTAL	**45**	**30**	**22**

Table 1. Workshop feedback form data

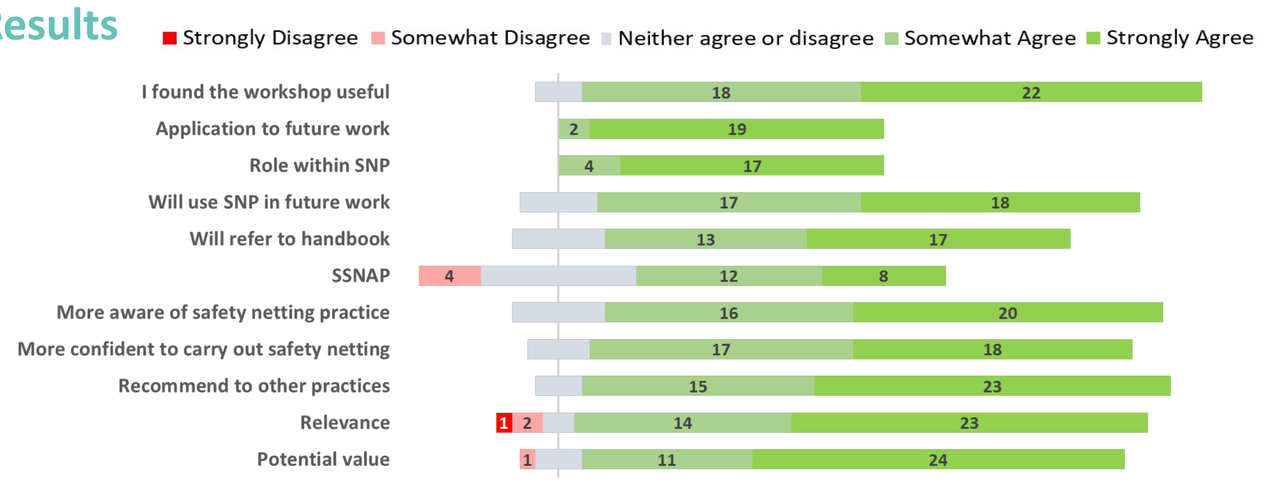

Fig. 1. Workshop feedback form data

The feedback and NoMAD forms show that participants felt overwhelmingly positive about the workshop, accompanying materials and workshop delivery, both immediately after the workshop and at 2 month follow up. However, these data were difficult to collect remotely, and overall practice completion rates were highly dependent on the level of engagement from the practice manager, who was the point of contact and therefore gatekeeper to the practice in this study.
16 staff members were interviewed (2 control, 14 intervention); overall, participants were positive about the workshop, but did feel that Covid has had a major impact on practice working life and cancer referrals.
A number of feasibility criteria have already been met, including recruitment, retention, intervention fidelity and routine data collection completion criteria, which all indicate feasibility. However, the reach of the intervention was much more challenging to record than anticipated, and at individual practice staff level this criterion needs reviewing to see how it can be addressed in a future trial.

Lessons Learned

- The ThinkCancer! workshop was initially designed to be delivered in practices but was rapidly adapted to be delivered remotely due to the pandemic. We found that remote delivery was in fact advantageous, and allowed more practices to take part, sessions could easily be recorded, travel was reduced and we could deliver workshop sessions to multiple practices in one day.
- Collection of clinical outcome measures was time-consuming for practices, and we found that various staff, both clinical and non-clinical, were collecting the data, which could have introduced bias into the data. For the future trial, we will explore remote data collection as an option, which would be more efficient, would involve less bias and would also mean less work for the practices.
- It became clear over time that some of the workshop components could be delivered to multiple practices at once, which means that more practices can take part and participating practices can learn from one another and share ideas
- Capturing staff attendee information was challenging; introducing individual log ins for future workshop sessions and attendance registers would allow us to more accurately monitor and assess staff attendance
- Workshop reach was difficult to gauge; in a future trial, access to alternate workshop dates, recordings and the inclusion of dissemination proposals in the safety netting plan could improve this.

What Next?

Analysis of the quantitative and qualitative data collected is currently underway. A final report will be ready in December 2021. In addition, the next phase of the trial is also in development. The plan is to deliver a randomised controlled pragmatic phase III cluster randomised trial with embedded economic and process evaluation. Practices will be recruited from Wales, the North West of England and the South West of England. The aim of the phase III trial will be to determine the effectiveness and cost-effectiveness of ThinkCancer! with regards to the Primary Care Interval (PCI). Secondary outcome measures will include Two Week Wait (2WW), conversion and detection rates, safety netting process measures, cancer stages at diagnosis and cost-effectiveness. There will also be a large patient component embedded in this trial.

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