

Jehu LM, Visram S, Marks L, Hunter DJ, Davis H, Mason A, Liu D, Smithson J.
[Directors of public health as 'a protected species': qualitative study of the changing role of public health professionals in England following the 2013 reforms.](#)

Journal of Public Health 2017

DOI: <https://doi.org/10.1093/pubmed/fox154>

Copyright:

This is a pre-copyedited, author-produced PDF of an article accepted for publication in *Journal of Public Health* following peer review. The version of record Jehu LM, Visram S, Marks L, Hunter DJ, Davis H, Mason A, Liu D, Smithson J. [Directors of public health as 'a protected species': qualitative study of the changing role of public health professionals in England following the 2013 reforms.](#) *Journal of Public Health* 2017 is available online at: <https://doi.org/10.1093/pubmed/fox154>

DOI link to article:

<https://doi.org/10.1093/pubmed/fox154>

Date deposited:

16/10/2017

Embargo release date:

07 November 2018



This work is licensed under a [Creative Commons Attribution-NonCommercial 3.0 Unported License](#)

Title: Directors of public health as “a protected species”: qualitative study of the changing role of public health professionals in England following the 2013 reforms

Authors: Llinos Mary Jehu, research fellow¹ (formerly at Durham University)
Shelina Visram, associate professor²
Linda Marks, senior research fellow²
David J Hunter, professor²
Howard Davis, independent researcher (formerly at Coventry University)
Anne Mason, senior research fellow³
Dan Liu, research fellow³
Joanne Smithson, independent researcher⁴

Affiliations: ¹ Department of Social Policy and Social Work, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK
² School of Medicine, Pharmacy and Health, Durham University Queen’s Campus, Stockton-on-Tees, TS17 6BH, UK
³ Centre for Health Economics, University of York, York, YO10 5DD, UK
⁴ Voluntary Organisations’ Network North East (VONNE), MEA House, Ellison Place, Newcastle upon Tyne, NE1 8XS, UK

Corresponding author:

Address: Dr Shelina Visram, 5th floor, Sir James Spence Institute, Institute of Health and Society, Royal Victoria Infirmary, Newcastle-upon-Tyne, NE1 4LP, UK.

Email: shelina.visram@newcastle.ac.uk

Telephone: +44 (0)191 208 2279

ABSTRACT

Background: The Health and Social Care Act 2012 gave councils in England responsibility for improving the health of their populations. Public health teams were transferred from the NHS, accompanied by a ring-fenced public health grant. This study examines the changing role of these teams within local government.

Methods: In-depth case study research was conducted within 10 heterogeneous councils. Initial interviews (n=90) were carried out between October 2015 and March 2016, with follow-up interviews (n=21) 12 months later. Interviewees included elected members, directors of public health (DsPH) and other local authority officers, plus representatives from NHS commissioners, the voluntary sector and Healthwatch.

Results: Councils welcomed the contribution of public health professionals, but this was balanced against competing demands for financial resources and democratic leverage. DsPH – seen by some as a ‘protected species’ – were relying increasingly on negotiating and networking skills to fulfil their role. Both the development of the existing specialist public health workforce and recruitment to, and development of, the future workforce were uncertain. This poses both threats and opportunities.

Conclusions: Currently the need for staff to retain specialist skills and maintain UKPH registration is respected. However, action is needed to address how future public health professionals operating within local government will be recruited and developed.

INTRODUCTION

The Health & Social Care Act 2012 gave upper tier and single tier local authorities in England new responsibilities for improving the health of their populations.¹ Directors of public health (DsPH) and their teams were transferred from the National Health Service (NHS) to local authorities, along with a ring-fenced public health grant. Section 30 of the Act required local authorities to appoint and employ a DPH, with their core purpose being ‘to act as an independent advocate for the health of the population and system leadership for its improvement and protection’.² DsPH should be trained, accredited and registered in specialist public health with the UK Public Health Register (UKPHR), General Medical Council or General Dental Council. There are two routes to gaining registration on the UKPHR – the standard specialist route and the practitioner route – which are designed to describe levels of practice, not specific job roles.³ The standard route entails completion of higher specialist training using a curriculum revised in 2015 by the UK Faculty of Public Health in light of the reforms. Alongside this is the Public Health Skills and Knowledge Framework, updated in 2016 to reflect changes in public health policy, practice and workforce planning across the UK.⁴

The 2013 Public Health Workforce Strategy included a commitment to introduce statutory regulation for all public health professionals, but this was subsequently reversed.⁵ As a consequence, there is no statutory requirement for those without a medical background to undertake continuing professional development (CPD) in order to remain registered. The House of Commons Health Committee report on public health post-2013 noted that specialist public health training continues to be a popular choice amongst applicants from a range of backgrounds, including medicine.⁶ However, it also noted cuts to local government spending and identified ‘regulatory blocks created by differences in terms and conditions between organisations’ that limit or discourage movement in order to gain breadth of experience. Finally, there is no dataset to assess how the public health workforce is changing over time.

This study examines the place of public health professionals within local government. It reflects on changes generated by the move of public health to local government, the challenges of adapting to its new setting, and likely future demands.

METHODS

This paper draws on a Department of Health Policy Research Programme funded project that sought to evaluate the impact of the 2013 public health reforms. It involved in-depth case studies of 10 local authorities, which were identified through purposive sampling to ensure a balance of political control, urban and rural mix, levels of deprivation, and local government structure from all English regions. The main method used was semi-structured interviewing, although the project also involved documentary analysis and observation of key meetings. Interviewees included elected members, DsPH and other local authority officers, and representatives from NHS commissioners, the voluntary, community and social enterprise (VCSE) sector and Healthwatch (the consumer champion for health and social care in England). See table 1.

Table 1: Interviewee breakdown

Roles	Initial interviews	Follow-up interviews
DPH	11	9
VCSE sector	10	1
Director with responsibility for adult social care	9	2
Director with responsibility for children and young people's services	8	1
Elected member (Health and Wellbeing Board chair)	8	2
Healthwatch	8	0
CCG representative (Health and Wellbeing Board vice chair)	7	1
Local authority chief executive	7	1
Local authority health scrutiny committee chair	7	2
NHS England	6	0
Others (primarily elected members or public health staff)	6	1
District council	3	1
Totals	90	21

Initial interviews (n=90) were carried out in person or by phone between October 2015 and March 2016, with follow-up interviews (n=21) with a sub-sample of participants in each site conducted 12 months later. Topics included changing roles and responsibilities, views on the reforms, and the public health leadership role of local authorities. Interviews were audio-recorded and transcribed verbatim by a professional transcribing company. Initial coding was undertaken (by LMJ) using NVivo 10 software to organise the data into nodes based on a framework developed from the interview schedule. Other team members (LM, SV, KM) independently analysed the transcripts to identify emergent themes. The results were merged through repeated discussions, and verified by sharing draft reports with the external advisory group (which included a DPH and representation from NHS England, the Local Government Association (LGA), Healthwatch and the VCSE sector).

RESULTS

Findings are reported under three themes relating to the topic of this paper: valuing the public health workforce as a resource; leadership and power; and developing a workforce for the future.

Valuing the public health workforce as a resource

Although the transfer of public health into local government had not always been smooth, local authority chief executives and strategic directors recognised and welcomed the contribution of public health skills and knowledge. This was increasingly evident in the follow-up interviews. Responses from elected members, however, were more mixed. For some authorities, the salary scales of transferring public health staff, and the impact this had on limited financial resources, drew comment. One elected member reported that their authority could not afford to employ the first DPH “on a doctor’s salary and pension”; as a result, the post and consequent resource requirement were shared with a neighbouring council. The chief executive of another council observed that the DPH was “the highest paid person in the organisation”.

One DPH believed that misunderstandings arose amongst local government colleagues because of differences in terminology, such as the term public health ‘consultant’ being equated with costly management consultants. They believed DsPH were not necessarily valued “because you didn’t have teams of 100 people you were directing”. However, another DPH reported supporting a reduction in the number of consultants “because I don’t need necessarily people who are not trained to work in local government”, arguing the need for more avenues for public health workforce development in the new setting. This DPH spoke of seeking a “health movement for change, making health everyone’s business”, rather than relying solely on the resource transferred from the NHS.

Leadership and power

A major change in the role of public health professionals has been the need to operate in an environment where elected members have ultimate decision-making authority. Some DsPH found this challenging, particularly where priorities arising from the public health evidence base were not in line with the political priorities of the council. An NHS commissioner highlighted the risks of making decisions “purely based on public opinion”, while also recognising that “if you just take a totally cold analytic approach, it’s difficult for people to become enthused or engaged by it”. Others welcomed the support provided by elected members, with one DPH stating they were “pleasantly surprised to see opposition parties really articulating the importance of public health in the council”.

The resulting distribution of decision-making power varied between authorities. DsPH were no longer able to rely on their status or position in the management hierarchy to secure power, and there was increased reliance on soft skills such as negotiating and networking. One described this as being able to “win friends and influence people”. However, although some reported open and positive relationships with members and officers (including in sites where the DPH reported to a strategic director rather than the chief executive), others reported restricted access to these decision-makers and so their power to negotiate or network was limited. DsPH also had to develop capability to work within more overtly political contexts, learning how best to engage with politicians whose priority may be to respond to the demands (and voting choices) of their constituents. It is perhaps not surprising, therefore, that one DPH commented on the need to “write a new public health handbook for local government practice of public health”.

Figure 1: Power to make decisions

You have to get a signature from the finance director for any expenditure over £100. Now, you try and innovate under those circumstances. There’s no freedom. There’s no empowerment to experiment, do anything. [...] Part of the way in which the council controls the members is by not letting people anywhere near them. So it’s bizarre. My boss gets very upset if I go and speak to a Cabinet member without her present in the room. But I do it anyway.

(DPH 6, follow-up interview)

There have been some examples where we’ve had to take a decision to the Cabinet member for health and wellbeing. But mostly we’ve been able to make any changes to how the programmes, and how we use the grant, we’ve been able to do that within the delegated authority that we have. And other than reporting performance and progress – we do that to the Health and

Wellbeing Board and the CCG board – other than that, we haven't been required to seek approval or permission to do mostly what we've been doing.

(DPH 3, initial interview)

I think if you embrace [the DPH role] and you find it interesting then I think it's a very, it can be incredibly rewarding. But it's quite challenging and you have to be quite fleet of foot and you have to have political nous. It's no good doing the job if you haven't got any political nous. It's a nightmare. You need to know where you're going and you need to make sure you've covered all your bases before you plunge into something. [...] In policy terms you have to be absolutely clear that you're not going to end up doing something that's unpalatable.

(DPH 5, initial interview)

Power balances and relationships between members and officers affected how the public health grant was used. Although the grant remains ring-fenced at the time of writing, there were examples of it being invested in wider services which contribute to public health outcomes, such as children's centres or Fire & Rescue Services. There were also examples of DsPH taking on additional responsibilities and of public health staff being incorporated within centralised functions or spread across directorates, with operational accountability placed with the host service and not the DPH. One DPH described formal service level agreements with directorates over how the public health grant was to be deployed to further public health outcomes, whilst another described a gradual move to less formal arrangements because "over time those relationships have strengthened". Many interviewees described growing trust between public health teams, other local government officers and elected members, resulting in increased networking ability and leverage in the decision-making process. However, one consequence of a move away from formal agreements was that the process for securing CPD resources for dispersed public health professionals was unclear.

Figure 2: Managing the ring-fenced budget

We have SLAs [service level agreements] outlining in quite clear detail what it is we're going to be doing with the money and also the professional bits around either their [staff located in other directorates] professional development or CPD or some sort of benchmark. [...] So just trying to look at that and getting a view and saying, 'Well, as part of the appraisal we will expect them to have a professional type appraisal, a PDP [personal development plan] type appraisal with the director of public health and in it they'd want to see that they've done what we'd called basic public health.

(DPH 9, initial interview)

We have funded public health activity in other parts of the council primarily, well, for two reasons. One, to secure some control over those other services and influence with a view to them becoming more integrated within the rest of the public health work. [...] The second reason of course, and probably the more opportunistic reason is it does release savings elsewhere in the council. So coming back to the [name of service] example, we have, the result of this has been that we now spend less from within the [X] budget and so effectively we've made savings in the [Y] budget as a consequence of this. So there is a contribution to the council savings as well as trying to have a more integrated approach.

(DPH 3, follow-up interview)

Developing a workforce for the future

Interviewees had different views over the balance between specialist and broader public health functions. Many viewed the move into local government as an opportunity to tap into an existing public health resource. For example, one DPH spoke of the “wealth of talent of people within local government” and advised that public health should not be seen as “simply a tiny speciality with a tiny group of experts”. This commitment to broaden the resource, and make public health integral to every role and function, was shared by those outside the transferred workforce. Most sites had introduced some form of training or development for elected members, local authority staff and communities, to raise awareness and increase public health skills. However, there was felt to have been a loss of healthcare public health expertise, linked to an overall loss of capacity due to cuts in the public health grant. Some sites were able to maintain the level of public health input to their local CCGs and interviewees highlighted increased input in second phase fieldwork, partly influenced by the development of sustainability and transformation plans (STPs) and a renewed focus on prevention. Other NHS commissioners reported concerns that, with the shift to more of an upstream approach following the reforms, “we’re probably not as strong on the ‘here and now’ stuff” such as cardiovascular disease and diabetes prevention.

Figure 3: Impact on healthcare public health

We all understand social aspects of health and the consequences and prevention. We understand it. So that remains really positive, and the shift from public health into local authorities made that much stronger. [...] What we have lost – and I share this view widely so it’s no surprise to anybody – I don’t believe we are as good at health prevention as we were. So I think we have lost something. And we’ve recognised it and we’re rebuilding it, but I don’t believe we’re as strong as we were as a PCT in typical health prevention work.

(NHS commissioner 8, initial interview)

We have a good connection with public health. We have a public health consultant who works within the CCG, sits on the governing body, acts as an adviser, works sort of across the boundary. [...] One thing that was recognised was that the CCGs would... so the PCTs had public health advice and expertise in-house; CCGs were going to have that all removed. So we recognised that local authorities should support the CCGs with public health expertise.

(NHS commissioner 4, initial interview)

The future of public health as a specialist career was less clear, underlined by the increasingly generic roles undertaken by public health professionals in local government. Whilst one DPH believed that the public health training programme was “pretty much continuing at current levels”, others expressed uncertainty. The source of new recruits and career path to be followed were seen to be changing, with one DPH stating that there was “much more reliance on people developing

skills and knowledge and experience through their everyday work, and demonstrating that through the portfolio”. They felt this may present challenges as generic roles reduced opportunities to develop or retain specialist skills in ‘everyday work’. Others raised questions over the critical mass required to ensure that a public health function was effectively delivered. Some DsPH believed there was “an issue about how much [specialist expertise] is actually respected or wanted” in local government, arising partly from the weight given to advice supplied by public health professionals. A sense of uncertainty was reflected in statements made by other local government interviewees, where a clinical background could sometimes be regarded as a hindrance rather than an advantage.

Figure 4: A valued resource or a protected species?

Of course you’ll still need the professional professionals, if you like, but I just think you don’t need an awful lot of them. Because actually what they should be doing is overseeing the whole process, so actually the public health work can be done by a wide range of people. In fact, if anything staff trained up through the NHS are probably not the best that you’d want, because you’d actually want people to have a much broader and wider view of how to improve health.

(HWB chair (elected member) 2, follow-up interview)

I think from all the changes that we’ll see in terms of who fill other roles within the team, I think that [the DPH role] will remain a protected species. I think the Faculty [of Public Health] have very strong views about it, I think local NHS area teams have strong views about who ought to and ought to not do those sorts of jobs. [...] Now actually hopefully they’ll be high quality, because they’ll have now spent this time in local government so they’ll have got some cross fertilisation that way. But I don’t think we’re going to see them coming from particularly different sources.

(HWB chair (elected member) 7, follow-up interview)

Although no chief executive or member suggested that specialist knowledge would never be required, the cost of employing a dedicated public health professional when their expertise may not be required on a regular basis was questioned. The current “protected species” status of DsPH could not therefore be guaranteed. However, a number of DsPH clearly welcomed the move to local government, partly because of the wider opportunities it offered. For them, a career as a public health professional within local government was reported to be very rewarding.

Figure 5: Public health specialist – a future career choice?

I think that the role of public health will be fully assimilated within local government. And I don’t think, do you know what, I don’t think I’d be appointing a DPH. I’d be looking at a different role, much more around public resilience, and then, yes looking at a whole system. [...] I’d commission them [people with specialist expertise]. Yes. I’d come to universities like yours, I’d start to commission that directly from providers or from universities. And I make a saving on it, I’m being very clear about that, that’s about a savings agenda but being again far more targeted.

(Local authority chief executive 3, follow-up interview)

[Public Health England] need to recognise there are a wealth of talent of people within local government who would make excellent directors of public health. How are you going to get them into the specialist training programme and deploy them back into local government so that they have their training with us, but they're going through the exam process? Because I would like to see eventually a chief exec in local government who is a public health person, you know, why not? So it's rethinking the career route I think is important.

(DPH 2, initial interview)

The whole upstream approach [is] right at the heart of what the council does. It's really interesting, yeah. It's a great place to be ending my career on. If it does me for the next four years I shall be very happy.

(DPH 5, follow-up interview)

DISCUSSION

Main findings of the study

This study finds that while value is placed on the contribution of public health professionals within local government, it is being balanced against financial stringency across all local authority services, the likely demands associated with developing and maintaining specialist skills, and the demands placed on elected members to represent the interests of their constituents. The reforms have also demanded a rebalancing of the skill-set required of public health teams, with an increased need for negotiating, networking, communication and presentation skills, greater focus on financial and people management skills, and an ability to exercise political astuteness. Consequently, both the CPD of the existing public health workforce, and the recruitment to, and development of, the future specialist function are uncertain. This poses both threats and opportunities.

What is already known on this topic

The impact of the 2013 reforms on decision-making, prioritisation of public health spending and commissioning have been well documented.⁷⁻⁹ Since the transfer of public health from local authorities to the NHS in 1974, there have been persistent debates over its identity and focus. In 1993, Frenk¹⁰ observed that “public health is experiencing a severe identity crisis”, and 15 years later, Foldspang¹¹ wrote that “public health is characterized by an increasingly Babylonian number of kingdoms with each their language and indispensable self-identity and sets of concepts”. There have been moves to establish frameworks to achieve consistency in approaches to professional development and standards, for example, the European Public Health Core Competencies Programme.¹² Foldspang also advocates “coherent and comprehensive national, regional and local public health organizational structures”.¹³

Both the UKPHR Practitioner Standards and the Public Health Skills and Knowledge Framework (PHSKF) focus exclusively on public health.^{3,4} However, reports of public health practice following the reforms suggest broader management competencies are now required.^{14,15} For example, a survey to investigate experiences within local government 12 months after the move of public health teams found widespread feeling amongst DsPH that they had greater influence across the council

(although 48% said they felt 'less able' to influence local CCGs than before the reforms) .¹⁶ A separate in-depth study of public health approaches to tackling alcohol misuse concluded that locating public health in local government had necessitated a 'refocusing of how evidence of public health is conceptualised, to incorporate multiple, and political, understandings of health and wellbeing'.¹⁷ There has been a questioning of the balance of required competencies, such as Day et al's¹⁸ proposal of five talents for public health leadership: mentoring-nurturing, shaping-organising, networking-connecting, knowing-interpreting and advocating-impacting. It has been suggested that, as public health teams now operate in different organisational, political and social contexts, 'there can be no one model of how professionals and communities can and should relate, and there are clearly no easy answers for critical public health practice'.¹⁹

What this study adds

This study finds that those public health staff who transferred to local government cannot assume that their specialist skills will automatically be understood or valued. They therefore need to develop and make full use of a range of soft skills if they are to be successful advocates and leaders for the improvement and protection of public health. This study also finds that although the PHSKF provides a much needed resource now that public health is 'everyone's business', if councils are to develop staff to UKPHR registration level, opportunities are needed for them to receive specialist training and gain experience in specialist settings. This necessitates tackling the 'regulatory blocks' which currently deter career moves between organisations.

Unlike the current position inherited from the NHS, in future councils will determine their public health resource. They may choose to develop a specialist resource and consequently support salaries which reflect the high costs associated with such skills. Alternatively, they may choose to rely on general practitioners, procuring or arranging to share specialist public health expertise across several local authorities. Whichever choice individual councils make, there is a need for closer alignment and sharing of resources between agencies concerned with public health professional development, including partners within local government, if there is to be a coherent workforce functioning in all the settings which the Health and Social Care Act requires.

Limitations of this study

This study displays limitations common to much qualitative research. The case study sites, although heterogeneous, represent only 10 of 152 upper and single tier local authorities in England. The lack of public health workforce data makes it difficult to assess whether our findings reflect changes in the workforce across England. It also means that the longer-term impact of the pressures identified here are inevitably unclear, including pressures of reducing financial resources, loss of decision-making power for public health professionals and increasing demands for soft skills.

CONCLUSION

The 2013 reforms have led to a level of public health competency being developed amongst a far greater number of people. These individuals should be recognised as part of the wider public health workforce, contributing to increased opportunities for improving and protecting public health. However, there is concern in some quarters that the specialist resource may be weakened and

reduced with unforeseen consequences. Whilst the transfer of public health has been welcomed by many, this study finds that the value the specialist resource offers councils is being measured against authorities' judgement of the value of securing democratic and political leverage, and against the value of diminishing financial resources. Currently, the need for those staff members transferred from the NHS to retain specialist skills and maintain UKPHR registration is being respected. But action is needed to address how future public health professionals operating within local government will be recruited and developed, assuming it is acknowledged that they have an important contribution to make.

Acknowledgements

The authors wish to thank all of those who took part in this study and also the members of the project advisory group. The study relates to research commissioned and funded by the Department of Health Policy Research Programme (*Commissioning public health services: the impact of the health reforms on access, health inequalities and innovation in service provision*, PR-R6-1113-25002).

Funding

This work was supported by the Department of Health Policy Research Programme (PR-R6-1113-25002). The views expressed in this paper are those of the authors and not necessarily those of the Department of Health.

Reference list

1. UK Parliament. Health and Social Care Act 2012. Norwich: The Stationery Office; 2012; Available from: <http://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>.
2. ADPH. What is a Director of Public Health? London: Association of Directors of Public Health; 2016 [cited 2017 8 March]; Available from: <http://www.adph.org.uk/wp-content/uploads/2016/10/Role-of-a-Director-of-Public-Health.pdf>.
3. UKPHR. Public Health Practitioner Standards for Registration. Birmingham: UK Public Health Register; 2014 [cited 2016 13 December]; Available from: <http://www.ukphr.org/wp-content/uploads/2014/08/UKPHR-Practitioner-Standards-14.pdf>.
4. PHE. Public Health Skills and Knowledge Framework. London: Public Health England 2016.
5. Public Health Policy and Strategy Unit. Healthy lives, healthy people: A review of the 2013 public health workforce strategy. London: Department of Health, PHE and LGA 2016.
6. UK Parliament. Public Health post-2013. Second report of session 2016-17. London: House of Commons Health Committee 2016.
7. Gadsby E, Peckham S, Coleman A, Bramwell D, Perkins N, Jenkins L. Commissioning for health improvement following the 2012 Health and Social Care Reforms in England: what has changed? BMC Public Health. 2017; 17.
8. Hunter D, Marks L, Brown J, Scalabrini S, Salway S, Vale L, et al. The potential value of priority-setting methods in public health investment decisions: qualitative findings from three English local authorities. Critical Public Health. 2016; 26:578-87.
9. Marks L, Hunter D, Scalabrini S, Gray J, McCafferty S, Payne N, et al. The return of public health to local government in England: changing the parameters of the public health prioritization debate? Public Health. 2015; 129:1194-203.
10. Frenk J. The new public health. Annual Review of Public Health. 1993; 14:469-90.
11. Foldspang A. Developing the public health workforce in Europe: Association of Schools of Public Health in European Region (ASPHER). Journal of Public Health Policy. 2008; 29:143-6.
12. ASPHER. European Public Health Core Competences (EPHCCP) and European Public Health Reference Framework. Brussels: The Association of Schools of Public Health in the European Region; 2011 [cited 2016 13 December]; Available from: <http://aphea.net/docs/research/ECCPHP.pdf>.
13. Foldspang A. Towards a public health profession: the roles of essential public health operations and lists of competences. European Journal of Public Health. 2015; 25:361-2.
14. PHE. Fit for the Future – Public Health People. A review of the public health workforce. London: Public Health England 2016.
15. CFWI. Public health workforce of the future: a 20-year perspective. London: Centre for Workforce Intelligence 2016.
16. Gadsby E, Peckham S, Coleman A, Bramwell D, Perkins N, Jenkins L. Commissioning for health improvement following the 2012 health and social care reforms in England: what has changed? BMC Public Health. 2017; 17:211.
17. Phillips G, Green J. Working for the public health: politics, localism and epistemologies of practice. Sociology of Health & Illness. 2015; 37:491-505.
18. Day M, Shickle D, Smith K, Zakariasen K, Moskol J, Oliver T. Training public health superheroes: five talents for public health leadership. Journal of Public Health. 2014; 36:552-61.
19. Green J. The public health profession and the community. Critical Public Health. 2015; 25:123-4.