

Improving access to organ donor registration in general practice: A feasibility study

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Abstract

Background: Organ donor registration helps guide family donation decision making. UK general practice provides the facility to register on the NHS Organ Donor Register but only to new patients. An intervention was developed to present a registration opportunity to existing patients in this setting.

Aim: To assess the feasibility and acceptability of an organ donation intervention implemented in UK general practice.

Design and Setting: A single practice feasibility study was conducted using an embedded experimental mixed methods design. Staff were trained to ask patients in consultations if they wished to join the register and leaflets and posters were displayed in the waiting room. The intervention ran in a large practice in Luton, UK for three months in 2018.

Method: Data on feasibility and acceptability was captured using SystemONE questionnaires, surveys and focus groups.

Results: Over three months, patients in 12.4% of face to face consultations were asked if they would like to join the register (812/6,569), and 244 (30.4%) of patients joined the register. Common reasons staff did not ask patients were due to telephone consultations, lack of time, and it not being appropriate. Nurses and healthcare assistants performed prompted choice more than doctors (23.4%, 17.1% and 1.6%). Certain clinic types, phlebotomy or routine clinics facilitated asking, compared to those where patients presented with unknown or more serious issues.

Conclusion: The intervention was found to be feasible and acceptable by some staff and patients. Feasibility criteria were met; therefore, the intervention can progress to further testing.

Keywords: Organ donation, intervention, primary care, general practice, feasibility

How this fits in: Nowhere in the UK are people able to sign up to the NHS Organ Donor Register verbally. The opportunity to do this was tested in a single UK GP practice where staff asked their patients in consultations if they would like to join. This intervention was successfully conducted, demonstrating that it is feasible and acceptable for some staff and some patients. The intervention also demonstrates promise for increasing registration rates.

Trial registration: International Standard Randomised Controlled Trial Number ISRTN44530504. Registration on 26th September 2017.

Introduction

In the UK there is a shortage of organs for donation. Between March 2018 and April 2019 1,600 people donated their organs, resulting in 3,951 transplants (1). However, during the same period, 6,077 people were on the transplant waiting list (1). This shortage of organs requires addressing to help increase the number of lifesaving transplants carried out in the UK. In order to do this, it is important to examine the facilitators to positive donation decisions. A key part of the organ donation pathway is the role of families in the process who ultimately decide whether organ donation should proceed. The academic literature has also repeatedly found that expressing a wish to donate through registration is vital to families consent to organ donation (2–7). This is demonstrated by the fact that 46% of donors had registered their wish to donate on the NHS Organ Donor Register (NHS ODR) in 2018-2019 (1). With only 38% of the population registered on the NHS ODR however, interventions are required to increase the number of people expressing their intention to donate in this way.

In 2018 a consultation was held on the transition of England from an opt-in system of organ donation consent to an opt-out (8). Based on the responses received, England will transition to an opt-out system of consent from Spring 2020 (8). Wales have implemented an opt-out system of consent since 2015, introducing an opt-out register and marketing campaign to target awareness of the change in legislation (9). Rates of organ donation consent have increased since its introduction (10). However, the increase in these rates cannot be attributed to opt-out policy alone but instead to opt-out combined with interventions and structural changes implemented alongside it (10,11). Critically, families will still be consulted

on whether donation should proceed, and if they do not consent, donation will not take place. Meaning that registration on the NHS ODR is still a vital part of the consent process. Therefore it is important to examine other opt-in interventions that can be implemented alongside opt-out, maximising public organ donation awareness.

General practice currently offers an opportunity for new patients to register on the NHS ODR via a tick box on their new patient registration form (12). Staff at practices then enter the details of those wishing to register directly onto the NHS ODR via computer system. This, however, is only offered to new patients. There is an opportunity to target existing patients in general practice and based on this, a new intervention was designed to fill this gap.

In order to develop this intervention, a systematic review investigating organ donation interventions in primary care or general practice settings was used as a basis. Ten studies were found, and only four of these were peer-reviewed journal articles. Although a limited evidence base, consistently positive findings were found for active interventions as opposed to passive conducted in this setting (13). Active interventions are those where patients were presented with an opportunity to register or discuss organ donation. Passive, on the other hand, are when materials are in place in practices that patients had to approach. These findings provided a basis for an active intervention to be developed.

The technique used in the present intervention is an active method called prompted choice, where patients are asked in consultations if they wish to join the NHS ODR. At present, nowhere in the UK provides the opportunity for people to sign-up face to face. In the USA,

however, this opportunity is provided to visitors to the Driving Motor Vehicles Offices. This technique has proven successful in recruitment to state registries by many authors and prompted choice aims to replicate this success (14–16). Importantly two studies from the systematic review conducted in the UK found significant barriers to implementation of interventions in general practice, particularly practice available time, resources and competing priorities (13). The present study, therefore, aims to assess the feasibility and acceptability of an organ donation intervention implemented in UK general practice, with the results expected to inform refinements to the intervention and data collection materials prior to effectiveness testing.

Method

Intervention

The main intervention component to be tested for feasibility and acceptability is prompted choice. Development of the intervention used a detailed method called intervention mapping (IM) (17) and was underpinned by the IIFF Model of organ donation registration (18). The IIFF model recommends four components be included in interventions – Information provision particularly concerning myths, an Immediate sign-up opportunity, Focused engagement with the intervention and Favourable activation where the patient should be in a positive affective state. To supplement prompted choice and fulfil the IIFF model, two additional components were included as part of the ‘intervention package’: staff training and providing leaflets and posters in the waiting room.

Participants and Setting

One large practice in Luton, UK participated in this study, the practice is located in an area in the top 10% of the most deprived areas nationally, with 45.34% of Luton residents classified as 'non-white' (19); compared 14.0% in England (20). All staff were invited to attend the training; clinical staff conducted prompted choice and staff voluntarily participated in post-intervention data collection. All patients who visited the practice during the intervention period could be exposed to the intervention. Training was conducted in March 2018, prompted choice ran from 5th April 2019 – 9th July 2019 and post-intervention data was collected from 9th July – 20th September 2018.

Materials and Procedure

Training

Training was designed by NHS Blood and Transplant and adapted by a Specialist Nurse in Organ Donation, NHS Blood and Transplant representative and a researcher. It was delivered in two sessions in March 2018. Training development and evaluation will be discussed in a separate paper.

Prompt and Questionnaire

To facilitate staff conducting prompted choice, a prompt and questionnaire were developed on the practice computer system (SystemONE). The prompt appeared only to trained clinical staff at the beginning of all consultations had with patients over the age of 18. Staff were then able to select No-patient will not be asked and record reasons for this (Lack of Time, Not Appropriate, Clinician Personal Beliefs & Other) or Yes-patient will be asked. The prompted choice questionnaire contained an eligibility question (does the patient have

capacity to consent) then staff could enter the patient response to prompted choice which were based on the new patient registration form (Table 1, Supplementary Figures 1-7).

[Table 1]

Following prompted choice, the prompt was switched off for future appointments if the patient responded joined the NHS ODR or they believed they were already on the register. If staff selected the option 'Do not ask patient again' this would also switch off prompt. The number of staff consultations had in the three month period was also collected and counted manually by a researcher during weekly monitoring visits and separated into face to face consultations and telephone consultations.

Leaflets and Posters

NHSBT provided leaflets and posters for display in the practice during the three month period. The intervention was monitored weekly by the researcher who checked for positioning of these and restocked them when necessary. Leaflets were counted at the end of the intervention period to establish how many were taken over three months.

Post Intervention Data Collection

Focus groups and online surveys were conducted to examine staff views of the intervention. Four focus groups took place in the practice in July – August 2018 during staff lunch breaks. These were separated according to staff group (GP, Nurse and Healthcare Assistant, Receptionist and Administrative). One focus group was conducted with five nurses and healthcare assistants, and one focus group with four administrative and reception staff.

Focus groups were attempted for GPs; however, on two separate occasions, only one participant attended, resulting in two GPs being interviewed. Participants read a participant information sheet and signed a consent form prior to participation. Topic guides were created and adhered to by the facilitator and staff debriefed post group (Supplementary Appendix 1). Separate topic guides were used for clinical staff who participated in prompted choice and staff who were administrative and reception staff. Following focus groups, all participating staff were sent a link to a qualitative online survey (Supplementary Appendix 2), hosted on Qualtrics, via email by the practice manager. This contained an information sheet and consent page, 13 open questions based on the focus group topic guide and a debrief page.

Patient views were captured using an online survey. Those for whom a prompted choice questionnaire was completed were recruited to a mixed methods online survey via text message sent by the practice. Not all patients sent a text message had prompted choice conducted, due to the ability of staff to select 'patient not asked' in the prompted choice questionnaire. The survey was also hosted on Qualtrics and patients were presented with an information sheet, consent page, three demographic questions, three closed questions and nine open questions, followed by a debrief page (Supplementary Appendix 3). Thirty six of the 743 patients who received a text message completed the online survey. Respondents had a mean age of 43, 22% were male, 86.1% were white, and 8 responded that prompted choice was not conducted in their consultation.

Analysis

Quantitative analyses were conducted on SPSS v23 and Qualitative analysis on NVivo v11. Quantitative analysis was descriptive examining prompt and questionnaire data from SystemONE, as well as the number of leaflets taken. Qualitative framework analysis was conducted on focus group data, and staff online survey responses. A descriptive thematic framework approach was taken, with an apriori framework specified and subsequent aposteriori themes added to the framework. The apriori framework consisted of Lau et al.'s contextual levels of primary care intervention implementation (External context, Organisational context, Professional context and Intervention context) (21). As well as the IIFF Model of organ donation – Immediate sign-up opportunity, Information, Focused Engagement and Favorable Activation (22). A list of preliminary themes was created based on first impressions, these were integrated into the framework, the data was then coded to the framework, and charts populated with summaries recorded for each framework cell. The patient online survey was analysed using descriptive thematic analysis only. This is due to the brief responses provided by patients to the online survey questions.

Results

Prompted Choice Questionnaire

Ten out of the 12 recruited clinical staff completed prompted choice on more than one occasion in their consultations. Two GPs did not conduct prompted choice on any occasion or complete any form of data collection. A total of 10,144 consultations were had during the three month period, 6,569 face to face consultations and 3,575 telephone consultations. Prompted choice was conducted by staff in no telephone consultations and in 812 face to face consultations, 12.4% of all face to face consultations conducted by participating staff members. Doctors conducted prompted choice on 46 occasions out of 2,875 face to face

consultations (1.6 %), nurses on 472 occasions out of 2,014 face to face consultations (23.4 %) and healthcare assistants on 296 occasions out of 1,734 face to face consultations (17.1%).

Of the 812 patients asked, 244 joined the NHS ODR (30.0%). Table 2 shows the full breakdown of patient responses to prompted choice. Based on the responses in Table 2, 327 patients were added to the NHS ODR for the first or second time (by wishing to re-register) as a result of the intervention.

[Table 2]

Prompted Choice reached 187 Black Asian Minority Ethnic (BAME) patients, and 326 Non-BAME patients. Of these patients, 39 BAME patients joined the NHS ODR for the first time, 20.8% of those asked. Ethnicity was not specified for 299 patients who received prompted choice. The average age of patients targeted was 50.2 years (SD 17.62, Min 18, Max 91, Median 50, Mode 67 years).

Prompted Choice Feasibility Questionnaire

The feasibility questionnaire was completed 2,906 times, and on 134 occasions only partially completed. During face to face consultations, a feasibility questionnaire was completed 1,690 times and on 1,051 occasions prompted choice was stated not to be conducted due to a telephone consultation. Lack of time was stated as the reason for not conducting prompted choice on 34% of feasibility questionnaires (N943) and not appropriate for consultation on 18.8% (N520). On 43 occasions language barrier was specified, and other

reasons were suggested on less than ten occasions each (data entry error, home visit, lack of capacity, over eligible age limit).

Leaflets and Posters

One hundred leaflets were taken during the three month intervention period by patients. Leaflets and posters were displayed per-protocol throughout the intervention period and were only restocked on one occasion.

Staff Focus Groups and Online Survey

External contextual factors were less prominent in the focus groups discussions, and only once was opt-out policy mentioned by staff. Predominantly, staff discussed GP settings generally; media exposure to organ donation, registration through the Driving Vehicle Licensing Agency and that organ donation is not a normal thing to discuss in society.

“In the general world of general practice, we’ve got the knowledge and the expertise, and especially with a little bit of training I think that’s fine.” (Focus Group – GP)

“Well normally it’s a no no, you don’t talk about things like that do you”

(Focus Group – Administrative & Reception)

At the organisation contextual level, staff discussed that they could not conduct prompted choice during telephone consultations, that weekend patients were easier to conduct prompted choice with, that there is a culture of collaboration and prioritising patient care in the practice, and that some consultations were more suitable for conducting prompted

choice in than others . This latter theme was strong throughout, as those clinics which are 'routine', for example, phlebotomy or practice nurse sessions were more suitable for prompted choice. Clinics where the patient could present with a serious issue, particularly those conducted by GPs, as well as those where nurses did not know what patients were visiting for, were more challenging.

“you’ve got to listen to the patient, you’ve got to examine the patient, you’ve got to figure out what’s wrong, you’ve then got to you know prescribe, do the prescribe then give the advice, so that’s completely different to a practice nurse session.. or maybe even your phlebotomy session” (Focus Group – Nurse & Healthcare Assistants)

Professional contextual factors included a wide variety of perspectives around prompted choice. Views amongst staff were polarised, with some believing it to be very acceptable and easy to conduct – the staff who conducted it more often, and others believing it to be challenging to conduct – the staff who conducted it less often. Overall, however, staff have positive attitudes to prompted choice believing it to be a good idea and believed it to be congruent with their professional role in most cases.

At the intervention contextual level, lack of time during consultations was the barrier discussed most often, alongside whether it was appropriate to ask all patients and concerns over negatively impacting the patient relationship.

“I would be happy to continue asking my pts if intervention was reintroduced as I feel it is a tremendously worthwhile/beneficial process to contribute towards” (Staff Online Survey)

“I still think general practice would probably be the best place for these things to happen and it’s a real shame, if we cannot do this” (Focus Group – GP)

“it depends on the patients really, erm because if they were really ill, I didn’t, I wouldn’t bring it up because I think that’s not appropriate” (Focus Group- GP)

“the time was quite limited cos er, you know, like you said they’ve come in and they want to start telling you what’s wrong” (Focus Group – Nurse & Healthcare Assistants)

Staff also reported problems with the SystemONE prompt and questionnaire, mainly that it was too long and complex. Staff had mixed views on the usefulness of leaflets and posters, with some staff using them to start the prompted choice process and others believing patients did not read them.

Finally, regarding the IFF model, providing information as part of prompted choice was discussed by all staff – verbally and also through the leaflets, and most staff were comfortable with this. Mixed views were discussed concerning an immediate sign-up opportunity, with some staff believing it is a good idea and others that it is better for patients to go away and think about it. Fewer discussions were on the topic of focused engagement, however staff mentioned that some patients wanted to start talking about their problem immediately and then wanted to leave once they were done. Indicating that patients may not have been focused on the topic of organ donation during prompted choice. Favourable activation however, was discussed at length, with some staff concerned

about patients being distressed by the topic and it not being appropriate. However, some discussed that they did not have any instances where a patient was distressed.

Patient Online Survey

Of the 36 patients who completed the online survey, 21 patients were asked by a nurse or healthcare assistant, seven were asked by a doctor or GP, and eight were not asked at all. Twelve patients noticed the leaflets and posters displayed in the practice, and twenty two patients did not. Responses to the open questions showed most patients believed the intervention to be acceptable and appropriate in a general practice setting.

“I went in to have my smear test and was asked at the end. I thought it was a great idea to ask me whilst in the room for a medical reason.” (Patient Online Survey)

“As long as asked once and not pressured I’m not bothered. I am already a donor.” (Patient Online Survey)

“This is probably the most appropriate place to be approached” (Patient Online Survey)

“This is the best place for the conversation in my view” (Patient Online Survey)

Some patients described that it might be annoying and one patient described feeling pressured to sign-up. Patients, on the whole, did not find the leaflets and posters useful. This was further illustrated by recommendations provided by the patients, including providing leaflets in the waiting rooms when these were already provided.

“Ok. Its same as being bombarded with tv ads. Annoying.” (Patient Online Survey)

**leaflets are*” useful as information reminders, but little influence on decision,. The major influence for me on deciding this sort of thing is speaking with someone “ (Patient Online Survey)*

Discussion

Summary

This study investigated the feasibility and acceptability of an organ donation intervention in general practice. Staff in the participating practice aimed to ask patients during consultations if they would like to join the NHS ODR. Staff were trained to do this and leaflets and posters were displayed in the practice. Over three months 812 patients experienced prompted choice, and 43.3% joined the NHS ODR - 244 joined the NHS ODR for the first time (30.0%), and 108 joined for the second time (13.3%). Overall the intervention was found to be feasible to conduct with some patients by some staff members. It was also found to be acceptable to staff and patients as long as patients for whom it is not appropriate were not asked. On 34% of occasions where a patient was not asked, this was reported to be due to a lack of time (N943/2906) and 18.8% due to it not being appropriate (N520/2906). Mixed results were found for the usefulness of leaflets and posters, as only 100 were taken when 6,569 face to face consultations occurred in the practice during the prompted choice period.

Strengths and Limitations

A strength of this research is that an in-depth examination of feasibility and acceptability was conducted using a number of mixed methods approaches. This allowed for the collection of a breadth and also depth of data, including quantitative reasons why the intervention wasn't conducted and in depth exploration of these reasons during focus groups. Additionally, the intervention shows it has promise for providing a new opportunity for people to join the NHS ODR as patients were asked in 12.4% of consultations during three months, and 30.0% of these joined. The intervention was also developed using a rigorous and detailed method, intervention mapping (17), and was underpinned by the IIFF model of organ donation registration (18), which could be a reason for its success. A number of stakeholders participated in the design and delivery of the intervention, including the participating practice, NHSBT, the patient participation group of the practice and a specialist nurse in organ donation. Including stakeholders in this process has been found to positively impact the success of interventions in previously literature (23).

There are limitations to this research, however. Recruitment to staff focus groups, online survey and the patient online survey was lower than anticipated. Additionally, the participation of only one practice, although results are promising, does not allow for transferability between practices. Therefore further investigations of feasibility and acceptability in multiple practices are required before firm conclusions can be made. Further challenges were found due to the constraints of the practice computer system to develop the prompt and questionnaire. Finally, a detailed examination of intervention cost was omitted from this study, due to resource and expertise limitations in the study team.

Comparison with existing literature

The findings support previous literature that active organ donation interventions in primary care are superior to passive (13). Only 100 leaflets were taken during the three months (a passive technique), with no guarantee patients would register on the NHS ODR. Whereas 244 patients signed up for the first time over three months using prompted choice, an active intervention. However, these findings are not conclusive. This is also only the second intervention targeting organ donation to be designed using intervention mapping to the best of the authors' knowledge (24). This research adds to the knowledge base using this technique in this context and supports that interventions designed using it can be successfully implemented. Finally, compared to the extensive barriers to interventions and challenges to implementing them expressed for primary care settings (25–30), this research shows a relatively successful rate of conducting brief verbal interventions in general practice.

Implications for research and practice

The implications of this research are that it is possible for staff on some occasions to ask patients in consultations if they wish to join the NHS ODR. Staff and patients find this intervention feasible and acceptable during some consultations, which means it can be tested further. The finding that nurses and healthcare assistants were able to perform prompted choice more often than GPs is particularly pertinent for further testing. Combined with the qualitative findings, reasons for this are likely to be that GPs see patients with more serious and complex issues than nurses and healthcare assistants. Whether prompted choice was 'appropriate' for all patients was discussed as a key theme, and this could

explain why GPs conducted it less than other staff members – because it is less appropriate for patients visiting a GP with a more serious issue. Additionally, nurses and healthcare assistants discussed that prompted choice was easier to conduct in more ‘routine’ clinics, such as phlebotomy, where they knew in advance what the patient was visiting for. This has important implications for testing the intervention further. It is possible that the intervention could be restricted to routine consultations such as screening, phlebotomy or health checks. However, it is recommended that further feasibility testing is conducted to explore this finding, and examine whether it occurs in multiple practices or is specific to the single practice who participated in the present study. A feasibility randomised controlled trial in multiple practices could fulfil this requirement, to examine transferability of the intervention between them. Additionally, it could obtain statistics to inform a sample size calculation and establish intervention costs. Finally, this could also gather more data on patient and staff acceptability – particularly of GPs as only two participated focus groups.

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Ethical Approval

Ethical approval was granted by Health Research Authority on 11th December 2017 (IRAS ID: 230702), favourable opinion by the NHS Research Ethics Committee on 3rd November 2017 (17/LO/1361) and favourable opinion by the Confidentiality Advisory Group on 8th December 2017 (17/CAG/0169). University of Bedfordshire Institute for Health Research

Ethics Approval was granted on 20th November 2017 (IHREC800). Several non-substantial amendments were approved by the Health Research Authority (23rd February 2018, 1st March 2018, 2nd May 2018 and 2nd July 2018).

Competing Interests

The authors declare that they have no competing interests

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References

1. NHS Blood and Transplant. Organ Donation and Transplantation: Activity Report 2018/19 [Internet]. 2019 [cited 2019 Aug 27]. Available from: <https://nhsbt.dbe.blob.core.windows.net/umbraco-assets-corp/16537/organ-donation-and-transplantation-activity-report-2018-2019.pdf>
2. Hulme W, Allen J, Manara AR, et al. Factors influencing the family consent rate for organ donation in the UK. *Anaesthesia*. 2016;71(9):1053–63.
3. Sque M, Walker W, Long-Sutehall T, et al. Bereaved donor families' experiences of organ and tissue donation, and perceived influences on their decision making. *J Crit Care*. 2018;45:82–9.
4. Walker W, Broderick A, Sque M. Factors Influencing Bereaved Families' Decisions About Organ Donation: An Integrative Literature Review. *West J Nurs Res*. 2013;35(10):1339-1359 21p.
5. Chandler JA, Connors M, Holland G, Shemie SD. "Effective" Requesting: A scoping review of the literature on asking families to consent to organ and tissue donation. *Transplantation*. 2017;101(5):S1–16.
6. Ralph A, Chapman JR, Gillis J, et al. Family perspectives on deceased organ donation: Thematic synthesis of qualitative studies. *Am J Transplant*. 2014;14(4):923–35.
7. Smeets W, de Groot J, Vernooij-Dassen M, et al. Decision making by relatives about brain death organ donation: an integrative review. *Transplantation*. 2012;93(12):1196–211.
8. NHS Blood and Transplant. Is organ donation law changing? - NHS Organ Donation Register [Internet]. 2019 [cited 2019 Aug 27]. Available from: <https://www.organdonation.nhs.uk/faq/is-organ-donation-law-changing/>

9. Moore R, Thomas R, Jones C. Organ donation in Wales. *Br J Gen Pract*. 2018;68(668):119.3-120.
10. National Health Service. Family Doctor Services Registration - GMS1 Form [Internet]. 2017 [cited 2019 Aug 27]. Available from:
<https://www.nhs.uk/ServiceDirectories/Documents/GMS1.pdf>
11. Jones C, Papadopoulos C, Randhawa G. Primary care interventions to encourage organ donation registration: a systematic review. *Transplant Rev*. 2017;31(4):268–75.
12. Rodrigue JR, Krouse J, Carroll C, et al. A Department of Motor Vehicles intervention yields moderate increases in donor designation rates. *Prog Transplant*. 2012;22(1):18–24.
13. Zaramo CEB, Morton T, Yoo JW, et al. Culturally Competent Methods to Promote Organ Donation Rates Among African-Americans Using Venues of the Bureau of Motor Vehicles. *Transplant Proc*. 2008;40(4):1001–4.
14. Harrison TR, Morgan SE, Di Corcia MJ, Corcia MJ Di. Effects of information, education, and communication training about organ donation for gatekeepers: clerks at the Department of Motor Vehicles and organ donor registries. *Prog Transplant*. 2008;18(4):301–9.
15. Bartholomew Eldredge LK, Markham CM, Ruitter RAC, et al. Planning health promotion programs: an intervention mapping approach. 4th ed. San Francisco, CA: Jossey-Bass; 2016.
16. Siegel JT, Alvaro EM, Hohman ZP. A Dawning Recognition of Factors for Increasing Donor Registration: The IIFF Model. In: Siegel JT, Alvaro EM, editors. *Understanding Organ Donation: Applied Behavioral Science Perspectives*. Malden, MA: Wiley-Blackwell; 2010. p. 313–30.

17. Orsmond GI, Cohn ES. The distinctive features of a feasibility study: Objectives and guiding questions. *OTJR Occup Particip Heal*. 2015;35(3):169–77.
18. O’Cathain A, Croot L, Sworn K, et al. Taxonomy of approaches to developing interventions to improve health: a systematic methods overview. *Pilot Feasibility Stud*. 2019;5(1):1–27.
19. Squires JE, Grimshaw JM, Taljaard M, et al. Design, implementation, and evaluation of a knowledge translation intervention to increase organ donation after cardiocirculatory death in Canada: a study protocol. *Implement Sci*. 2014 Jul;9(1):80.
20. Mason VL, Shaw A, Wiles NJ, et al. GPs’ experiences of primary care mental health research: A qualitative study of the barriers to recruitment. *Fam Pract*. 2007;24(5):518–25.
21. Yallop JJ, Mcavoy BR, Croucher JL, Tonkin A. Primary health care research—essential but disadvantaged. *Med J Aust*. 2006;185(2):118–20.
22. Michalec B, Fagan HB, Rahmer B. Primary care practices’ perceived constraints to engaging in research: the importance of context and “Flow”. *Prim Health Care Res Dev*. 2014;15(1):58–71.
23. Brodaty H, Gibson LH, Waine ML, et al. Research in general practice: a survey of incentives and disincentives for research participation. *Ment Health Fam Med*. 2013;10(3):163–73.
24. Bower P, Wallace P, Ward E, et al. Improving recruitment to health research in primary care. *Fam Pract*. 2009;26(5):391–7.
25. Hummers-Pradier E, Scheidt-Nave C, Martin H, et al. Simply no time? Barriers to GPs’ participation in primary health care research. *Fam Pract*. 2008;25(2):105–12.

Table 1: Prompted Choice Questionnaire

Prompted Choice Questionnaire responses			
Yes	Any organs or tissues		
	Selected organs	<i>Heart</i>	
		<i>Liver</i>	
		<i>Kidneys</i>	
		<i>Corneas</i>	
		<i>Lungs</i>	
<i>Pancreas</i>			
Unsure – Patient will think about it			
Do not ask patient again			
Patient believes they are already on the register	Would the patient like to re-register?	<i>Yes</i>	<i>Any organs or tissues</i>
			<i>Selected organs</i>
			<i>Heart</i>
			<i>Liver</i>
			<i>Kidneys</i>
			<i>Corneas</i>
			<i>Lungs</i>
			<i>Pancreas</i>
		<i>No – Patient would not like to re-register</i>	
Patient was not asked	Not appropriate for consultation		
	Lack of time		
	Clinician personal beliefs		
	Other reason, please specify		

Table 2: A breakdown of patient responses to prompted choice and reasons why prompted choice was not conducted.

Patient Preference or Reason Patient Not Asked	Number of Responses
<i>Yes – Any</i>	216
<i>Yes – Selected</i>	28
<i>Believes already on register</i>	112
<i>Unsure</i>	327
<i>Do not ask again</i>	129
Total	812
<i>Patient not asked</i>	2772
<i>Reason Patient not asked – Lack of time</i>	943
<i>Reason Patient not asked – Not appropriate for consultation</i>	41
<i>Reason Patient not asked – Lack of time & other</i>	520
<i>Reason Patient not asked - Other</i>	1268