"*It's allowed me to do things that I could never imagine I could do*": An independent, qualitative evaluation of the Scottish SAS Development Programme

An NHS Education for Scotland (NES) funded project

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Executive Summary

The SAS Professional Development Fund is NHS Education for Scotland's (NES) approach to improving professional development for SAS doctors and dentists. The aims and objectives of the project are aligned with the Scottish Government's 2020 Vision.

The aim of this work is to independently and robustly evaluate the NES SAS Professional Development Fund. We did so through using a literature search and a qualitative interview study with key stakeholders, framed by a realistic approach so we could evaluate what works, for whom, and in how and under what circumstances. We interviewed 22 key stakeholders: SAS doctors, SAS Educational Advisors (EAs), programme architects and clinical directors, between end February and May 2014. We carried out an inductive and data-driven thematic analysis, then applied the realist framework to the data.

Our findings indicated that the SAS Programme Development Fund has changed the resources or opportunities available to SAS doctors in Scotland and, in that sense, has changed the context for this group – or at least those who have realised the associated opportunities. This new context has triggered programme mechanisms. These are, first, the EA role and activities and, second, the opportunity for funding for CPD linked to service developments. These mechanisms correspond to those intended by the Programme Architects. Other mechanisms elicited in the data include the development of regional networks of SAS doctors (resulting from the EA activities), increased communication between SAS doctors working across different services, and more opportunities for SAS doctors to interact with other doctors (SAS and others with the same clinical focus) through attending training. Those who have obtained funding feel personally more valued in terms of the positive message of obtaining external funding for training, their clinical service supporting them to attend, and actively seeking their contribution to service development and improvement. Thus, the gains or mechanisms are not just in terms of new or better skills and knowledge for SAS doctors, and service development, but in what these skills, knowledge and contributions represent and enable.

It is clear that the SAS Programme Development Fund recognises the value of SAS doctors in service development and improving patient care, thus linking directly with Everyone Matters: 2020 Workforce Vision - Implementation Framework and Plan 2014-15. Issues to address in the future include improved communication about the Fund, and encouraging all SAS doctors, not just the motivated few, to be proactive about their own training and development within the framework of their professional roles.

1. Introduction

In this report, we provide the rationale for this project, background in terms of literature and importance, and the study aims and research questions.

1.1 Background

SAS doctors and dentists work across Scotland in a wide range of secondary care specialties. With the new Specialty Doctor contract in 2008, time for appraisal and CPD was formally recognised, and all Specialty contracts should have at least one session of Supporting Professional Activity (SPA) per week to allow time for this. The GMC CPD guidance for *all* doctors, emphasises the importance of planning for professional development, patient safety and revalidation (GMC, 2012). The linkage of appraisal process and revalidation is a driver to improve rates of appraisal, and hence recognition of skills and input, of staff, associate specialist, and specialty (SAS) doctors but local support and systems for SAS doctor development are inconsistent (Rimmer, 2014). The SAS Professional Development Fund is NHS Education for Scotland's (NES) approach to improving professional development for SAS doctors and dentists. The aim of this Fund is not to support routine CPD but is rather to provide assistance to individuals by way of a contribution towards the cost of carrying out a course of study or project, for the purpose of meeting a specific aim towards delivering a component of service, developing a new service and enhancing practice capability or credentialing for that purpose as per *Continuing professional development guidance for all doctors* (GMC, 2012). The aims and objectives of the project are aligned with both the Scottish Government's 2020 Vision that, by 2020, whatever the setting, care will be provided to the highest standards of quality and safety, with the patient at the centre of all decisions, and Shape of Training, which, among other recommendations, posits that medicine has to be a sustainable career encompassing opportunities to develop and change roles throughout doctors' careers.

1.2 Study aims and research questions

The aim of this work is to independently and robustly evaluate the NES SAS Professional Development Fund. We did so through using a literature search and a qualitative interview study with key stakeholders, framed by a realistic approach (e.g., Pawson, 2006; Wong et al., 2013) so we could evaluate what works, for whom, and in how and under what circumstances.

1.3 Literature review

A rapid review of the UK literature identified few empirical studies on this topic. Those identified which had been carried out before the introduction of the 2008 SAS doctor contract had the recurring theme of difficulties faced by these doctors in terms of: career progression and advice (DoH, 2003), access to educational and development opportunities (Claxton and Griffiths, 2006; Rao, 2010), professional support (Newton, 2007), continuing professional development activity such as appraisal (pre-2008; Mullen et al., 2005), and, overwhelmingly, morale (Baker et al., 1999; French et al., 2007; Newton 2007; Rippon and Buckley, 2009). For reasons such as these SAS doctors have often been described as the "forgotten tribe" (Claxton and Griffiths, 2006).

We also identified a number of more recent reports and articles in the non-academic literature (e.g., College newsletters). Research and evaluation carried out after the introduction of the new specialty doctor contract were of particular interest given the focus of the current study.

Phazey et al. (2012) used telephone interviews with 10 SAS doctors in the north of England to identify areas that SAS doctors see as lacking in terms of supporting their career progression and professional development. Their participants reported a lack of: training and development opportunities, career progression structure, and little access to basic careers advice and guidance. Second, they experienced difficulties applying for training posts and arranging appraisals. They felt a lack of recognition for the SAS role and little clarity about where the SAS doctors' role fits in relation to colleagues and in the post-Modernising Medical Careers structure. Similar findings were identified in another small qualitative study, also carried out in England (Dashora, 2014). Athough asked specifically about CPD opportunities, in neither study did participants refer to the 2008 SAS doctor contract or the provision of £12m of ring-fenced funding for SAS doctors from the Department of Health (DoH).

Two recent surveys have also looked at career development in SAS doctors post-2008. Brown et al. (2012) surveyed all SAS doctors in the North West of England. They had a relatively good response rate (53.8%). The majority of the sample were male and of Asian ethnic origin. A substantial percentage (19.1%) required a work permit to work in the UK. Brown and colleagues found that the career goal to move from an SAS grade to consultant grade was common in males, particularly those identifying their ethnicity as Asian. Responses to open questions in the survey implied that some doctors who had been unable to gain entry to a specialty programme view the SAS role as an

alternative pathway to accreditation as a consultant. On the other hand, many other respondents seemed to have actively chosen the SAS career pathway, citing family commitments, responsibilities and stability as reasons for doing so. Perhaps reflecting these two points, female respondents were more likely to have been in post longer (as well as intending to remain in their current grade). Educational opportunities were important to those in the survey, particularly teaching skills (45.4%) and specialty-specific education (26.6%). (This links to the findings of the BMA Survey of SAS Doctors' Experience of Training and Appraisal (Final report August 2012) which indicated that many SAS doctors were involved the training and development of medical students, junior doctors and medical students and consultant colleagues). Eligibility for entry onto the specialist training programme was seen to be most vital by around a quarter of respondents (27.1%). Although not reported in the study, presumably this was important for those wishing to progress to a consultant post rather than those who intended to remain in their current grade. However, there were barriers to accessing CPD: only 34.7% of respondents had an educational supervisor; while most were aware of their study leave entitlement, only about one third used it. Lack of appropriate courses, locations of courses, insufficient time between hearing about courses and the courses running, and family and work commitments were cited as reasons. (Note that the level of awareness and use of study level found by Mowat and Schofield was similar to that in Brown et al.'s (2012) survey of a different English region (see later)).

In 2012, Mowat and Schofield (2014a) looked at SAS career development funding use and study leave via a web-based survey of SAS grade staff in the East Midlands Deanery, a sample whose demographics match that of SAS doctors across England. While bearing in mind that this study had a low response rate (less than 20%), it indicated that those SAS doctors who responded took a similar average of study leave days to those taken by consultants (BMA, 2010). In the same survey, the authors identified that most SAS doctors in their survey were aware of the presence of additional funding for SAS doctors professional development in England (Mowat and Schofield, 2014b). Approximately one-third of respondents had accessed either generic non-clinical courses supported by the Fund or individual funding, and reported these had improved their skills, knowledge, confidence, and patient care. A sub-sample of participants who also took part in a telephone interviews highlighted improvement in morale linked to CPD. However, this interview data is reported in little detail and hence there is little information as to the "why" and "how", or views and beliefs, of those participating in the programme as to its benefits.

Our interpretation of the literature around SAS doctors' professional development indicates a paucity of good quality studies. Two main confounding factors are obvious. First, many were carried out by SAS doctors themselves, with little recognition of the potential biases this might have involved. Second, many studies were small-scale (either single-site or single specialty), a-theoretical and methodologically weak, and hence lacking in transferability to different contexts (note that all but one of the studies reviewed were carried out in England). The focus of early studies seemed to be elucidating problems rather than identifying solutions and facilitators for addressing the issues.

While acknowledging these limits, there is little doubt that the continued professional development of SAS doctors was ill-served prior to 2008, and issues linger. The reasons for this are complex, from lack of awareness/poor communication, to more tangible organisational barriers to accessing CPD, to the intersection of these external factors with individual variables (ie to the characteristics of the SAS doctor his or herself). This picture of complexity fits with the wider literature on change in healthcare settings (e.g., Foy et al., 2007). As a consequence of this complexity, educational and training interventions in health service and social care settings may only be effective sometimes and there is a limited understanding of the processes required to change health and social care practice (Curry et al., 2005; Shojania & Grimshaw, 2005). Finding ways to support practitioners to improve their knowledge and skills in such a way as to lead to change in the workplace in order to benefit patients is therefore an important research goal (Grol & Grimshaw, 2003). This evaluation will contribute to that broader literature as well as providing specific information for NES.

The literature review identified that work using a theoretical approach is required to provide a more fundamental understanding of the issues to be addressed in SAS doctor career development and the impact of the SAS Development Fund in doing so. Although there may be some similarities, findings from English regions, where there are differences in both the demographics of the SAS doctor population and in terms of healthcare organisation and delivery (National Audit Office, 2012), cannot necessarily be transferred to the Scottish setting.

2. Qualitative interview study

2.1. Methods

To address these questions, we used a realist approach to evaluate the SAS Programme Development Fund (e.g., Pawson, 2006; Wong et al., 2013). Realist evaluation highlights four key inter-linked concepts for understanding how programmes work (or do not work): mechanisms (M), contexts (C), outcomes (O), and context-mechanism-outcome (CMO) patterns (Pawson & Tilley 2004). This may appear complex, but at heart, realist evaluation looks to evaluate what works, for whom and in how and under what circumstances they are effective (Wong et al. 2013).

In the current case, this might include:

Contexts (C): Context often pertains to the "backdrop" of programmes and research. For example, the conditions connected to an SAS doctor or dentist being encouraged and support to make an application to the project fund. This might include unit/ward/practice norms and culture, the nature and scope of existing opportunities, geographic location, opportunities or constraints to apply and accept (or not progress the application for) funding. Were requests for certain types of CPD more likely to be approved, were applications from certain groups of applicants more likely to be accepted or rejected?

Mechanisms (M): A mechanism is the generative force that leads to outcomes. It is likely to be associated with the reasoning (cognitive or emotional) of the SAS doctors, educational advisors (AEs) and others involved in the project, in relation to the project, challenges, and successes. This may include questions about perceived cost effectiveness. A mechanism involves the participants' display of responses to the availability of the project and its opportunities.

Outcomes (O): Outcomes are either intended or unintended and can be proximal, intermediate, or final. Examples of potential outcomes in this case may be greater empowerment, participation, enrolment, education and knowledge. Potential outcomes may also include improvements beyond the individual, to the service and patients, or to the team, or the identification of other training needs.

We did this by testing the 'programme theories' underpinning the SAS programme. These are broadly stated, within the NES documentation, as unlocking the potential of SAS doctors and dentists. We used a qualitative approach to doing so, in order to gain an understanding of underlying reasons, opinions, and motivations about the Fund, its purpose and how it has unfolded "on the ground".

2.2 Participants

We aimed to interview diverse stakeholders' own programme theories, to set the work in context and enable us to examine different perspectives regarding the anticipated and actual outcomes of the SAS Development Fund. Thus, we aimed to interview the following people (Table 1):

Table 1: Target participants

Participant group	Number of proposed interviews
1. involved in the programme organisation and its planning (the programme architects)	2-4 members of the Project Implementation Group
2. SAS doctors and dentists who had applied successfully to the programme	12-16
3. SAS Educational Advisors	4-6 (of 13)
4. Clinical Directors	4-8

We used maximal variation sampling across the group of SAS doctors who had received funding (Participant group 2 in Table 1), to ensure participants from different specialties, localities, gender and ethnicity were represented in the study. Invitations and information outlining the background and purpose of the study, and the commitment required, were sent out via the SAS Development Fund Officer who was independent of the study. Those who expressed an interest in taking part were then contacted by the researchers to arrange a convenient time for interview. Written informed consent for data collection and publication of anonymised data was obtained from all participants.

2.3 Data collection

We selected semi-structured individual interviews as the data collection tool. This allowed us delve deeply into different aspects of the issue and to depart from the planned itinerary during the interview if tangents seemed productive (e.g., Johnson, 2002). Pragmatically, given the constraints

of the study, individual telephone interviews were the only possible research tool which would allow use to explore the views of stakeholders spread throughout Scotland in the time available.
All interviews were carried out between end February and May 2014. JB carried out the interviews with SAS doctors, Educational Advisors and Clinical Directors. JC carried out the interviews with the programme architects.

The semi-structured interview guide was developed on the basis of the literature review. The topics covered: Communication, motivation to apply for the development fund, rationale, support mechanisms, purpose of training, challenges and barriers to CPD and, promotion and development of SAS doctors. Questions were adapted for different groups of participants.

The interviews continued until participants felt they had shared their views and experiences sufficiently. The interviews were then closed and participants thanked.

2.4 Data analysis

All interviews were digitally audio-recorded, transcribed verbatim and anonymised. The interviews were analysed for content (ie what was said).

Two interview transcripts were selected for initial analysis and each analysed independently by JC and JB. This process enabled us to identify the key themes in the data which were used to develop a coding framework to code all interview transcripts. Analysis progressed through meetings and telephone discussions, were ongoing coding and comparisons were explored.

After the themes emerged and following further team discussion, we extended beyond simple, inductive and data-driven thematic analysis to apply the realist framework to the data. Analysis and synthesis of transcript segments was directed towards a realist explanation for the outcome (i.e., what within the transcripts can be considered to be context and what can we infer the causal mechanisms to be).

2.5 Positionality

The team comprised a medical educator and clinical psychologist (JC), a health services researcher (JB), and a post-graduate dean and pathologist (PJ). PJ was not involved in the data collection and analysis component of the research due to his links with NES. No member of the team has any direct professional or personal association with either the SAS Development Fund or SAS doctors.

2.6 Ethics

The College of Life Sciences and Medicine Ethics Research Board (CERB) of the University of Aberdeen approved this study.

3. Results

Twenty-two interviews were carried out in the time available, from 12 SAS doctors who were recipients of the SAS Programme Development Fund, five SAS Educational Advisors (see later), two clinical directors and three programme architects. The recipients were drawn from all Scottish health boards, across a range of specialties, and male and female respondents were equally represented in this group. The median length of the interviews was 21:04 minutes (from 10:42 minutes to 52 minutes).

3.1 Programme Architects

We present the data from the three key programme architects first, as this provides a framework for considering that from the other groups. These individuals come from a variety of backgrounds – hospital medicine and general practice, consultant and SAS roles - and had different roles in the establishment, leadership and management of the Fund. However, the messages, or "programme theories" were consistent across the three interviewees.

The wider context was clearly the 2008 SAS Doctors contract and the Department of Health's response to this in England (a funding injection). NES was arguably "*slow off the mark*" to respond to the new Contract, but this seems to have been a conscious decision to "*watch and learn*". Programme architects talked about the DoH funding not having the impact expected, possibly

because of poor communication and no SAS "*champions*" on the ground. This informed the NES case for funding to the Scottish Government, where funding was split between direct funding for CPD and supporting local networks/supports for SAS doctors. The latter is in the form of regional Educational Advisors (EAs), SAS doctors working sessionally to support their colleagues and facilitate access to the Development Fund (and other sources of CPD support, if more appropriate). The belief that the EA network is critical to the success of the Fund was strongly held, and strongly argued. However, because it took "*quite some time*" to develop EA job roles, advertise and fill the posts, there is some anxiety that working for the longer term benefit of SAS doctors in Scotland (as this represents), will have less measurable short-term gains. This is relevant given the project funding is only for three years in the first instance and future funding is contingent on short-term "*results*". These "results" must be clearly linked to service development and may not acknowledge, for example, the preliminary work required (e.g., identifying the number of SAS doctors in each region and where they work). On the other hand, the centrality of service gains to accessing funds may be beneficial in terms of "*helping a service see just how much or in what ways an SAS doctor can contribute*". We enquired about a group of SAS doctors from one region receiving funding for the same training. In this case, the Health Board, rather than the SAS doctors themselves, approached the Fund with a case for service development contingent on SAS doctor training.

The Programme Architects were unanimous in their belief that NES is "*very supportive*" of SAS doctors, as evidenced by the Development Fund and other activities (e.g., eligibility for SAS Leadership and Management Programme (LaMP)). There was the view that SAS doctors are valued much more in Scotland compared to England because of differences in NHS culture and SAS doctor demographics across the two countries. SAS doctors were "*a neglected group in the past*" but there is increasing recognition of their critical role – "*valued and essential, and needing support and recognition*" - and the increasing emphasis on quality and safety reinforces the need to educate and support this group of doctors. Education and support should be individually tailored as peoples' needs and wishes differ – the key thing is that all SAS doctors should have opportunities for professional development linked to service improvement/change.

All Programme Architects were "*passionate*" about the scheme and developing SAS doctors generally. They all spoke about how difficult it was to even identify the number of SAS doctors in Scotland, in each health board and in each specialty (see Appendix 1 for a breakdown of data collected by the EAs). They were, however, able to see fault lines in how things had unfolded to

date. First, Clinical Directors (CDs), who currently sign off applications to the Fund, may "*not be best placed to do so*". The head of clinical service may be a more appropriate person. Second, the payment of backfill is critical to the success of the Fund but is paid at the rate of the individual (SAS doctor's) pay, not locum rates. This is a barrier as usually the only person who can provide backfill is a locum.

3.2 Educational Advisors (EAs)

Many of the EAs interviewed had been "championing" SAS doctors informally for many years and saw this as an opportunity to do so more formally.

"I genuinely had been doing a lot of the stuff unpaid for a number of years and thought it would be useful to have it more formalised, to be able to link into education networks, to link into [region's] education network, and just drive forward things that I've been wanting to do but really hadn't time in my schedule to do so" (EA2).

There seemed to have been lots of activity over the years from within the SAS doctor group to promote the role but the perceived difference with the SAS Programme Development Fund and EA role was that formalising this activity enables the creation of supports and structures at Board/regional level, which had been lacking.

"*If we could get local boards to set things up, and the educational advisers are in a really good position to do that, because we already have the contacts with the SAS doctors and the contacts with management. So we're a kind of natural bridge that would be well able to set up appropriate CPD for our own doctors*." (EA3)

Linked to this, the EA role itself must be supported at local Board level:

"It's been quite gratifying just how much support I've had from directors of medical education and service leads in NHS xxxxx. It's been one of the highlights of the post, really, is that developing this infrastructure within NHS xx to have a long lasting support network there for SAS doctors." (EA1).

There was the feeling that the time is right for SAS doctor development "*there was a huge positiveness out there*" (EA5) and the role is an opportunity to help other SAS doctors, as well as

enabling personal development ("*I fancied something a little different*" (EA4)). The EA role was seen as a combination of championing the role of SAS doctors within the NHS, promoting the professional development of SAS doctors and advertising the Fund at all opportunities, while at the same time providing practical support and encouragement to those wishing to apply to the Fund or for other sources of support for CPD.

Interestingly the EAs were very positive about the support they themselves had received as SAS doctors (*"I've been very well supported"* (EA1) *"I've never not been supported in anything I've wanted to do"* (EA4)) but were aware that this was not always the case, stating that many SAS Doctors feel "*disenfranchised or downtrodden*" (EA5) or "*deskilled*" (EA3) and that there is not always the support from direct line management to help SAS doctors have time out of clinical work. This seemed to be unit/ward/service dependent but was further discouraged where "*there's no real process or structure within health wards themselves to ensure that SAS doctors are supported to get away for training opportunities and to ensure that they complete CPD opportunities*" (EA1). This was seen as short-sighted in that the doctors who contribute to the backbone of many services do not "*necessarily have the most up-to-date skills; aren't at the top of their game*" (EA5) due to difficulties getting released from service delivery for CPD. This was not seen as unique to SAS doctors though, more a general NHS issue of wishing a professional service but not building sufficient time into contracts to allow for upskilling and CPD. Things have changed post-2008 as there is now "*a political will to support SAS doctors*" (EA3) and appraisal (previously lacking for SAS doctors) was seen as a useful tool to identify CPD need. However, even with these changes, sometimes individuals had to be persistent to overcome on-the-ground (service release) barriers, and one aspect of the EA role was to help them do so.

Other organisational or systems factors which hinder SAS doctor professional development is that there was "*once they get to the top of the salary scale, then that's in, there's nothing else to strive for*" (EA4) in terms of salary or career progression, hence little motivation to develop professionally. However, the issues were not all organisational. Individual factors were also barriers to CPD. These were linked to family commitments, particularly child care, and to systems where doctors tend to pay for CPD themselves and then claim the costs back, which can be difficult for some people particularly if the sum if large (a benefit to the SAS Programme Development Fund is that it pays "up front" and will pay for more expensive training than local study budgets). These issues reflect what is known already (see earlier).

3.3 Clinical Directors

We interviewed two clinical directors (CDs). While the messages from two individuals are limited, the key finding was that both felt there were plenty of opportunities for SAS doctors to progress and develop, and both gave examples of SAS doctors in their own units who had leading roles in service development.

"*I think there are very few barriers to them to be able to access opportunities, and the motivated ones are able to identify those and go through the right steps to get a fund*" CD1

Unsurprisingly, given this, they identified barriers to development as usually associated with the individual:

"*Some SAS doctors are happy to stay in the same role and not develop their career*" CD2

The CDs did, however, acknowledge that the criterion of only being able to pay backfill at standard time was a limitation of the SAS Programme Development Fund ("*that's not the real world. That is just not healthcare….. You need to be realistic about funding to release people*" (CD1)).

3.4 Recipients of the SAS Programme Development Fund

We interviewed 12 SAS doctors who had received support from the SAS Programme Development Fund. The data can be categorised into four broad themes: organisational barriers to CPD for SAS doctors; the purpose of funding; gains from funding; the need for better communication about the SAS Programme Development Fund; and the interplay between individual and systems factors.

3.4.1 Organisational barriers to SAS doctor training and development

Professional development as an SAS doctor was seen by many as a challenge in terms of the role of SAS doctors, being released from service delivery for training and accessing funds for training:

"*Well, sometimes you've got to feel that you kind of almost hit a wall, that your career doesn't really develop. Because we're mainly there for service provision. So it's difficult to kind of try and push to develop something*." Recipient Six (R6)

"*I was always trying to learn new skills and with the support of the department have been trying to do some things, but always the limiting factor will be financial and also the department may not be able to give enough time for me to pursue any new skills*."R3

Time out for training was seen as not just an issue for SAS doctors but for all doctors, because of staff shortages:

"*SAS doctors and consultants are under increased pressure to cover for colleagues and to keep the service afloat…there's no shortage of CPD venues and CPD opportunities, they abound, but this implicit pressure that you have to stay because you've got to shore up the services, it's stretched to its capacity, that's a real psychological pressure that people feel I think*." R2

Consultants were, however, seen as getting priority for CPD and training opportunities, with more SPA (Supporting Professional Activities) time. Consultants and training grades were also seen has being able to pursue broader interests in terms of what training requests would be supported. In other words, the service delivery focus of SAS grades is also reflected in the kind of training they are encouraged to pursue, unless working towards CESR.

"*With SAS Doctors, it's more you're expected to cover the service, and you get opportunities for continuous professional development, but that is just limited to your choice, and perhaps the service needs, rather than your overall professional development*." R4

Linked to this was the perception of limited opportunities for SAS doctors to lead on service improvements. This was, in turn, linked to the hierarchical nature of medicine where SAS doctors were traditionally not seen as involved in services developments and improvements as these were consultant roles. Our participants wished to be judged on their personal capabilities rather than on their job title. For example

"(wishing people were) *looking at your experience rather than your position*" (R2)
"*Getting time (for training) is difficult because it's not a training job*." (R5)
"*I think the attitudes would tend to be that that (leading on service improvement} wouldn't be appropriate for SAS doctors to undertake*." (R12)

However, all but one of our interviewees stated that they felt supported and valued by their colleagues and department/service.

"*They've been very supportive of me progressing to try and get onto the specialist register through the CESR*." R1

"*I can say that very honestly and clearly that my department has been very supportive of specialty doctors … but speaking to colleagues or friends who work in other departments, they told me they are not as fortunate as me and they feel that their specialty doctors sometimes do not have the same support as consultants*." R4

"*They are very good…. If you are interested and want to do extra, they do support you, so it is a positive attitude*." R8

"*They (colleagues) were looking forward for me to come back to say that, yes, I have experience now and I can provide this service*." R9

Feeling valued and supported was related to working in a good team who work well together for the greater good of the services. For example,

"*We have a good team and we all work together well, and they all were not happy with how the service was working, so it was an opportunity for us to sit together, and reflect on the experience and the service that we deliver, and then take that forward*." R4

3.4.2. Purpose of funding

This varied from top up training to enable application for specialist registration via the CESR route (3 applicants) or backfill for a specific training opportunity. For those pursuing specific opportunities, the overwhelming aim was to further develop their skills so they could contribute more to their service and to service developments:

"*If it wasn't going to widen my clinical role, my interest in the job would have waned and I would have probably gone off to do something else.*" R5

3.4.3 Gains from Funding

The gains from the SAS Fund were multiple. These clearly linked to skills development, more independent working, increased flexibility within the service and reduced demands on consultant colleagues, and hence improved service delivery.

"*It will save (the patients) coming to and from to the hospital and waiting even longer times to get the results*." R3

"*It's the skills I gained …. (we are) giving a better service to the children by managing them in the community as opposed to having them in acute service*." R8

There were also other, less tangible gains such as increased confidence and better networks:

"*Personally it gives you more confidence when you work*."R7

"*The whole thing was good as well because I met doctors in my profession from all over the NHS, not just in xxxx because it was held in Glasgow so that was quite good, building up links as well*." R10

Views of the fund were overwhelmingly positive:

"*Well, I just think it's an exceptionally brilliant programme and it's allowed me to do things that I could never imagine I could do and I feel that we should fight to keep that programme, that it would really enhance lots of lots of SAS doctors and be really positive for the NHS because a lot of it comes down to finances and it just gives people flexibility to gain new experience and underline their skills*." R2

"*I think it's a very good opportunity and I think that's a lifesaver for many SAS doctors and I'm glad that they've been recognised and some funding has been arranged because I think that's a very fair opportunity, to allow us to move forward and develop new skills and I hope it will stay there and serve others as it has served me*." R7

3.4.4 Communication

We asked those in receipt of funding how they had heard about the SAS Doctor Programme Development Fund. The main mechanisms were word of mouth from SAS colleagues, or through hearing about it from the local EA. The EAs had communicated in three ways – word of mouth, presentations at SAS doctor events, and by emails to the SAS doctors in their region. There seemed no one consistent way of communicating information, and how information was communicated was perceived as differing across the country:

"*The Fund is not advertised enough on every health board - depends on which health board it is and (it could) maybe better (be) advertised what you can actually do with the fund as well.*" R8

3.4.5 The interplay between individual and systems factors

The data indicated that most of those who applied for the Fund were motivated individuals who either wished to improve some aspect of their own skills and knowledge (in order to support a specific service development) or wanted top-up training to fulfil CESR requirements. The latter was also linked to service developments (e.g., "*I'm taking on more responsibilities within the organisation, being a member of the senior management team at the xxxx, being asked to lead projects*." (R1)) and future service needs (e.g, "*There's going to be a significant shortfall of xxxxxxxxx across NHS Scotland in the next five to ten years through retirement. So I will be able to fill one of those posts and keep xxxxxxxxxx as a service alive in NHS because there are not many trainee xxxxxxxxxx*." (R2)). However, there was an interesting narrative from the only interviewee who explicitly stated that s/he did not feel valued:

"There's the option to apply to the CESR process, to become a consultant once you've got equivalent experience, but there's no path set out to follow to get to that … I've got quite a lot of experience in different things. It might be that there maybe wouldn't need to be that many additional things for me to actually fulfil the requirement to apply for a CESR post, but it would be difficult just to... if NES were able to sit down and say, right, once you've worked five years in a SAS post, we should sit down and look and see if there's a way where, with a little bit of additional training, that you could get over the next five years to becoming accredited (as a consultant)." R5

An interdependence between the work situation and the individual doctor is evident from the above. This doctor states that there is no clear pathway to CESR, which is not the case (and indeed

some of those interviewed were working through that process). This doctor wanted "NES" to "*sit down*" and help her through the process, rather than identifying the opportunity and working through it herself. It seems that specific kinds of experiences are afforded through work activities and educational experiences (in this case, SAS doctors topping up their skills and knowledge by training) but without active engagement by individuals, the learning potential of, and gains from, these experiences may not be optimum (see Cleland et al., 2014). In other words, while some of the individuals interviewed were active and agentic learners, working towards a particular goal, this particular individual could be viewed as passive and unprepared to engage in the experience which could assist him or her in realising the goal of achieving CESR. The reasons for this lack of engagement are not known, but could be due to perceiving that the *status quo* was undesirable and one should be seen to strive towards being a Consultant, but yet not actually wanting to expend the effort to achieve this goal, or at some level not wishing to change from an SAS to a consultant role. Alternatively – or additionally - there could be a component of learned helplessness – if previous efforts to develop as an SAS doctor have not been encouraged, why should this time be different?

4. Discussion

This independent, theory-driven and methodologically-robust evaluation of the SAS Programme Development Fund identified very positive views of this initiative and alignment between its aims and objectives and how it has been implemented. Note that the timing and nature of this evaluation did not allow for an assessment of outcomes in terms of service change and improvement.

We shall briefly discuss this in reference to the mechanisms (M), contexts (C) and outcomes (O) of the realist approach (Wong et al. 2013). The SAS Programme Development Fund has changed the resources or opportunities available to SAS doctors in Scotland and, in that sense, has changed the context for this group – or at least those who have realised the associated opportunities. This new context has triggered programme mechanisms, identified by asking what it is about the SAS Programme Development Fund that has generated change. These seem quite clearly to be, first, the EA role and activities and, second, the opportunity for funding for CPD linked to service developments. These mechanisms correspond to those intended by the Programme Architects (this is not always the case).

Other mechanisms hinted at in the data include the development of regional networks of SAS doctors (resulting from the EA activities), increased communication between SAS doctors working across different services, and more opportunities for SAS doctors to interact with other doctors (SAS and others with the same clinical focus) through attending training. These all seem beneficial in terms of developing a more coherent community of practice and hence professional identity for SAS doctors (e.g., Wenger, 1998), who are often the only one of their kind in a service, and so feel quite isolated.

Those who have obtained funding seem to feel personally more valued in terms of the positive message of obtaining external funding for training, in terms of their clinical service supporting them to attend, and their service actively wishing their contribution to service development and improvement. Thus, the gains or mechanisms are not just in terms of new or better skills and knowledge but in what these represent and enable. It is clear that the SAS Programme Development Fund recognises the value of SAS doctors in service development and improving patient care, thus linking directly with Everyone Matters: 2020 Workforce Vision - Implementation Framework and Plan 2014-15.

Counter mechanisms were also identified. These range from the generic issues (ie relevant to all doctors) of limited training opportunities when there is no slack in the service, a need to give at least six weeks notice to take time out of service, and limited study budgets, to more specific ones. These include the limitation of the SAS Programme Development Fund not providing backfill funding at locum rates, and the perennial view that the hierarchy of medicine does not prioritise training for SAS doctors. The last is not surprising: it would be unrealistic to presume that a relatively new initiative could completely change a long-standing historical and cultural issue in a short period of time.

Communication of the SAS Programme Development Fund seems inconsistent and it may be worthwhile to review what works or doesn't work by comparing communication mechanisms in different regions/Boards, perhaps comparing those where many applications have been made to the Fund with those regions where relative (or proportionately) few applications have been forthcoming. Clinical Directors do not seem to be a particularly critical mechanism and it may be more beneficial to shift the sign off of applications to clinical service directors.

Together these mechanisms have generated positive outcomes – increased skills and knowledge in those SAS doctors who have EA roles or who have been funded for training are obvious. However, many other outcomes were indicated by the data. These included an increased sense of feeling valued and supported by those who matter (not just the service, but the Board), of one's new skills and knowledge being important for the team and service, of increased contribution to the team/service, and, for most SAS doctors who have been recipients of the fund, a sense that an SAS doctor has as much "right" to training and development as a consultant or a doctor in a training post.

In terms of comparison with previous literature, it seems that SAS doctors in Scotland, or at least those interviewed as part of this study (recipients and EAs), feel more supported and valued that their English counterparts (e.g., Phazey et al., 2012; Dashora, 2014). This might be associated with different demographics – there are fewer international medical graduate (IMG) SAS doctors in Scotland, and more women (Brown et al., 2012). It may also be a reflection of cultural differences between the NHS in Scotland and England. It might link with feeling valued because of benefiting from the Fund (as per Mowat and Schofield, 2014b). It may also be associated with methodological

issues – the current work is more independent than most studies reported in the literature (with the exception of Brown et al., 2012). Further work is required to explore this further.

A limitation of this study is that we did not interview those who had applied for funding but were unsuccessful or did not take up funding. Data held by the project team indicates that the reasons for the latter are associated with personal circumstances rather than work-related barriers. The former would be worthy of investigation as it may be that additional support and guidance needs to be developed to ensure all applications are appropriate (although perhaps that is unrealistic as there will always be variation in standard of applications for any sort of funding).

5. Conclusion

There is a clear synergy between the aims and objectives (the "programme theories") of the SAS Programme Development Fund and how it has been implemented on the ground. The combined approach of creating the EA posts and providing direct funding for CPD is essential to the success of the project in terms of communication, practical support and encouragement. Those who have engaged with the fund report feeling valued and are very positive about the increased contribution they can make to service as a result of their new skills and knowledge. The EAs are excellent role models for other SAS doctors in terms of their proactive and positive focus on supporting and representing their colleagues.

Issues to consider addressing in the future were highlighted by the research. First, it may be that the SAS Programme Development Fund has benefited the "top layer" of SAS doctors, those who are motivated, feel valued for their contribution, take personal responsibility for their own CPD, and who saw the Fund as an opportunity. It may be more difficult to reach those SAS doctors who are less proactive and/or who feel less valued, and ways of doing should be considered. Advertising the SAS Programme Development Fund by additional, novel means may be worth considering as a means of reaching out to all SAS doctors in Scotland, not just the motivated few. Funding backfill at locum rates may enable more SAS doctors to take advantage of this opportunity. A survey of SAS doctors' roles, morale and sense of feeling valued would be a useful addition to the literature and could inform future SAS Programme Development Fund activities.

Team Expertise

Professor Jen Cleland is Chair of Medical Education Research at the University of Aberdeen. She has experience of designing and implementing surveys of medical students and doctors in training, working in collaboration with NHS Education Scotland. She has a track record in qualitative and quantitative methodologies and has published nearly 100 articles and editorials across a broad range of journals including BMJ, Medical Education and Quality and Safety in Healthcare. She was recently commissioned by the GMC to carry out a review of selection and widening access to medicine and the Selecting for Excellence group (SEEG) to carry out empirical work on the same topic.

Dr Peter Johnston is Associate Postgraduate Dean for the North Deanery, NES, and a Consultant Histopathologist with NHS Grampian. He is regional specialty adviser for the Royal College of Pathologists. Peter has extensive experience of designing and implementing surveys of medical students and doctors in training. He has a long term interest in training and work force planning as seen in work as Diagnostics STB chair, NES and the GMC.

Ms Jacqueline Burr is a Masters student and a research assistant at the University of Aberdeen. She has experience in questionnaire design, conducting telephone interviews and working with large data sets.

Contributions

JC and PJ developed the proposal. JC lead on the review, helped by JB who carried out a literature search. JC prepared the ethics application and associated documents at Aberdeen. JB and JC carried out the qualitative interviews and the data analysis. JC drafted the final report which PJ and JB then contributed to in terms of developing the final submission.

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Appendix 1:

SAS doctors by health board: comparison of ISD figures with up-to-date figures from the Educational Advisors (EAs).

NHS Health Board	ISD figures March 2012	Local figures March 2013
NHS Ayrshire & Arran	111	112
NHS Borders	29	31
NHS Dumfries & Galloway	97	52
NHS Fife	95	84
NHS Forth Valley	58	61
NHS Greater Glasgow & Clyde	468	241
NHS Grampian, Orkney & Shetland	158	203
NHS Highland & Western Isles	116	81
NHS Lanarkshire	172	100
NHS Lothian	160	203
NHS Tayside	153	108
Other (special health boards)	22	8
TOTAL	**1639**	**1284**

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