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RESEARCH

The brave new world of older patients: preparing general practice training for an ageing population

Andrew Bonney[1], **Lyn Phillipson**[2], **Sandra C. Jones**[3], **Julie Hall**[4] and **Rashmi Sharma**[5]

[1]Roberta Williams Chair of General Practice, Graduate School of Medicine, University of Wollongong, Wollongong, NSW, Australia
[2]Research Fellow, Centre for Health Initiatives, University of Wollongong, Wollongong, NSW, Australia
[3]Director, Centre for Health and Social Research, The Mary Mackillop Institute for Health Research, Australian Catholic University, Melbourne, Victoria, Australia
[4]Project Manager, Centre for Health Initiatives, University of Wollongong, Wollongong, NSW, Australia
[5]Adjunct Associate Professor, ANU Medical School, The Australian National University, Canberra, ACT, Australia

Aim: Develop and pilot test evidence-based resources for general practice training practices to enhance older patients' (65+ years) interactions with General Practice Registrars (GPRs). **Background:** In Australia, general practice trainees, referred to as GPRs, see fewer older patients and patients with chronic conditions than doctors who have completed their specialist GP training. This reduces learning opportunities for GPRs in the management of these important patient groups. Therefore, developing effective strategies to improve GPR–older patient interaction is critical to primary care training, to meet the current and future needs of an ageing population. **Methods:** Adopting a social marketing approach, GPR practice resources were developed to address knowledge and attitudinal barriers at the practice and patient level to improve older patient comfort, and willingness to engage, with GPR care. Two focus groups with older patients ($n = 18$) and interviews with staff of training practices ($n = 12$) were utilised to pre-test resources. Amended resources were pilot tested and evaluated in a naturalistic GPR training practice setting using a structured patient questionnaire ($n = 44$). **Findings:** Pilot evaluation suggests improved comfort and willingness of older patients to interact with GPRs. In all, 54% of survey participants indicated they would be more likely to make an appointment with a Registrar in the future as a result of exposure to the resources. In all, 40% of patients would feel comfortable having a GPR manage a complex or chronic condition, which compares favourably with 28% of similarly aged patients in previous research. The use of tailored, engaging and informative GPR resources for older patients and practice staff may be an important contributor to addressing the growing problem of ensuring GPRs are adequately engaged in treating older patients. The adoption of a social marketing framework was instrumental in enhancing the acceptance and effectiveness of this intervention.

Key words: general practice; older patients; registrar training; social marketing

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Introduction

The ageing population, combined with changes in lifestyles and reduced mortality from communicable disease, has resulted in a global epidemic of chronic disease (World Health Organisation, 2011).

Correspondence to: Andrew Bonney, Roberta Williams Chair of General Practice, Graduate School of Medicine, University of Wollongong, Building 28.119, Wollongong, NSW 2522, Australia. Email: abonney@uow.edu.au

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The combined effect of ageing and its associated health impacts is placing strain on Australia's health system [National Health and Hospitals Reform Commission (NHHRC), 2009], as it is across the globe. Strengthening primary care is one response that has the potential to reduce population-wide morbidity and mortality from chronic disease, whilst also containing national health expenditure (Starfield *et al*., 2005; NHHRC, 2009). As part of strengthening primary care for this brave new world of older patients, we must seek ways of adapting the way we train primary care physicians [family physicians in North America and general practitioners in the United Kingdom, Europe, Australia and New Zealand] in this changing environment (Lipman, 2000).

In Australia, primary care physician trainees, known as General Practice Registrars (GPRs), must complete specified clinical rotations during their postgraduate hospital training (postgraduate years 1 and 2) before entering supervised community practices for a minimum of a further two years. GPR training relies heavily on GPRs having sufficient clinical exposure to the range of cases and conditions that they will see in unsupervised practice. However, in the Australian context there is evidence that GPRs do not see the same caseload of older patients and patients with chronic conditions than doctors who have completed their specialist GP training see in community practice (Spike and Britt, 2006). This limits training opportunities in chronic disease management for the future generation of general practitioners (Spike and Britt, 2006). A number of reasons have been advanced for this, including older patient preference for interpersonal continuity of care with their usual GP, especially for chronic conditions (Bonney *et al*., 2009a). Delineating the key issues in older patient reluctance to consult GPRs, and developing effective strategies to improve GPR–older patient interaction, is therefore of importance to primary care training, primary care and the future health of populations.

Research into the attitudes of older patients to GPRs has recently been undertaken in Australia (Bonney *et al*., 2009a; 2009b; 2010). This research, including data from a national sample, confirmed that there was a significant reluctance by older patients to consult GPRs for chronic problems (Bonney *et al*., 2009a; 2012). Data indicated that the factors of trust and continuity of care were highly important to older patients in their interactions with GPs and GPRs. A number of achievable interventions, including ensuring personal and informational continuity with the patients' regular GP around GPR consultations, were shown to have the potential to result in significant improvements in patient acceptance of GPR chronic disease care (Bonney *et al*., 2012). In addition, it was shown that patients have a poor understanding of the nature of GP training and the roles of GPRs in practices; information that older patients wished to have (Bonney *et al*., 2009a; 2010).

The purpose of this study was to develop and pilot test a resource for training practices that might address some of the key areas of concern for older patients. This was undertaken to improve the information available to older patients in making decisions to consult GPRs and hence enhance older patient–GPR interactions. Based on theoretical work derived from previous research (Bonney *et al*., 2011), the aim was to strengthen communication, and hence trust, in the institutional processes at training practices to improve patient comfort with GPR care. Processes important to patients were highlighted in the resources including employing appropriately qualified and trained GPRs (Bonney *et al*., 2009a; 2012), ensuring adequate supervision of these junior medical staff (Bonney *et al*., 2009a) and providing mechanisms for maintaining interpersonal continuity of care with the patient's usual GP around GPR consultations (Bonney *et al*., 2012).

Method

Materials development

The intervention was developed using a social marketing framework, which has been successfully used to elicit behaviour and attitude change at a group or community level, across a wide range of behaviours and target audiences, utilising targeted and mass communication of educational messages (Kotler and Lee, 2008). Consistent with the principles of social marketing, an audience-centric approach was adopted in the development of the GPR resources (Kotler *et al*., 2002). Older patients and practice staff were consulted during focus groups and interviews about the messages, design and utility of the developed GPR resources. Resources were subsequently amended in response to received feedback.

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This was not simply an information campaign, with research and analysis directly informing the 4Ps of the 'Marketing Mix' (product, price, place and promotion) (Kotler *et al.*, 2002). In social marketing, 'product' refers to the desired behaviour (actual product), and the set of benefits associated with the desired behaviour (core product) (Kotler *et al.*, 2002). In this case, older patient interaction with the GPR is the desired behaviour (actual product), whereas the benefits that older patients could accrue from interaction with the GPR are the 'core products'. There is also the 'augmented product', the features that encourage uptake of an actual product or service, in this case those things that will support older patients in their interaction with GPRs. Price is the customers' perceived costs or losses exchanged for the promised benefits (Grier and Bryant, 2005); while this includes monetary costs, it also includes non-monetary factors such as physical or psychological costs (Merrit, 2010). In this context, 'price' refers to the costs or negative outcomes that older people may associate with a medical consultation with a GPR, which they exchange for the perceived benefits of that interaction. 'Place' is where and when the target audience (the older person) will perform the interaction with the GPR and receive any tangible information or associated support, as well as the communication channels used to disseminate promotional information about the programme (Kotler *et al.*, 2002), in this case the GPR training programme.

In this study, a suite of evidence-based resources was the 'augmented product' developed to provide practical recommendations and tools for training practices to implement to improve older patient interactions with GPRs. The resources were designed to address identified barriers (the 'price' considerations) that currently prevent older patients consulting GPRs for chronic problems. Patient- and practice-level informational and attitudinal barriers were addressed within the promotional messages of these tailored resources. For patients aged 65+ years these resources included an information booklet (*What is a GP Registrar?*), GPR introductory posters and waiting room posters; and for staff of training practices a fact sheet for practice staff, fact sheet for GPRs and fact sheet for general practitioners. 'Place' factors were also taken into consideration to ensure patients were exposed to the suite of resources at the preferred time and location within the GPR practices.

Testing materials with the target audience

The GPR practice resources were then tested with the two primary target audiences: patients aged 65+ and staff from training practices. Two focus groups were conducted with patients ($n = 18$) aged 65+ years who had an existing relationship with a medical practice involved in GPR training. A semi-structured exploratory approach was taken based on a discussion guide developed by the research team. The focus groups were digitally recorded and transcribed. A total of 12 face-to-face interviews were undertaken with practice staff members: three with GPs, three with GPRs and six with front desk practice staff and practice managers. Again, a semi-structured interview guide was used to elicit feedback about the GPR resources designed for practice staff (fact sheets), perceptions of the GPR resources for older patients and views on the most effective resources to improve older patients' relationships with GPRs in training practices. Analysis was undertaken by using a constant comparison approach, aiming to elicit key themes concerning responses to the resource material. Initial coding was conducted by a trained research officer (Sandra C. Jones) who grouped segments of similarly coded text being grouped for re-reading and analysis. Resultant themes were then reviewed by another researcher (Lyn Phillipson) and refined until agreement was reached between both coders (Crabtree and Miller, 1992).

Consistent with the social marketing framework, the results are presented in the context of the '4Ps' (product, price, place and promotion). However, previous research has demonstrated that the 'product', a medical consultation with a GPR, is poorly understood by the target audience, as older patients are largely unaware of the role or qualifications of GPRs (Bonney *et al.*, 2009b; 2012). Previous research suggests that the 'price' includes the perceived risks and disadvantages associated with receiving care from a GPR rather than the patient's usual GP: issues related to trust and continuity of care (Bonney *et al.*, 2014). Owing to the complex nature of this interaction, product and price are seen as inextricably linked and thus are discussed together in the 'Results' section.

Refinement of the materials

Resources were refined in response to the feedback from older patients and practice staff and

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then pilot tested and evaluated in a practice located in the Australian Capital Territory. This involved the display of the suite of resources within a training practice environment for a period of three months. Each resource was placed in the location and manner recommended during the resource testing phase: the introductory poster was displayed at the front desk area of the training practice, whereas both the waiting room poster and information booklet were placed in the patient waiting room area. Practice staff members were also provided with the fact sheets for practice staff, GPs and GPRs for use over this period. Patients aged 65+ were then surveyed to evaluate the perceived value of the resources as experienced in a naturalistic setting. Surveys were provided to patients exiting the surgery by front desk staff to take home to complete and post back confidentially to the research team in a reply paid envelope. Open-ended written feedback was obtained from practice staff members about the utility and value of the resources in an everyday practice environment.

Results

Audience resource testing: older patient GPR resources

The participants in the focus group discussions and interviews are summarised in Table 1.

Many of the older patients who participated in the focus group discussions indicated that they had a long-term relationship with their existing doctor, or at least with the practice they currently visited. A number had recently undertaken a consultation with a GPR, and none reported any negative experiences. The practice staff that were interviewed had worked in training practices, which typically serviced a high proportion of patients aged 65+.

Testing the Marketing Mix

Product and price

In the training practice context, the 'product' is a medical consultation with a GPR and the 'price' includes the perceived risks and disadvantages.

The majority of older patients considered the information booklet to be a very valuable resource, containing information that was 'new' and of 'high importance'. From the suite of resources tested, it was viewed as the most important and valuable. For practice staff members, this booklet was identified as containing information that was beneficial for older patients, but also, importantly, for front desk staff, who also noted 'knowledge gaps' around GPR training and qualifications.

Older patients identified the following messages contained in the information booklet as key to positively influencing their perception of GPRs: 'A GP Registrar is a qualified doctor', 'Registrars work closely with the experienced GPs in your practice' and 'you are always welcome to ask the Registrar to double-check management with your regular GP'. Importantly, these statements were considered to assist in improving their level of confidence around seeing a GPR. As a result, older patients felt that these messages should be highlighted or emphasised across all of the GPR resources.

'I like to know that they are qualified doctors but "Working closely with your GP" that is

Table 1 Characteristics of focus group and practice interview participants

	Total number of participants	Respondent characteristics
Focus group participants	*n* = 18	Eight male and 10 female patients Aged over 65 years Current patients of two GPR training practices in regional locations in Australia Majority indicated a long-term relationship with either their GP or general practice
Practice interview participants	*n* = 12	Three GPs, three GPRs and six front desk staff and/or practice managers Current staff of two GPR training practices in regional Australia that service a large proportion of patients aged 65+ years

GPR = General Practice Registrar.

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the most important thing because if they are not then you wouldn't want to see them'.

'The last sentence on that part "you are always welcome to ask the Registrar to double-check management with your regular GP". If you are not happy with something you can always ask. That is important for some people if they are not familiar with registrars to start with and they think well, what happens if I don't like them, or I am not happy with the diagnosis or the treatment. If it says there that you can check with their own GP, or regular GP, it may give people a little bit more confidence in at least seeing a registrar for the first time'.

The introductory poster was perceived to have an important role in familiarising older patients with incumbent GPRs. For older patients, familiarity with the face and or name of the incumbent GPR was seen to assist and potentially enhance the process of considering a consultation with a GPR.

'Yes, if you were asked to take an appointment with the Registrar but you had already seen their photo – you would think, oh yes, I have seen them and it would help'.

Both of the participating training practices recognised the value of familiarising patients with their GPR/s and had, in fact, engaged some version of an introductory poster within their practice (generally without a photographic image). Across the three versions of posters tested, both older patients and practice staff preferred to see the image of a Registrar with other practice doctors, to effectively communicate the 'team' of doctors working closely together and the term 'Our Registrar' was also preferred by both. Older patients suggested that this poster should emphasise the message, 'Registrars are qualified doctors', reflecting their information needs.

The waiting room poster was considered valuable by older patients to introduce the issue and 'start them thinking' about the role of GPRs in their practice and their relationship with them. Practice staff tended to be more ambivalent about this resource on the basis that they believed the critical messages for older patients were adequately delivered in the information booklet and the introductory poster.

Older patients indicated that the message and imagery in the waiting room poster clearly communicated to them that having a consultation with a GPR means that 'your doctor is in the background'.

'It does assure that if you are going to see a Registrar first the backup is right there in the next room. You are comfortable with that'.

Older patients and practice staff suggested that this waiting room poster should also feature the vitally important statement 'A GP Registrar is a qualified doctor', and this was added to the poster before piloting. It was evident that for older patients as a 'stand alone' resource it did not answer their questions about GPRs or provide the depth of information they required; as previously noted, the information booklet 'What is a GP Registrar' would ideally be located in close proximity to this poster.

Place

In the context of this intervention, 'place' refers to the most appropriate locations and channels for dissemination of the messages such as where in the surgery to locate messages; whether to post materials or have them on site; and intermediaries, such as the use of practice staff to disseminate and draw attention to the messages.

For older patients, the information booklet was envisaged to work most effectively in conjunction with the other resources, as they contained vital detailed information to supplement the more introductory nature of the posters. For this reason, the preferred location for this booklet was under the waiting room posters (Training Registrars to care for older patients) in an attached plastic stand. However, there was additional comment that this resource could also be available at the front desk. Some front desk staff indicated that they would prefer to personally hand this booklet directly to older patients in tandem with a quick discussion about GPRs, as a more effective mode of dissemination for this age group.

Older patients and practice staff considered the ideal location of the introductory poster to be behind, or at, the front desk, as a valuable prompt/support at the site of reception and (often) appointment re-bookings.

Practice staff were unsure about the waiting room poster; raising pragmatic concerns about

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space and aesthetics in their practice waiting rooms, and the display of unnecessary information or materials. However, older patients considered the waiting room to be the most effective location for the display of this poster, with general comment that they did notice and read new information located in the practice waiting room.

Promotion

In the context of this intervention, 'promotion' refers to the most appropriate images, taglines and supporting text for communicating the key messages.

It was clear that for older patients the most important element of any photographs depicting GPRs within this resource was the presence of a stethoscope, which for them, instantly identified Registrars as doctors. Possible alternative formats for this 'introductory' poster were also explored (eg, flyers mailed to older patients). However, in terms of effectively introducing and familiarising older patients with incumbent GPRs, posters remained the strongly preferred format for this resource.

Design elements of the waiting room poster were also explored to identify features, which maximised the effect, comprehension and readability. This resulted in some specific layout and design features including the use of a circular design (perceived to be softer, more human and also more noticeable because of its atypical layout), a blue colour scheme (perceived to be a calm, soothing, harmonious colour) and the use of a larger font size and darker font colour to improve readability for this audience.

Audience resource testing: GPR fact sheets for staff of training practices

Practice staff (front desk staff), GPs and GPRs were asked to provide feedback about the specific GPR fact sheets that were developed for their use. Overall, the fact sheets were well received by front desk staff and Registrars, but GPs approached the fact sheets and their potential adoption within training practices with a level of ambivalence.

Front desk staff and practice managers identified a clear need for the fast facts for practice staff resource within training practices. They envisaged that this would be a valuable front desk tool located next to telephones, providing useful prompts for 'what to say' to older patients to encourage their consideration of GPR care. Practice managers indicated that this resource would be valuable in staff training/procedure folders to ensure all 'frontline' staff were well informed about facilitating older patient's engagement with GPRs. It was also suggested that this fact sheet could be disseminated and discussed in staff meeting or training session forums to improve knowledge uptake.

'This is definitely useful. As a quick reference near the phone on the noticeboards then all of the staff would know what to say, and say it with consistency. Have one approach that everyone uses'.

'I could stick it on the wall and give it to everybody and if I had new staff I would put it in their induction package'.

Information featured on this fact sheet about *why* it is important to facilitate older patients' acceptance of Registrar care (ie, 'this raises concerns that GPRs do not manage sufficient numbers of older patients') was considered to be useful and motivating information for front desk staff. There was some evidence that practice staff (excluding practice managers) were not well informed about the status and qualifications of GPRs and could benefit from additional, specific resources and/or training.

'I am new to Registrar practices and I was wondering when I started why the staff weren't selling the Registrars as qualified doctors, because they are qualified doctors. It seemed like the staff were hesitant to recommend them and I guess that is lack of education on behalf of the staff. I think the reception staff need training as well'.

'Some of the reception staff don't actually know what a Registrar is or what the training process is to become a doctor. So it would provide useful education for reception staff'.

'Perhaps we all need to be trained on that (what a Registrar is) or told, so we can tell the patients'.

The practice staff fact sheet was amended in response to requests from front desk staff for the

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use of 'plain language' and greater focus on practical information (ie, 'what to do and say' to improve older patients relationships with GPRs).

GPRs considered the fast facts for Registrars sheet to contain some valuable information about older patients' relationships with GPRs that they would not otherwise be aware of before undergoing their first placement. Hence, they suggested that ideally GPRs should receive this resource before their first placement. In this way, they would have prior understanding of the issue and some practical strategies to use with older patients that could be implemented from the beginning of their first placement.

> *'Yes I think it would be helpful if we had this information at the orientations from the start because that is when you don't know how to deal with some things and like I said we do deal with it in the hospital but we don't think we'll have to deal with it in the GP setting'.*

No changes were requested or made to the content of this resource after testing with GPRs.

GPs provided a mixed response to the fast facts for general practitioners sheet and the message content. For some, it was viewed as useful to reinforce information that they, for the most part, already knew, but it was likely to be only read once and disposed of. For others, the content around strategies to promote the GPR to their patients was somewhat fraught. For some, the recommendations promoted discomfort around playing a role, which actively promoted GPR care to their older patients, with whom the importance of continuity of care was an important concept to both patients and GPs.

Evaluation survey

A total of 44 out of 90 completed surveys (49%) were completed and returned by patients older than 65 years. Open-ended written feedback was obtained from five practice staff members (two GPs and three front desk staff). Owing to the small number of completed surveys and it not being possible to characterise the non-responders, the results should be treated as indicative only.

Respondents were fairly evenly split between female (55%) and male (45%) adults, aged 65–69 years (32%), 70–79 years (34%) and 80 years or over (34%) and typically had a long-term relationship with their current GP, with 32% indicating a relationship of 15 or more years (Table 2).

Table 2 Characteristics of survey respondents

	Survey respondents (n = 44)	
	Count	Percentage
Age		
65–69	14	31.8
70–74	10	22.7
75–79	5	11.4
80–84	9	20.5
85–89	5	11.4
90+ years	1	2.3
Gender		
Female	24	54.5
Male	20	45.5
Number of years with current GP		
<5 years	7	15.9
5–9 years	12	27.3
10–14 years	11	25.0
15–20 years	8	18.2
>20 years	5	11.4
No response	1	2.3

The GPR resource most likely to have been noticed by survey respondents was the introductory poster, with 66% indicating that they had seen this resource, followed by the information booklet (59%) and the waiting room poster (54%). It is likely that the more prominent placement of the introductory poster at the front desk area resulted in the higher recall of this resource.

Respondents who indicated that they had seen one or more of the resources (n = 35) were asked the extent to which they agreed or disagreed with a range of statements about GPRs based on the resource/s they had seen. Responses were on a scale of 1 (strongly agree) to 5 (strongly disagree); owing to the small sample size, 1 and 2 were collapsed into 'agree' and 4 and 5 were collapsed into 'disagree'.

The majority of respondents agreed that 'I have a better understanding of GP Registrars' (77%); 'I have developed a better understanding of the importance of GP Registrars gaining experience in the care of older people' (77%); and 'I feel I can trust a GP Registrar to provide me with quality care' (71%). More than half (54%) agreed that 'I would be more likely to make an appointment

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Table 3 Agreement with statements about GP Registrars (based on resources seen)

	Survey respondents (n = 35)	
	Count	Percentage
I have a better understanding of the qualifications of GP Registrars		
Agree	27	**77.1**
Neutral	5	14.3
Disagree	2	5.7
No response	1	2.9
I have a better understanding of the importance of GP Registrars gaining experience in the care of older people		
Agree	27	**77.1**
Neutral	4	11.4
Disagree	3	8.6
No response	1	2.9
I feel I can trust a GP Registrar to provide me with quality care		
Agree	25	**71.4**
Neutral	6	17.1
Disagree	3	8.6
No response	1	2.9
I would be more likely to make an appointment with the GPR in the future		
Agree	19	**54.3**
Neutral	10	28.6
Disagree	4	11.4
No response	2	5.7
I would feel comfortable having a GPR manage a long-term or complex medical problem		
Agree	14	**40.0**
Neutral	14	40.0
Disagree	5	14.3
No response	2	5.7

GPR = General Practice Registrar.

with the GPR in the future' and 40% that 'I would feel comfortable having a GPR manage a long-term or complex medical condition' (Table 3).

Survey respondents were also asked to consider their perceptions about GP Registrars and to indicate their agreement or disagreement with two statements about GP Registrar care. Results demonstrated that confidence in seeing a GP Registrar can be improved for the majority of older patients if they have knowledge that their regular doctor works closely with the GP Registrar and that their medical record is readily available. The majority of respondents agreed that 'knowing that my regular doctor works closely with the GP Registrar helps me to feel confident about seeing a Registrar' (80%) and that 'knowing that my medical record is readily available helps me to feel confident in seeing a Registrar' (74%).

Respondents were invited to provide a final comment regarding the resources they perceived to be the most important for older patients; and, as well as confirming the value of the resources per se, these comments reinforced the importance of the key messages.

> *'The fact the GP Registrar is working closely with an experienced GP that I know and respect'.*

> *'Having complete history of relevant problems and being backed up with your regular GP. Going in unaware of these assets is of little value to patients'.*

> *'about my doctor working closely with the GP registrar'.*

Practice staff evaluation

Five practice staff members completed two open-ended questions asking their general opinion about resources for older patients and resources for staff of training practices. Responses demonstrated that

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both the patient resources and the staff resources were perceived to be useful in the practice setting.

> *'Good, this flyer would make it easier for all staff to refer to when asked to explain "What is a Registrar?" Also to be able to hand our patients this flyer to take home for their information'*
> (Practice/front desk staff)

> *'The GPR fact sheet was available for practice staff to read in order to familiarise themselves with the role of Registrars. This information in turn could be passed on to patients so they would feel comfortable seeing a Registrar rather than their usual doctor'*
> (Practice/front desk staff)

> *'I think the resources are good, unfortunately we have a lot of anxiety from elderly patients when their own doctor is not available. We do present our Registrar as best we can but for some reason when the words Intern or Registrar is mentioned people shy away'*
> (Practice/front desk staff)

> *'Posters and pamphlets were readily available for patients to see and access. Practice staff could refer to these as well as letting patients know of information from GPR Factsheet. This worked well and older patients generally felt more confident about seeing Registrars'*
> (Practice/front desk staff)

Discussion

Using a social marketing framework, we developed a suite of resources to inform older patients about the role and qualifications of GPRs. The aim was to increase their knowledge and understanding, and hence comfort, with receiving care from these doctors. The evidence-based content of the resources was developed to address knowledge and attitudinal barriers at the practice and patient level, and adapted in response to patient and practice feedback to produce resources that were both accurate and attractive and useful for patients and practice staff. The responses from older patients during the resource testing, in relation to their low awareness of the role and qualifications of GPRs, were consistent with those found in previous research (Bonney *et al.*, 2012).

This was a pilot study, and resource constraints prevented more extensive pilot testing and evaluation. The results of evaluation survey should be viewed within the limitations of the study, notably, the small sample from a single practice location. These results should be confirmed by evaluation across multiple practices before extrapolating them with any confidence. However, whilst acknowledging these limitations, responses suggested that the intervention was successful in generating attitudinal change and intentions to change the key target behaviour – older patient interaction with GPRs. Of the older adults who responded to the survey and had viewed the resources, 54% indicated that they would be more likely to make an appointment with a Registrar in the future as a result of reading the resources and 40% that they would feel comfortable having a GPR manage a complex or chronic condition. This is in comparison with 28% of similarly aged respondents in a national sample without exposure to the resource (Bonney *et al.*, 2012). Although it was beyond the scope of this study to explore pre- and post-exposure attitudes, these results are promising and suggest the approach could make an important contribution to addressing the current problem of low GPR engagement with older patients and those with chronic disease.

Three important findings arose from the project as a by-product of developing the resources. First, despite the significant length of time GPR training has been undertaken in these practices, patients (and to a degree practice staff) were not fully aware of the qualifications or status of GPRs. Second, GPs were in some cases negative, or, in other cases, ambivalent in their attitudes to promoting change in models of care aimed to increase the interaction between older patients and GPRs. This resistance suggests the need for the greater engagement of GPs themselves in strategies to address current trends. General practice typically has human resource constraints and the utilisation of GPRs to improve access for older patients, especially those with chronic conditions, is one avenue for addressing those constraints. There are also the training imperatives upon practices to improve chronic disease management exposure for GPRs. Although it was readily acknowledged by practice staff that they had difficulties in encouraging older patients to see Registrars, the response from GPs to improving this situation was

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ambivalent. The expression of views that reflected concerns in regards to the loss of continuity of care with patients suggests that effective models of delivering high-quality and safe GPR care to their older patients, whilst maintaining interpersonal continuity, had not been demonstrated to their satisfaction.

Finally, front desk staff and GPs suggested that the dissemination of GPR resources could be best achieved by practice meetings or training sessions. It was considered that uptake of the resources and understanding of their significance would be enhanced for training practices by a meeting/ discussion rather than simple dissemination of paper-based resources.

Conclusion

This was a small-scale pilot study, with a primary focus on developing resources that were evidence based, engaging and informative for older patients and practice staff, and a secondary aim of testing the feasibility of an intervention of this kind. The intervention was well received by patients and improved their awareness of and attitudes towards GPRs, was well received by practice staff and GPRs (although less so by GPs) and feasible to implement in a real-world general practice setting. Thus, research concerning patients' attitudes and perceptions of a model of health care delivery (GPR care in training practices) was successfully incorporated into resource materials using patient and staff feedback in a social marketing framework.

On the basis of the findings of this project, we recommend that these (or similar) resources be trialled and evaluated in a wider range of practices. To that end, a randomised trial of the implementation of the resources across a sample of practices is currently underway. We also recommend that training providers take the opportunity arising from the distribution of the resources to directly engage GPs and their staff in dialogue concerning how GPRs are presented to patients and explore the views of GPs in regards to alternative models of care involving GPRs. Innovative models of GPR care for chronic disease management for older patients should be trialled in order to improve the training experience for GPRs, patient satisfaction and the long-term health outcomes for patients.

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Conflicts of Interest

Andrew Bonney is a GP supervisor for CCCGPT and has previously received payment from CCCGPT for GP Registrar supervision. Rashmi Sharma has received payment from CCCGPT for GP Registrar supervision and is a current CCCGPT board member.

Ethical Standards

No human or animal experimentation occurred within the course of this study. All aspects of the study that involved direct research with participants were undertaken with approval from the University of Wollongong Human Research Ethics Committee (HE 11/355).

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