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A new competency model for general practice:

implications for selection, training, and careers

Abstract

Background
Recent structural and policy changes in the UK health service have significantly changed the job responsibilities for the GP role.

Aim
To replicate a previous job analysis study to examine the relevance of current competency domains and selection criteria for doctors entering training.

Design and method
A multisource, multimethod approach comprising three phases: (1) stakeholder consultation (n = 205) using interviews, focus groups and behavioural observation of practising GPs; (2) a validation questionnaire based on results from phase 1 (n = 1082); followed by (3) an expert panel (n = 6) to review and confirm the final competency domains.

Results
Eleven competency domains were identified, which extends previous research findings. A new domain was identified called Leading for Continuing Improvement. Results show that, Empathy and Perspective Taking, Communication Skills, Clinical Knowledge and Expertise, and Professional Integrity are currently rated the most important domains. Results indicate a significant increase in ratings of importance for each domain in the future (P<0.001), except for Communication Skills and Empathy and Perspective Taking, which consistently remain high.

Conclusion
The breadth of competencies required for GPs has increased significantly. GPs are now required to resolve competing tensions to be effective in their role, such as maintaining a patient focus while overseeing commissioning, with a potential ethical conflict between these aspects. Selection criteria remain largely unchanged but with increased priority in some domains (for example, Effective Teamworking). However, there is an urgent need to review the training provision arrangements to reflect the greater breadth of competencies now required.

Keywords
clinical competence; education; knowledge; personnel recruitment; personnel selection; professional competence; training.

INTRODUCTION

Under the UK government's plans for NHS reform, expectations of policymakers regarding the future role of the GP are a topic of significant debate.[1,2,3] With major structural changes in the UK NHS,[4] there is now more emphasis on exploring the skills and capabilities of GPs outside of the consulting room, relating to leadership, professionalism[5,6] and engagement in commissioning activities.[4,7] These skills are in addition to designing services for their registered patients, with an increasing shift of patient care from hospitals into the community. This suggests that there is a broadening of the UK GP job role from that centred on a 'helping model' in doctor–patient consultations to a role that also emphasises a 'business model', where GPs are increasingly required to consider how their work impacts at a community level and how this fits within the health system as a whole.[4] Furthermore, a recent policy report on the career path of GPs advocates the future importance of generalism as opposed to specialty development.[8] However, there is limited research available to inform the skills and professional attributes required of GPs in future for their expanded role outside of the consulting room. This paper reports on a multisource, multimethod job analysis study of the GP role, replicating a previous job analysis conducted over 12 years ago.[9]

The primary purpose of this study is to evaluate the current selection criteria for those entering general practice training. However, the results also offer important information regarding content of training, career development and aspects of workforce planning. Previous research has largely focused on doctor–patient consultations (such as measuring determinants of patient satisfaction).[9,10] Relatively little research has explored aspects of GP performance outside of the consulting room, relating to planning services, financial management, and running a practice.[11] Similarly, previous research in GP selection has tended to focus on indicators of clinical judgement, reasoning and patient communication[9,12,13] rather than skills associated with working in multiprofessional teams and practice management.

The current UK GP selection system is reliable, valid, and generates positive candidate reactions,[14,15,16,17] and uses selection criteria derived from a job analysis study published over 12 years ago in this journal.[9] Although the selection criteria were reviewed using a nationwide survey in 2005,[18] there is a now an urgent need to ensure continued relevance given recent changes in practice.[4] Research consistently shows that the cornerstone of effective selection is identifying selection criteria through job analysis studies.[19] Job analysis

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How this fits in

A job analysis study conducted over 12 years ago was used to inform development of selection criteria and training interventions. A revised model comprising 11 competency domains was identified, including a new domain labelled Leading for Continuing Improvement. Results indicate that the GP role has significantly increased in breadth and there is increasing potential for role conflict in the job design. Some updates are required to the current selection criteria but these remain largely unchanged. There are however, serious concerns about the level of preparedness after training as several domains are not adequately covered at present to provide sufficient support to equip trainees in future.

is a systematic process for the collection and analysis of job-related information to provide a framework with which role-specific selection criteria can be identified and prioritised. Results are used to develop behavioural indicators for use in assessment when operationalising a selection method.[20]

METHOD

The job analysis method adopted here follows a previously validated approach[9,20] comprising three phases:

- stakeholder consultation (n = 205) using a combination of semi-structured interviews (n = 103), focus groups (n = 96) and behavioural observation (n = 6) of GPs (in a range of practices across the UK over 30 hours);
- validation questionnaire based on phase 1 results administered to a further sample of stakeholders within the GP community to examine the initial competency framework (n = 1082); followed by
- expert panel to review all available evidence from phases 1 and 2 to confirm the competency framework and identify core themes arising from the results (n = 6 experts). This three-phase method was designed to triangulate results consistent with previous job analysis studies.[9,20]

For phase 1, a convenience sample of 205 stakeholders participated either in an interview, focus group, or behavioural observation. A total of 103 semi-structured interviews were conducted, either face-to-face or by telephone, each lasting approximately 45 minutes. Of these, 32 interviews were conducted with GPs, 38 with patient representatives, 23 with allied healthcare professionals/health managers/administrators, and three with trainees (see Table 1 for a description). A total of eight focus groups were conducted, comprising GP trainers (n = 58), Royal College patient representatives (n = 9), and trainee representatives (n = 29). A total of 32 hours of behavioural observations of practising GPs (n = 6) were conducted across five sites in a range of locations (at least one in each of the UK nations and a mix of urban and rural areas).

Data arising from the interviews, focus groups and behavioural observations were transcribed and analysed over a 3-day period by a panel of six independent researchers experienced in job analysis. The initial process of coding was conducted using a two-level card sort method,[21] whereby behavioural descriptions were grouped according to similarity. For example, all behavioural descriptions relating to 'clear and concise in written and verbal communication' were grouped together to form a behavioural indicator. Next, behavioural indicators were classified into higher-order competency domains, and assigned a label to reflect the domain content, such as Communication Skills and Professional Integrity.

Having produced an initial framework, the label for each domain with a corresponding definition was used to create items for a questionnaire. The questionnaire comprised 11 domains with four items per domain. Responders were asked to indicate the importance of each domain:

- currently in the GP role;
- in the future GP role;
- for assessment at point of selection; and
- for addressing during training.

Each item was based on a 6-point Likert-type scale where 1 = 'not at all important' and 6 = 'very important'. The questionnaire was administered electronically. It was accessible for online completion for 1 month via 15 regional websites. Wilcoxon signed-rank tests were used to examine differences between mean ratings of importance for the current and future GP role for each competency domain, and between mean rating of importance for selection and training.

In phase 3, a panel of six independent experts with no previous involvement in the analysis reviewed the results arising from phases 1 and 2. The panel comprised two senior GPs and four senior occupational psychologists. The panel met during a 1-day

Table 1. Summary of stakeholder interviews

Interviews	Organisation	Roles	*n*
GPs	RCGP	Assessment and Curriculum Leads	7
		Elected Representatives for the Panel of Examiners	1
		Chair of Assessment Committee	1
		R&D Lead for MRCGP and Deputy Chief Examiner	1
		Advisor to MRCGP	1
	RCGP Council	Chair, RCGP Council	1
		Chair Postgraduate Training Committee	1
	COPMeD	Chair	1
	COGPED	Chair	1
	GPNRO	Chair	1
	Deaneries	GP Recruitment Leads	3
		Commissioning Leads	2
	National Association of Sessional GPs	Chief Executive	1
	British International Doctors Association	Chair	1
	General Practitioners Committee	Chair	1
	Medical Schools	GP Deans/Senior Educators	3
	UK Association of Programme Directors	Chair	1
	National Association of Primary Care Educators	Chair	1
	UKCEA	Chair	1
	AiT Subcommittee	Chair	1
	First5 representatives	Chair	1
Department of Health and Medical Education England	Department of Health	Director General of Workforce	1
		Deputy Director of Workforce Capacity	1
		Academia/ research — Society for Academic Primary Care	1
		NHS Management/Workforce Planning	1
	Medical Education England (MEE)	Director of Medical Education	1
		Dean Advisor	1
		Clinical Advisor	1
Patients and Patient Representatives	Picker Institute	Chief Executive	1
	RCGP Patient Partnership Group	Chair	1
	National Association for Patient Participation	President	1
	East Midlands Deanery	Patient representatives	35
Allied Professionals and healthcare professionals	Allied healthcare professionals	Practice Managers, Patient Services Manager, Dispenser Manager, Receptionists, Practice Nurses, District Nurses, Community Counsellor	18
	Other healthcare professionals	Presidents/Medical Directors from Royal College of Physicians, Royal Collage of Paediatrics and Child Health, Royal College of Obstetricians and Gynaecologists, Royal College of Psychiatry, Faculty of Public Health	5
Trainees	Derbyshire, England Glasgow, Scotland Llandrindod, Wales		3
Total			103

AiT = Associate in Training. COGPED = Committee of General Practice Education Directors of the UK. COPMeD = Conference of Postgraduate Medical Deans of the UK. GPNRO = National Recruitment Office for GP Training. MRCGP = Membership of the Royal College of General Practitioners. RCGP = Royal College of General Practitioners. R&D = Research and Development. UKCEA = UK Conference of Postgraduate Education Advisors in General Practice.

workshop to agree the final competency domains. This review included identifying areas of similarity to, and divergence from the previously published competency framework.[9]

RESULTS

Phase 1. Stakeholder consultation

A total of 4168 behavioural descriptions were extracted from the interviews, focus groups and observations. Using the card sort procedure described above, 266 were identified as unique and these formed the basis of the initial framework. A total of 11 independent competency domains were identified: (1) Empathy and Perspective Taking; (2) Communication Skills; (3) Clinical Knowledge and Expertise; (4) Conceptual Thinking and Problem-Solving; (5) Organisation and Management of Resources; (6) Professional Integrity; (7) Coping with Pressure; (8) Effective Teamworking; (9) Respect for Diversity and the Law; (10) Learning and Development of Self and Others; and (11) Leading for Continuing Improvement (Table 2).

When compared to the original competency framework,[9] the expert panel judged 10 of the domains to align closely with the existing domains (such as Communication Skills and Professional Integrity). However, the definition for each of these domains has expanded, which reflects a broadening of the role. For example, Organisation and Planning is now defined as Organisation and Management of Resources, and has a greater emphasis on management of external resources within and outside the GP practice, rather than solely personal resources. The previously delineated domain Personal Attributes was not identified as an independent domain this time. Instead, an additional domain was identified, defined as Leading for Continuing Improvement, reflecting the new requirement of the job role.

Phase 2. Validation questionnaire

A total of 1082 individuals completed the questionnaire (demographic characteristics of the responder sample are displayed in Table 3). The descriptive statistics for the rated importance of each competency domain is shown in Table 4. Results indicate that all 11 competency domains were perceived as currently highly important for the GP role, with Empathy and Perspective Taking, Communication Skills, Clinical Knowledge and Expertise, and Professional Integrity rated as the most important currently. Respect for Diversity and the Law and Leading for Continuing Improvement

Table 2. Identified competency domains for general practice with example behavioural indicators

1. Empathy and Perspective Taking	• Capacity and motivation to view situations from the patient and/or colleague perspective; acts in an open and non-judgemental manner. • Takes a holistic approach to patient care and considers social, psychological and emotional factors as well as the wider healthcare system. • Takes a patient-centred approach, treating patients as individuals; empowers patients through involvement in their own care.
2. Communication Skills	• Demonstrates an ability to listen attentively and actively. • Tailors language to suit the individual and the situation; provides explanations using non-technical language; builds rapport with others. • Communicates clearly both written and verbally with team members and others (patients, colleagues, allied healthcare professionals).
3. Clinical Knowledge and Expertise	• Capacity to apply sound clinical knowledge and awareness to full investigation of problems, reflecting good clinical judgement. • Proficient in information gathering and history taking; applies knowledge effectively to make clear and proactive decisions. • Able to anticipate rather than just react; maintains knowledge of current research and practice.
4. Conceptual Thinking and Problem-Solving	• Thinks conceptually, using critical analysis to think around issues to help formulate solutions; open to ideas and suggestions from others. • Recognises inconsistencies in information; able to assimilate information quickly; identifies key issues/details and understand data. • Able to synthesise multiple streams of evidence to make effective judgements; makes decisions confidently and in a timely way.
5. Organisation and Management of Resources	• Efficient and organised; employs effective processes to manage own workload. • Able to prioritise and shift demands to fulfil tasks; demonstrates attention to detail. • Is aware of resources available and manages these appropriately, considers implications of actions and/or activities on available resources.
6. Professional Integrity	• Open and honest with others; willing to admit own mistakes; treats others with respect and knows where personal and professional boundaries lie. • Able to balance ethical tensions in relation to demand, resources and expectations. • Demonstrates a commitment to equality of care for all and strives to act in the patient's best interests.
7. Coping with Pressure	• Willing to admit when experiencing difficulties and seek assistance where needed; readily employs tactics for managing own stress and pursues a healthy work and life balance. • Remains calm under pressure; demonstrates self-awareness; understands own limitations, manages own emotions and is resilient. • Able to take on multiple complex roles and balance differing responsibilities and commitments, capable of modifying behaviour to adapt to differing roles; accepts and manages uncertainty and change, responding flexibly when required.
8. Effective Teamworking	• Able to effectively influence and negotiate with others; promotes an inclusive approach; motivates others to achieve goals. • Supportive of colleagues; offers advice and assistance as required; understands and respects others' roles within the wider multiprofessional team. • Is open to sharing information; collaborative with other professionals; acknowledges and appreciates others' expertise; willing to learn from others.
9. Respect for Diversity and the Law	• Demonstrates awareness and is compliant with nationally or locally agreed policies; works to protocol, guidelines, and legislation. • Recognises prejudice and works with, and learns from, others' prejudices; appreciates values, and sees the strength of diversity. • Recognises and takes into account own and others' moral and religious codes.
10. Learning and Development of Self and Others	• Committed to the learning and development of self and others; able to self-manage; actively promotes self-directed learning. • Proactively seeks feedback; motivated to learn; supports others to learn through engaging in peer support and teaching. • Demonstrates lifelong desire to develop skills and abilities to enable effective fulfilment of role responsibilities.
11. Leading for Continuing Improvement	• Shows leadership skills and organisational awareness within and outside of the practice; is an ambassador for the profession; inspires and empowers others and is positive about the future of general practice. • Commitment to quality improvement in care; understands the needs of the local community; manages healthcare pathways effectively. • Considers multiple agendas (for patient, practitioner, higher clinician); understands implications of decisions on the health of the wider population. • Understands and demonstrates business, finance and budget management and skills; is aware of the cost and value of services.

Table 3. Demographic data for the validation questionnaire (*n* = 1082)

Sex	%
Male	47.3
Female	51.9
Undisclosed	0.8
Ethnic group	
White	85.7
Black	1.2
Asian	10.1
Mixed	1.6
Other	1.4
Role	
GP/Allied health professionals	92.8
Trainees	6.5
Undisclosed	0.8
Involved in medical education	
Yes	84.5
No	14.6
Undisclosed	1.0

were rated as less important for the role currently (although all domains were rated >4 on a 6-point Likert scale; indicating that all domains were considered important).

For the relative importance of the competency domains now and in the future, there was a significant increase in nine of the 11 domains ($P<0.001$; Table 4), with the exception of Communications Skills and Empathy and Perspective Taking as these domains were both rated highly important now and in the future. In absolute terms, the competency domains rated as most important currently (Empathy and Perspective Taking and Communications Skills) were still perceived as the most important in the future, as they were in the previous job analysis study.[9] However, the most significant increases in perceptions of importance for the future were (in order of magnitude of increasing importance in future), Leading for Continuing Improvement ($t = 4429$, $P<0.001$, $r = -0.54$), Organisation and Management of Resources ($t = 3927.5$, $P<0.001$, $r = -0.50$), and Effective Teamworking ($t = 3552.5$, $P<0.001$, $r = -0.30$).

Regarding perceived importance for selection into training, Communication Skills, Empathy and Perspective Taking, and Professional Integrity were rated as the most important domains, broadly reflecting the current selection criteria. However, compared to the previous job analysis study,[9] results show other domains are also important for selection, including, Effective Teamworking (mean = 4.63) and Learning and Development of Self and Others (mean = 4.59). By contrast, Leading for Continuing Improvement and Organisation and Management of Resources were perceived as less important at the point of selection (mean = 3.48 and 4.08 respectively). All competency domains were seen as increasingly important to address during the training pathway, with Leading for Continuing Improvement showing the greatest increase in importance rating ($t = 1989.50$, $P<0.001$, $r = -0.76$), followed by Organisation and Management of Resources ($t = 1320$, $P<0.001$, $r = -0.77$).

Table 4. Mean ratings of importance[a] for each competency domain

	Current importance		Future importance		Importance in selection		Importance in training	
Competency domains	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
1. Empathy and Perspective Taking	5.77	0.54	5.76	0.58	5.04	0.92	5.79	0.53
2. Communication Skills	5.83	0.48	5.83	0.52	5.21	0.84	5.84	0.50
3. Clinical Knowledge and Expertise	5.61	0.63	5.64	0.63	4.55	1.0	5.63	0.63
4. Conceptual Thinking and Problem-Solving	5.33	0.77	5.41	0.78	4.63	0.93	5.41	0.71
5. Organisation and Management of Resources	5.12	0.80	5.51	0.72	4.08	1.0	5.35	0.72
6. Professional Integrity	5.66	0.61	5.73	0.59	5.24	0.92	5.62	0.67
7. Coping with Pressure	5.43	0.70	5.54	0.69	4.72	0.91	5.48	0.69
8. Effective Teamworking	5.30	0.76	5.47	0.72	4.63	0.93	5.46	0.69
9. Respect for Diversity and the Law	5.05	0.86	5.16	0.85	4.46	1.1	5.16	0.83
10. Learning and Development of Self and Others	5.26	0.73	5.37	0.73	4.59	1.0	5.40	0.74
11. Leading for Continuing Improvement	4.47	0.95	4.99	0.96	3.48	1.2	4.94	0.92

[a] 1= not at all important and 6 =very important.

Phase 3. Expert panel review

A final framework of 11 competency domains and corresponding behavioural indicators was confirmed through a review by an expert panel. The expert panel identified three core themes arising from the study relating to:

- significantly increased role breadth for GPs in the future;
- increased potential for role conflict through balancing patient care and financial responsibilities; and
- concerns around the level of preparedness for practice after training.

Table 5 summarises the core themes identified with illustrative quotations from the stakeholder interviews (from phase 1).

Regarding an increased role breadth, results show an enhanced emphasis for GPs to consider multiple agendas beyond the patient and their practice in future, to include the health of their registered population, the broader community, and

Table 5. Key themes identified by the expert panel with quotations to illustrate findings

1. Significantly increased role breadth for general practice in the future	
• Considering multiple agendas	*'I've got to consider the patient's agenda*(s), *I've got to consider the practitioner's agenda … of course there's the higher clinician agenda that I need to to bring into this.'*
• Balancing local and 'bigger-picture' thinking	*'GPs will have to see the patient in front of them in the context of the whole healthcare system.' 'GPs have to learn to balance their working week between face-to-face contact with individual patients and involvement as clinician in the wider sense, delivering healthcare processes for the locality to which they are working.'*
• Taking on multiple complex roles	*'I think the future GPs are going to have to be much more than what they are now; part social worker, public health person, part commissioner, part GP …'*
2. Increased potential for increased role conflict	
• Commitment to patient care versus managing resources	*'There will be an increasing pressure to make difficult decisions as GPs have to decide between cases of funding versus patient care — there is more pressure to consider money and funding.'*
• Maintaining patient trust versus professional integrity relating to resources	*'GPs don't like saying "no", they like to be able to say "yes" … but this isn't going to be possible with finite resource.'*
• Holistic patient care versus negotiating the boundary between illness and disease management within their professional identity	*'In deprived areas some doctors are shocked by the conditions people live in and find themselves wanting to "fix" the overall situation … are they only there for the treatment of medical conditions?'*
3. Level of preparedness for practice after training	
• Some elements of the future GP role are not currently addressed in training	*'Trainees will need greater support during training in developing their business acumen. The need to know about budget management, employment law, PR, HR … not just clinical'*
• Effective training in how to treat medical ailments but less in how to deal with difficult psychological or social issues facing patients	*'Trainees are often unprepared to deal with difficult situations involving child protection issues, domestic violence or relationship issues and bereavement etc as they are unlikely to have encountered this to a great extent during training.'*
• Training focuses on the clinical role — a significant proportion of the role will involve an increasingly broad range of non-clinical duties	*'Managing paperwork is a critical skill to be an effective GP but the non-clinical administration side is not taught in training.'*

HR = human resources. PR = public relations.

the NHS. GPs will be required to focus on balancing individual (local) needs versus their registered population's health ('bigger-picture' thinking), and will need to take on multiple complex roles in future.

Results show an increased potential for role conflict in relation to ethical values, whereby GPs are required to demonstrate commitment to patient care, which may at times conflict with managing limited resources. Similarly, GPs need to maintain patient trust, which may also conflict with ensuring Professional Integrity relating to resource management. GPs are required to adopt an increasingly holistic approach towards patient care but this demand could at times be at odds with maintaining professional boundaries.

A third theme identified was the level of trainee preparedness for practice given new job role requirements. For example, there are gaps in training provision relating to dealing with challenging psychosocial issues facing patients. In future a significant proportion of the role will involve an increasingly broad range of non-clinical duties. Capabilities relating to Leading for Continuing Improvement, leadership, innovation, and financial awareness are not currently assessed in training or tested directly in the current MRCGP licensure exams.

DISCUSSION

Summary

This study extends previous research by conducting a comprehensive job analysis to develop a model of 11 competency domains required for effective practice, now and in the future. Compared to a previous job analysis study[9] results here show substantial alignment. However, some important changes were clearly identified, such as a significantly increased role breadth, where several domains are now broader in their definition to reflect contemporary practice. For example, Empathy and Perspective Taking replaces Empathy and Sensitivity identified in the previous study (which focused more on behaviours within the consulting room), whereas the present study shows an increased emphasis on teamworking within multiprofessional units, reflecting additional skills outside of the consulting room. Furthermore, a new competency domain was identified: Leading for Continuing Improvement relating to population (registered patients) health needs, business acumen, finance, and budget management (in addition to managing healthcare pathways effectively).

Participants perceived Leading for Continuing Improvement, Organisation and Management of Resources and Effective Teamworking as significantly more important for being a GP in the future compared to current perceived importance. However, of these, Leading for Continuing Improvement and Organisation and Management of Resources were judged less important as selection criteria, with more emphasis on these domains being addressed within the education curriculum and training pathway.

Strengths and limitations

A previously validated method was employed and an extended sample of GPs and patient

representatives were recruited from across the UK, including observation in practices in both urban and rural locations. For practical reasons, a convenience sample was recruited, the majority of whom were from the GP community. It was not feasible to administer the questionnaire to patient representatives, for example. It is conceivable that patients would rate the relative importance of competency domains differently, which is an important consideration for further research. The patient representatives who took part in the interviews were also a convenience sample from a single Deanery.

Comparisons with existing literature

The issue of increased role breadth is a topic not unique to medicine, as research shows that a common challenge for many high stakes job roles is in how best to train and develop individuals to perform in new and more complex ways.[22] Research consistently shows that effective performance of high stakes job roles requires employees who are sufficiently confident in their abilities to take on broader duties, and here, the concept of self-efficacy is an increasingly important construct to evaluate.[23] Self-efficacy refers to people's judgements about their capability to perform particular tasks, and evidence shows that job holders who feel capable of performing particular tasks will perform them better,[24] will persist at them in the face of adversity,[25] and will cope more effectively with change.[26] Therefore, this study proposes that self-efficacy is an important motivational construct to be considered in the future education and training of GPs, as it influences individual goals, emotional reactions, effort, coping, well-being and persistence. In future, research could evaluate a trainee's role breadth self-efficacy as part of the training evaluation process. This concerns the extent to which people feel confident that they are able to carry out a broader and more proactive role, beyond traditionally prescribed requirements, and would allow training interventions to be tailored accordingly.

Of perhaps more immediate concern for trainers and employers is the increased potential for role conflict and role ambiguity. These two components have consistently been shown to be linked to work-related stress, reduced job satisfaction and burnout.[27] Results show an increased potential for role conflict, especially relating to ethical values, where there is increased emphasis on GPs taking responsibility for balancing what is good for individuals versus what is good for the broader community in a climate of heavily restricted resources. This presents competing job demands, for example, where there is a need to balance a commitment towards patient care versus managing limited resources effectively. The results also demonstrate a significantly increased emphasis on management and business skills within the GP role, reflecting the requirement for UK GPs to take a closer account of cost-effectiveness and be more closely involved in managing commissioning activities, which may be at odds with their identity as clinicians.

Implications for future practice

Results indicate that all areas of the previously published competency model continue to be perceived as important and the key priorities for selection criteria are largely unchanged, with empathy, communication skills, and integrity being rated as most important in selection. Hence, relatively light-touch updates are required to the selection criteria in future, but these updates must reflect the increased role breadth of GPs. Selectors should also place more weighting on some domains, such as teamwork and leadership capabilities.

A more pressing need is to determine how the greater breadth of capabilities can be addressed during training to support and equip future GPs. Results show the need to educate trainees in new domains such as Leading for Continuing Improvement, which is not yet addressed within training. Given the extensive and broad range of responsibilities and capabilities required, there are now important implications for the future configuration and potential extension of GP education and training. Further work is urgently required to explore the optimal construction of the education, training and career pathway to support trainees (and thus patients) appropriately in the future.

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REFERENCES

1. Buckman L. Changes to the GP contract threaten general practice in the UK. *BMJ* 2012; **345:** e7343.
2. Trumble S, Naccarella L, Brooks P. The future of the primary medical workforce. *BMJ* 2011; **343:** d5006.
3. Toynbee P. GPs have reasons not to be so cheerful over commissioning plans. *BMJ* 2010; **341:** c3839.
4. Department of Health. *Equity and excellence: liberating the NHS*. London: DoH, 2010.
5. NHS (Institute for Improvement and Innovation). *Medical Leadership Competency Framework*. 3rd edn. NHS Leadership Academy, 2010.
6. Clark J, Armit K. Leadership competency for doctors: a framework. *Leadersh Health Serv* 2010; **23(2):** 115–29.
7. Department of Health. *The functions of GP commissioning consortia: a working document*. London: DoH, 2011.
8. Royal College of General Practitioners. *Medical generalism. Why expertise in whole person medicine matters*. London: RCGP, 2012. http://www.rcgp.org.uk/policy/rcgp-policy-areas/~/media/Files/Policy/A-Z%20policy/Medical-Generalism-Why_expertise_in_whole_person_medicine_matters.ashx (accessed 6 Mar 2013).
9. Patterson F, Ferguson E, Lane P, *et al*. A competency model for General Practice: implications for selection and development. *Br J Gen Pract* 2000; **50(452):** 188–193.
10. Saultz JW, Albedaiwi W. Interpersonal continuity of care and patient satisfaction: a critical review. *Ann Fam Med* 2004; **2(5):** 445–451.
11. Smits A, Meyboom W, Mokkink H, *et al*. Medical versus behavioural skills: an observation study of 75 general practitioners. *Fam Pract* 1991; **8(1):** 14–18.
12. Ham C. *Health care commissioning in the international context: lessons from experience and evidence*. Birmingham: University of Birmingham, 2007.
13. Goodwin N, Ross S, Smith A. *The quality of care in general practice capturing opinions from the front line. A King's Fund report*. London: King's Fund, 2010.
14. Lievens F, Patterson F. The validity and incremental validity of knowledge tests, low-fidelity simulations, and high-fidelity simulations for predicting job performance in advanced-level high-stakes selection. *J Appl Psychol* 2011; **96(5):** 927–940.
15. Plint S, Patterson F. Identifying critical success factors for designing selection processes into postgraduate specialty training: the case of UK general practice. *Postgrad Med J* 2010; **86(1016):** 323–327.
16. Patterson F, Zibarras L, Carr V, *et al*. Evaluating candidate reactions to selection practices using organizational justice theory. *Med Educ* 2011; **45(3):** 289–297.
17. Irish B, Patterson F. Selecting general practice specialty trainees: where next? *Br J Gen Pract* 2010; **60(580):** 849–852.
18. Patterson F, Carr V, Plint S. *General practice competency validation exercise: technical report to GP National Recruitment Office*. Sollihull: National Recruitment Office for GP Training, 2005.
19. Ash RA. Job analysis in the world of work. In: S Gael (ed.). *The job analysis handbook*. New York: John Wiley and Sons, 1998: 3–13.
20. Patterson F, Ferguson E, Thomas S. Using job analyses to identify core and specific competencies for three secondary care specialties: Implications for selection and recruitment. *Med Educ* 2008; **42(12):** 1195–1204.
21. Miles MB, Huberman AM. *Qualitative data analysis: a sourcebook of new methods*. Beverly Hills, CA: Sage, 1984.
22. Parker S. Enhancing role breadth self-efficacy: the roles of job enrichment and other organizational interventions. *J Appl Psychol* 1998; **83(6):** 835–852.
23. Gist ME, Mitchell TR. Self-efficacy: a theoretical analysis of its determinants and malleability. *Acad Manage Rev* 1992; **17(2):** 183–211.
24. Barling J, Beattie R. Self-efficacy beliefs and job performance. *J Organ Behav Manage* 1983; **5(1):** 41–51.
25. Lent RW, Brown SD, Larkin KC. Comparison of three theoretically derived variables in predicting career and academic behavior: Self-efficacy, interest congruence, and consequence thinking. *J Couns Psychol* 1987; **34:** 293–298.
26. Hill T, Smith ND, Mann ME. Role of efficacy expectations in predicting the decision to use advanced technologies: The case of computers. *J Appl Psychol* 1987; **72(2):** 307–313.
27. Jackson SE, Schuler RS. A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organ Behav Hum Dec Processes* 1985; **26:** 16–28.