The Role of the Director of Public Health, Public Health Consultant Staffing and the Specialist Public Health Contribution to CHPs and CPPs

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Contents

Abbreviations

CHP	Community Health (and [Social] Care) Partnership
CPD	Continuing Professional Development
CPP	Community Planning Partnership
DPH	Director of Public Health
HEAT	Health Improvement, Access, Efficiency, Treatment
HPS	Health Protection Scotland
HPV	Human Papilloma Virus
HS	NHS Health Scotland
ISD	Information Services Division
JHIP	Joint Health Improvement Plan
MD	Medical Director
ScotPHN	Scottish Public Health Network
SMR	Scottish Morbidity Record
SOA	Single Outcome Agreement
SPARRA	Scottish Patients at Risk of Readmission and Admission
SPH	Specialist Public Health

Summary and conclusions

Aim and Method
The study aimed to provide an overview of the current functions, staffing levels and management arrangements for the Specialist Public Health (SPH) function across Scotland. There was a particular focus on the role of the DPH, consultant staffing and the SPH contribution to CHPs and CPPs. Data were gathered by an emailed questionnaire survey sent to all 14 DsPH in September 2009, and telephone interviews in October 2009 with representative samples of 19 CHPs (usually CHP general managers or directors) and 18 related CPPs (usually CPP managers or co-ordinators). A 100% response rate was achieved for all three groups. Information about numbers of consultants in public health, using definitions agreed by the DsPH group, was provided by DsPH and their equivalents in Special NHS Boards in February 2010.

Results
DPH role
There was a substantial consensus among DsPH about their current role. Of the 17 functions proposed there was unanimity on 11. These were: providing public health advice to the NHS Board, and to the local authority; contributing to corporate leadership of the Board; producing an independent annual report; providing leadership and advocacy for protecting and improving health and reducing health inequalities; managing the Board's specialist public health team and associated support staff and resources; ensuring the Board and its staff have access to timely, accurate and appropriately interpreted data on population health; ensuring the implementation of NHS components of Scottish Government public health or health improvement policies; overseeing the coordination and effectiveness of screening programmes; communicating with the public via the media on important public health issues; and contributing to emergency planning. All but one and two DsPH respectively included ensuring all appropriate infection and environmental surveillance and control measures were in place; and ensuring health needs assessments were carried out. A larger minority were not involved in planning or evaluating health services or acting as Caldicott guardian. Some had other corporate management responsibilities. A minority of DsPH thought several current functions could be carried out by other staff such as the Medical Director. Only being Caldicott guardian and planning health services were seen by a minority as definitely jobs for other staff. Half the DsPH favoured the existing model of one DPH per Board area employed only by the Board, but some were willing to consider other arrangements such as a joint appointment with the local authority.

SPH staffing, capacity and management arrangements
Using the agreed definitions, there were 128 WTE consultants in public health employed by the NHS in Scotland in February 2010. Of these, 82% were consultants in public health medicine or dental public health. Relative to the size of the population served, consultant staffing levels were broadly similar among the larger area Boards. The higher levels in the smaller boards reflected the need for a minimum number of staff to fulfil the roles that are common to all Boards. Around half the area Board consultants had generic roles, a quarter were dedicated to health protection, a fifth to health and social care services and a sixth to health improvement. All but two area Boards had dedicated consultant provision for health protection but only about half for health improvement or health and social care services. Whilst there was strong dedicated consultant provision at national level for health protection, health improvement and generic health information, there was none for health and social care services.

Consultant level and health information staff were largely based at Board headquarters; health improvement staff were based partly or wholly in CHPs. For their Board area, 11 DsPH were at least fairly satisfied with current capacity for health protection, ten for health improvement, seven for health and social care services but only four for health information.

DsPH were more likely than CHP and CPP respondents to report there was insufficient SPH provision for CHPs and CPPs. Both DsPH and CHPs saw health information as the most underprovided resource. Most CHPs appeared otherwise generally happy with the current level of SPH input. 12/14 DsPH and 12/18 CHPs were satisfied or very satisfied with management arrangements for SPH input. Several CHPs wanted more joint working and devolution of SPH resources.

SPH inputs to CHPs and CPPs
Many examples of effective SPH contributions to CHPs were cited by DsPH and CHP respondents. These covered a wide range of issues including: developing JHIPS and SOAs, HEAT target delivery, supporting health needs assessments, anticipatory care and health protection (e.g. pandemic flu and winter planning).

In 16 of the 18 CPPs surveyed, a public health specialist was a member of the CPP Board, or a subcommittee or themed working group. Most respondents cited examples of important SPH contributions to CPP policy, plans or decisions in the past 12 months. 8/14 DsPH, 13/18 CHP respondents, and 15/18 CPP respondents were very or fairly satisfied with SPH inputs to CPPs overall. DsPH cited a lack of SPH capacity as the main difficulty. CHP and CPP respondents wanted enhanced input through SPH resource dedicated to CHPs and better integration. Some CPP respondents wanted more clarity on the allocation of roles and responsibilities for SPH work between the NHS Board and the CHP

There were significant SPH inputs to most CHPs and CPPs from Health Protection Scotland, NHS Health Scotland and ISD.

Conclusions

- There was substantial agreement among DsPH about their role. Some DsPH were willing to transfer or share some functions or consider joint appointments with a local authority.
- The study provided robust information about current numbers of consultants in public health; quantifying the rest of the NHS public health specialist workforce and interpreting the findings would be a major undertaking.
- There was clearly variation across Scotland in the numbers and types of SPH staff employed, the proportions allocated to different roles and their management arrangements. No one pattern emerged as superior. In most areas SPH resources were seen as being in short supply and stretched.
- CHPs and CPPs appeared broadly satisfied with the quality and usefulness of SPH inputs but several would have preferred locally owned SPH resources to enable more focus on the local context.
- Further attention should be given to the perceived lack of health information expertise available to a majority of area NHS Boards.
- Consideration should be given to the development of a national public health resource with a focus on the provision of health and social care services.

Aim

1.1 The aim of this study was to obtain current information about the role of the DPH, SPH capacity, and models of engagement by SPH with CHPs and CPPs in every health board area. It was conducted by NHS Health Scotland and the Scottish Public Health Network (ScotPHN) on behalf of the Scottish DsPH Group and formed part of the overview of the Specialist Public Health Function in Scotland conducted by the CMO and Public Health Directorate of the Scottish Government.

Method

2.1 A survey method was used. Three linked questionnaires were developed to enable a composite picture to be drawn using the differing perspectives of the DPH at the NHS Board, and senior managers in CHPs and CPPs. The questionnaires were drafted by Laurence Gruer and modified in the light of comments from colleagues from the DsPH group, ScotPHN, Health Scotland and the Scottish Government. Following advice from a CHP manager and the Scottish Government CPP coordinator, the CHP and CPP questionnaires were then piloted in four areas not in the main sample**.** Letters explaining the purpose of the study were sent to all members of the three study groups and arrangements for telephone interviews were made by Ann Conacher and Andrew Millard with the CHP and CPP samples. A questionnaire was emailed to all 14 DsPH in September 2009. Digitally recorded telephone interviews using the CHP and CPP questionnaires were conducted in October 2009 by Andrew Millard with a sample of general managers of 18 CHPs and coordinators of the corresponding CPPs. Copies of the questionnaire are available on request.

Sampling method

2.2 All DsPH were included in the study. For CHPs, a sampling method was used to ensure that at least one CHP was sampled in every NHS Board area, and more than one in the three Boards with at least four CHPs. The method was as follows:

1. For the five Health Boards with only one CHP select that CHP,
2. For the six Boards with two or three CHPs select the CHP with the largest population,
3. For the two Boards with four CHPs select the largest and the largest of the other type (urban or rural),
4. For NHS Greater Glasgow and Clyde, which has 10 CHPs, select the largest, then the next largest rural and urban ones.

This resulted in a sample of 18 CHPs out of the 40 Scottish CHPs. Each CHP had a corresponding CPP which was also sampled, giving a sample of 18 CPPs out of the 32 Scottish CPPs. More details of the sampling method are available on request.

Specialists in Public Health

2.3 For the purposes of the overview, specialists in public health were defined as professionals whose role requires training and qualifications in public health, or equivalent qualifications or experience. This includes DsPH and other consultants in public health (see 2.4); public health academics with NHS contracts; health improvement or health promotion managers or officers; and public health information/intelligence managers. Respondents were asked to consider SPH functions under three headings:

Health Protection
Community and hospital acquired infection surveillance and control, blood borne virus prevention, immunisation, and environmental health.

Health Improvement or Promotion
Tobacco, alcohol and drug prevention, promoting mental health, physical activity, healthy eating, breast feeding, community development, and reducing population health inequalities.

Health and Social Care Services
Health needs assessments, planning, monitoring and evaluation of general and mental health services, managed clinical networks, screening programmes, anticipatory care, alcohol brief interventions, drug and alcohol treatment services, smoking cessation, and child protection.

Consultants in public health

2.4 Following initial analysis of the staffing data provided by the DsPH, it was clear that obtaining accurate information on all grades of specialists in public health was beyond the scope of this study. Job titles and roles varied between Boards and, in some, staff were employed by CHPs or other Board departments. Collecting robust data on such a wide range of staff would be a major exercise. However, it was agreed with the Scottish Government and the DsPH Group that it would be possible and useful to obtain current staffing data on consultants in public health, who make up a key component of the public health workforce. Definitions of consultants in public health were agreed by the DsPH Group. This included fully accredited consultants in public health medicine or dental public health and other senior staff considered by the DPH of the employing NHS Board to be appropriately qualified and functioning at an equivalent level (See Appendix 1 for details). To provide a full picture across NHS Scotland, data were requested from the area Board DsPH and their equivalents in NSS (ISD and Health Protection Scotland); NHS Health Scotland; NHS Education for Scotland and NHS Quality Improvement Scotland).

Response rates and respondents

2.5 There was a 100% response rate from the DsPH. In one case, the DPH was on sick leave and the questionnaire was completed by other colleagues. The response rate for CHPs and CPPs was also 100%. In one CHP, no respondent was available for the whole CHP. Therefore the two Local Health Partnerships which fulfilled the operational functions of the CHP provided an interviewee each. CHP respondents were usually either directors or managers of the CHP, but in four cases second-line managers were nominated. The CPP interviewees were usually community planning or corporate policy managers or co-ordinators with responsibility for their CPP's arrangements.

Analysis and report writing

2.6 All quantitative data on the questionnaires were coded and computerised. Themes were identified in qualitative data from interview notes. The interviews were digitally recorded, and interview notes were validated against interview transcripts where clarification was required. Time did not permit direct coding of interview texts. Standard statistical tests were used where appropriate to give an indication of the strength of the associations between quantitative variables. Andrew Millard performed the initial analysis and drafted three separate reports based on the results of the three questionnaires. A combined report was then drafted by Andrew Millard and finalised by Laurence Gruer with comments from Phil Mackie.

Limitations

2.7 The study surveyed all DsPH and included CHP and CPP respondents from all Board areas. Consistent terms and questions were used throughout and all the interviews were conducted by the same person. However, the study had several limitations. First, definitions of posts and terms such as “adequacy” and “satisfaction” were open to varying interpretation and subjective responses. Second, the small numbers meant the use of statistical tests was not appropriate. Third, the focus on CHPs and CPPs meant that the SPH contribution to acute and secondary care services was not fully represented. Finally, data were gathered when the H1N1 influenza outbreak was in progress, which may have influenced responses to some questions.

Acknowledgements

2.8 We are very grateful to all the respondents for their co-operation and to all colleagues who provided advice and comments on the design of the study and the draft report.

Results

Director of Public Health Role

3.1 The DsPH were asked to consider a list of 17 functions and to indicate which of these they currently performed and whether or not they thought the function could or should be performed by the DPH or someone else. Table 1 shows the functions ranked according to the proportion of DsPH who agreed the function was part of their current role.

3.2 There was unanimous agreement that 11 of the 17 functions were currently part of the DPH role. However, at least four DsPH indicated that planning or evaluating health services and acting as Caldicott guardian were not part of their current role. Some DsPH qualified their response to particular functions, for example, providing a supportive rather than a lead role in planning health services; or involvement in evaluating some but not all health services. In some cases, a function such as health needs assessment or health service planning was no longer performed due to reduced capacity. One DPH shared Caldicott guardian responsibilities with someone else. Some DsPH performed other functions in addition to those listed. They included corporate management responsibilities other than public health. Also mentioned were lead roles for particular clinical and health topics, such as sexual health and prison health, lead roles for civil protection and child protection and chairing the alcohol and drug partnership; and acting as professional lead for pharmacy, dentistry and psychology.

Views on who should carry out current DPH functions

3.3 There were only two functions which any DPH thought should not be performed by a DPH: being the Caldicott guardian (4) and playing a lead role in planning health services (2). However, for only four functions (providing the lead for expert public health advice to the NHS Board and the local authority; corporate leadership as an executive director of the NHS Board and the production of the annual DPH report), was there complete unanimity that the function could not be performed by someone else. At least four DsPH felt that the following functions could be performed by

someone else: emergency planning, assessing cost-effectiveness of services, assuring effectiveness and cost-effectiveness of plans, communication with the media, co-ordinating screening programmes, planning health services, conducting health needs assessments and implementing Scottish Government health improvement policy. Some DsPH emphasised they shared particular responsibilities jointly, e.g. Healthcare Acquired Infection or Information Governance being shared with the Medical Director (MD). In some cases appropriate involvement in a topic was seen as preferable to leading it, e.g. the Caldicott role, health service planning, emergency planning and health policy implementation were examples of this. For these cases 'DPH and someone else' applied, rather than 'DPH or someone else'. Eight respondents suggested other functions should be included in the DPH role. These included ensuring appropriate training for public health specialist trainees, and Continuing Professional Development (CPD) for existing specialists; overseeing public health research standards and ethics; and a more explicit lead role in health service planning.

Table 1 DPH views on their current functions and whether or not they should be performed by someone else (NA = not answered)

Function	Currently performed by DPH		Could or should be performed by:			
	Yes	No	DPH	DPH or Other	Other	NA
Has lead role for providing expert public health advice to the NHS Board	14	0	14			
Has lead role for providing expert public health advice to the Local Authority	14	0	14			
As an executive director, contributes to the corporate leadership of the Board	14	0	14			
Produces an independent Annual Report on the health of the population of the NHS Board area	14	0	14			
Provides leadership and advocacy for protecting and improving health and reducing health inequalities in the NHS Board area	14	0	13	1		
Manages the Board's team of public health specialists and support staff and the associated budget and other resources	14	0	12	2		
Ensures the Board and its staff have access to timely, accurate and appropriately interpreted data on the health of the population of the NHS Board area	14	0	11	3		
Ensures the implementation of NHS components of Scottish Government Public Health or Health Improvement policies in the NHS Board area e.g. smoking cessation, breast-feeding, alcohol brief intervention, HIV prevention	14	0	10	4		
Oversees the coordination and effectiveness of screening programmes	14	0	9	5		
Communicates with the public via the media on important public health issues	14	0	8	5		1
Contributes to emergency planning	14	0	8	6		
Ensures all appropriate infection surveillance and control measures, including immunisation programmes, and relevant environmental health surveillance and protection measures are in place and implemented effectively	13	1	11	3		
Ensures health needs assessments for relevant population groups are carried out	12	2	10	4		
Ensures the effectiveness and cost-effectiveness of relevant health services and health improvement initiatives in the NHS Board area are properly evaluated	10	4	8	6		
Board responsibility for health information governance as the Caldicott Guardian	9	5	5	5	4	
Ensures that plans for health services are based on the best available evidence for effectiveness and cost-effectiveness	8	6	8	6		
Plays a lead role in the planning of health services in the area	7	7	7	5	2	

Impact of the Medical Director role

3.4 Ten DsPH said the addition of the MD role had had an effect on the DPH role, three said the MD role had not had an effect and one did not reply to this question, having had no experience as a DPH where a medical director was not in place. Those who commented on a change of role said that the MD had taken on the role of giving medical advice on health services to the Board. Service evaluation and some clinical, information and research governance responsibilities (including Caldicott) can now be the MD's role. In infection control, the MD may now be seen as the overall lead owing to the emphasis on hospital-related issues. In health service planning, the MD may have more input, but at the possible expense of a population perspective. For one DPH, the transfer of some responsibilities to the MD had allowed the DPH to have a more focused and manageable role in health improvement and health inequalities.

Future options

3.5 DsPH were asked to choose between six possible options for a future DPH role. Responses are shown in Table 2. Overall, half the DsPH supported the prevailing model of one DPH employed by each NHS Board but an equal number supported other options, adapted to the local context. The respondent who did not choose one of the available future options was employed solely by the NHS Board but had a joint role with one of the local authorities in the NHS Board area. A key task was being a member of the local authority's Corporate Management Team and lead officer on local authority committees. This was thus a variation of the single employer model. Various reasons were given for the choices made and are summarised below.

Table 2 DPH views on future options

1. One DPH for every NHS Board area, employed solely by the Board	7
2. One DPH for every Board area but employed jointly by the Board and Local Authority	1
3. One DPH for every local authority area, employed by the local authority	0
4. One DPH for every CHP area	0
5. One DPH for a region covering several health boards	0
6. More than one option e.g. 1 and 2 could co-exist	5
Not answered (joint role but single employer model)	1

Option 1

3.6 Three of the seven respondents choosing this option gave a reason or further comment. The DPH could be employed by the NHS Board and provide input to the Local Authority, e.g. through health protection advice as the "Competent Person" for the local authority, CHP committee work, and as a member of the CPP Board. Another DPH emphasised that sufficient capacity at consultant level was necessary to work effectively with local authority chief executives and cabinets as well as supporting implementation at local level. A third stated that option 1 should be the basic standard: if option 2 applied in multiple CHP areas, a DPH could have multiple employers (with potential disadvantages). Options 3, 4 and 5 were not seen as appropriate in very small or very large areas.

Option 2

3.7 This was attractive to some DsPH because of the Public Health Act, new requirements for local authorities and health boards around joint health protection plans, the importance to public health of joint working with a range of partnership groups, and the potential for improved data sharing to create a cross-sectoral public health intelligence resource.

Option 6

3.8 Five respondents agreed it would be difficult to be prescriptive given the different situations within each Board area, e.g. 'Option 2' might work best in areas where the health board and local authority were co-terminous. Difficulties in recruitment might lead to different solutions in some areas. A DPH role shared across Boards might become inevitable in some areas. If NHS Scotland moved to regional Boards then a regional DPH might work or might be cost-effective for a region covering several small health boards. If delivery of public health functions changed to local authority control then a DPH employed by the local authority would make more sense. One stated that joint employment by both the NHS board and the local authority enabled the DPH to have the greatest impact on the public health agenda in the area. If CHPs became better integrated health and social care partnerships, a DPH of their own might well add value and increase impact.

3.9 Another thought a shared post could be desirable, but: "we are faced with most Boards having more than one local authority. It depends if there is a difference, which there could be, between the DPH influencing role (where a shared post with a single local authority would be good but leaves a question as to the NHS role in a multi local authority NHS Board) or delivery of service role (i.e. from a team of specialists which the DPH can access but need not necessarily manage wholly). If accountability for certain areas remains, the DPH must either manage the staff or have assured access and set the agenda." One respondent saw a reduction in the number of NHS Boards as a necessary precondition to any further debate: "I believe the number of boards should be reduced – having 11 mainland boards is not sustainable."

Current Public Health Consultant staffing in NHS Boards

4.1 DsPH and their equivalents in Special NHS Boards were asked to supply data on the number of whole-time equivalent (WTE) consultants in public health currently employed by their Boards, using agreed definitions. (See 2.4 and Appendix 1). The WTE numbers of medical/dental and other consultants and the total number per 100,000 of each area Board's population are shown in Table 3.

Table 3: Numbers (WTEs) and population rates for medical/dental and other consultants in public health (Data collected in February 2010)

	Medical/dental*	Other	Total	Total/100,000#
Area NHS Boards				
Ayrshire and Arran	6.6	1	7.6	2.1
Borders	3	1	4	3.6
Dumfries and Galloway	4	3	7	4.7
Fife	7.7	0.5	8.2	2.3
Forth Valley	5.5	0	5.5	1.9
Grampian	8.5	1	9.5	1.8
Greater Glasgow & Clyde	13.3	3	16.3	1.4
Highland	4.7	2.2	6.9	2.2
Lanarkshire	9	1	10	1. 8
Lothian	12.9	2.2	15.1	1.9
Orkney	2	0	2	10.1
Shetland	1.6	0	1.6	7.3
Tayside	7.6	4	11.6	2.9
Western Isles	1	1	2	7.6
All Area NHS Boards	**87.4**	**19.9**	**107.3**	**2.1**
Special NHS Boards				
Health Protection Scotland	6	0	6	n/a
ISD	6.1	0.5	6.6	n/a
NES	0.4	0	0.4	n/a
NHS Health Scotland	4.3	2.4	6.7	n/a
QIS	1	0	1	n/a
All Special NHS Boards	**17.8**	**2.9**	**20.7**	**n/a**
All NHS Boards	**105.2**	**22.8**	**128**	

Notes:

*** includes Directors of Public Health, consultants in public health medicine or dental public health and academics with NHS consultant contracts.**

 # Based on 2008 Mid-year estimated population for NHS Board area or Scotland as applicable

Vacant posts are included; outward seconded posts are excluded

4.2 The larger area Boards had more consultants but the Boards with the smallest populations had proportionately more consultants per head of population, reflecting the need for a minimum number of staff to fulfil the roles that were common to all Boards. In the larger Boards, staffing levels per head of population fell within a relatively narrow range. Of the 128 WTE consultants in Scotland, 82% were consultants in public health medicine (96.3 WTE, including 3.9 WTE academics) or consultants in dental public health (8.9 WTE). The proportion of other consultant staff varied between Boards from none to four.

Table 4 WTE consultants in public health by sub-specialty and NHS Board (Data collected February 2010)

	Health Protection (%)	Health Improvement (%)	Health and Social Care Services (%)	Generic (%)	Total WTE
Area NHS Boards					
Ayrshire and Arran	22	13	38	26	7.6
Borders	25	25	25	25	4
Dumfries and Galloway	39	23	13	26	7
Fife	22	0	0	78	8.2
Forth Valley	18	0	0	82	5.5
Grampian	27	0	34	39	9.5
Greater Glasgow & Clyde	17	12	0	71	16.3
Highland	14	12	0	74	6.9
Lanarkshire	20	10	20	50	10
Lothian	23	26	29	21	15.1
Orkney	0	0	0	100	2
Shetland	0	0	0	100	1.6
Tayside	27	25	40	9	11.6
Western Isles	50	0	0	50	2
All Area NHS Boards %	**23**	**13**	**18**	**46**	
All Area NHS Boards WTE	**24.2**	**14.3**	**19.1**	**49.8**	**107.3**
Special NHS Boards					
Health Protection Scotland	100	0	0	0	6
ISD	0	0	0	100	6.6
NES	0	0	0	100	0.4
NHS Health Scotland	0	94	0	6	6.7
QIS	0	0	0	100	1
All Special NHS Boards %	**29**	**30**	**0**	**41**	
All Special NHS Boards WTE	**6**	**6.3**	**0**	**8.4**	**20.7**
All NHS Boards %	**23.6**	**16**	**14.9**	**45.5**	
All NHS Boards WTE	**30.2**	**20.5**	**19.1**	**58.2**	**128**

Notes: Directors of Public Health are defined as generic posts. Vacant posts are included; outward seconded posts are excluded. Percentages and WTEs may not add up to 100 due to rounding.

4.3 Overall, around half of the consultant workforce in the area Boards were classified as generic, with a quarter dedicated to health protection, a fifth to health and social care services and a sixth to health improvement (Table 4). The proportion of staff classified as generic varied from 100% in Orkney and Shetland to 9% in Tayside. All area Boards except Orkney and Shetland had dedicated Health Protection consultant staffing, but only eight had dedicated provision for health improvement and seven for health and social care services.

4.4 At national level, there were significant numbers of public health consultants dedicated to health protection and health improvement and, at ISD, to generic health intelligence. However, it was notable that there was no national public health resource with a focus on health and social care services. This gap was being partially filled by ScotPHN, which, for example, had conducted needs assessments for neurosurgery and services for people with HIV, diabetes and chronic fatigue syndrome.

Base for SPH staff by staff category

4.5 Consultant level staff were largely based at NHS Board headquarters. An exception was Highland where some non-medical consultant staff were CHP based. Health promotion staff were also headquarters-based in the majority of boards, with the notable exceptions of Lanarkshire and Greater Glasgow and Clyde. Information/intelligence managers were largely based at NHS Boards also, although four boards had none of these.

Base for SPH staff by SPH topic areas

4.6 Where non-consultant level staff were based varied to some extent between small and large Boards. Health protection staff were almost all based at Board headquarters in both large and small boards. Staff with a health improvement remit were split between headquarters and CHPs, especially in large health board areas. SPH staff for health and social care tended to be split between headquarters and CHP proportionately more in larger health board areas while in smaller areas they tended to be at the Board headquarters.

Satisfaction with overall SPH capacity by topic

4.7 DsPH were most likely to report that they thought specialist provision was adequate for health protection and least for health information/intelligence (Table 5). Seventy-one percent of respondents said there was not enough health information/intelligence input, although two said they were very satisfied with provision in this area; 50% said that there was too little health services input, 29% too little health promotion input and 21% too little health protection input. Several DsPH emphasised the lack of health information and epidemiological expertise or that it was fragmented across a number of teams. They commented that this diminished their ability to make effective contributions to strategic planning. A defined health intelligence team was suggested as desirable.

Table 5 DsPH satisfaction with SPH capacity across their Board area, by topic

	Health Protection	Health improvement	Health and social care services	Health Information/health intelligence
Very satisfied	1	1	0	2
Satisfied	10	9	7	2
Not satisfied	3	4	7	10

Specialist public health input to CHPs

Satisfaction with SPH input to CHPs

5.1 DsPH and CHPs were asked about their satisfaction with SPH input to CHPs. Only around half or fewer of the DsPH said they were satisfied with the amount of SPH input available to the CHPs, particularly for health and social care services where only about a third were satisfied. A majority of DsPH commented that they simply did not have the capacity overall to meet all the demand for SPH input at both Board and CHP levels.

Table 6 DsPH satisfaction with the amount of SPH input to CHPs by SPH topic

	Health Protection % (n=14)	Health Improvement % (n=14)	Health and Social Care Services % (n=14)
Very satisfied	7	0	0
Satisfied	50	57	36
Not satisfied	14	29	43
Nil/ not answered	28	14	21

CHPs views

5.2 Most CHP respondents reported they were satisfied or very satisfied with the amount of SPH input they received across the three topics (Table 7). Their satisfaction levels appeared somewhat higher than those of the DsPH. However, several respondents commented that it would be better to have more SPH resources in the CHP to help with planning and with linking health profiles with deprivation data. In particular, respondents highlighted a lack of specialist health information staffing, with almost 80% (15/19) saying they had too little provision. One commented that this deficit led to a lack of locally focused information for responsive local planning sensitive to the needs of different localities within the CHP. Other comments included the view that the lack of access to specialist public health consultant resources meant insufficient presence at CHP meetings and a consequent lack of an epidemiological perspective in planning for health improvement and 'clout' to get things done at the NHS Board. Shortfalls in locally based health improvement staff resulted in a lack of capacity to deliver national agendas, on inequalities and HEAT targets, and for developing and delivering local health improvement solutions for local issues.

Table 7 CHPs Satisfaction with amount of SPH input by SPH topic

	Health Protection % (n=19)	Health Improvement % (n=19)	Health and social care services % (n=19)
Very satisfied	21	42	21
Satisfied	68	47	58
Not satisfied	11	11	21

5.3 Most CHP respondents also reported they were satisfied or very satisfied with the quality of SPH input (Table 8). Further comments from CHPs included the desire for more joint working or devolution of SPH resources to CHPs to enhance input; devolution of health information staff to CHPs; more joint working on health protection; and an increase in available SPH capacity.

Table 8 CHPs Satisfaction with quality of SPH input by SPH topic

	Health Protection % (n=19)	Health Improvement % (n=19)	Health and social care services % (n=19)
Very satisfied	37	47	32
Satisfied	53	47	58
Not satisfied	11	5	11

Examples of effective SPH contributions to CHPs

5.4 DsPH gave many examples of what they thought were effective contributions including:

- leading or supporting health needs assessment, (e.g. through health profiles),
- anticipatory care, (e.g. local development of Keep Well, Well North),
- health protection, (e.g. pandemic influenza (H1N1), winter planning), and
- prioritisation of health improvement activities through health input to Single Outcome Agreements (SOAs), Health, Efficiency, Access and Treatment (HEAT) target delivery and the development of Joint Health Improvement Plans (JHIPs).

5.5 Other nationally driven and locally implemented activities cited included performance monitoring for health improvement, and support on tackling health inequalities. Local initiatives on methods of delivery included using one CHP in the Board area as a lead for a particular health improvement topic or target group. Particular health improvement topics included alcohol brief intervention, cardiology interventions needs assessment, prioritisation, and funding bids for healthy weight interventions and smoking prevention. There was also joint working on environmental health.

5.6 A variety of effective contributions were cited by CHP respondents. These included support for SOAs and HEAT targets in various ways such as support for smoking cessation, alcohol brief interventions and child healthy weight initiatives. Effective health protection support included: H1N1 planning, Human Papilloma Virus (HPV) screening campaign support, and help in local norovirus outbreak control.

Satisfaction with management arrangements for SPH input to CHPs

5.7 Overall, most DsPH were satisfied with the management arrangements (Table 9). One commented that provided there was agreement on what they were trying to achieve, management arrangements should not get in the way. Some DsPH thought that the success of their management arrangements was due to having only one CHP in their board area but there was not a great deal of difference in responses between DsPH with single CHPs and those with multiple. A higher proportion of CHP respondents appeared to be dissatisfied with the management arrangements. Some commented that more local capacity could encourage a more effective and equal partnership in joint working. Some CHP respondents wanted both more influence on public health agendas and more control over SPH resources (perhaps through having more non-medical SPH staff) which would enable them to have that influence, and to implement further health improvement activity.

Table 9 Satisfaction with current management arrangements for SPH input to CHPs

	DsPH % (n=14)	CHPs % (n=19)
Very satisfactory	43	21
Satisfactory	43	47
Not satisfactory	7	32
Not answered	7	0

Specialist Public Health Input to Community Planning Partnerships

6.1 Ten of the 14 DsPH and 16 of both the CHP and CPP respondents said that a public health specialist was a member of the CPP Board or at least one of its subcommittees or working groups (Table 10). How specialist public health was represented on the CPP varied, being either a DPH, a consultant or a health promotion manager. DsPH indicated that specialist public health input to CPPs was more often about health improvement than either health protection or health and social care services.

Table 10 Views of the three groups on SPH Input to Community Planning Partnerships

	DPH % (n=14)	CHP % (n=19)	CPP % (n=18)
PH Specialist is a member of CPP Board or Subcommittee	71	84	89
PH Specialist presents papers to the CPP	50	84	89
PH Specialist is asked by the CPP to provide ad hoc information	57	63	72
Other arrangements for PH Specialist input to the CPP	43	32	56

Papers and reports

6.2 To give an indication of the type of specialist public health input given to CPPs, respondents were asked to provide the title of the most recent example of a paper presented to the CPP. DsPH mentioned two SOA updates, two reports on healthy weight, one on mental health, and one on public health pharmacy. CHP respondents mentioned a varied range of papers on health improvement strategies, plans, projects and results. Substantive topics included health and well being, Keep Well, H1N1, bowel screening, alcohol and drugs, and sexual health and relationships training for looked after children. CPPs mentioned reports on the progress of local Health Improvement and Health Protection interventions; reports on health needs through health profiles and trends; and governance for health improvement.

Contributions to Groups and other work

6.3 Respondents were asked to indicate the type of CPP groups to which specialist public health contributed. DsPH mentioned a wide variety including health improvement teams or groups, alcohol & drug partnerships, poverty strategy groups, an SOA steering group, an employability partnership and a sustainable communities partnership. Examples given by CHP respondents included health and well-being groups, a JHIP group, alcohol and drug partnerships, smoking cessation, healthy weight and breast-feeding groups, and the management of gang violence. CPP respondents gave similar examples, including chairing groups relevant to health (not confined only to health and wellbeing groups) and leading or supporting relevant pieces of work in priority setting and creating strategy, overseeing the implementation of strategy, and planning, supporting and overseeing topic specific health improvement projects, developing and monitoring SOA indicators.

6.4 Other examples of contributions were given. DsPH cited writing the area profile for the SOA, logic models for delivering specific targets, and providing monitoring data. CHPs mentioned pandemic flu planning, a health profile for alcohol and drug planning and a hand hygiene audit. CPPs cited agreeing and monitoring indicators and targets in the SOAs, with four specific mentions of the SOA; specific health improvement topics included suicide prevention, alcohol, obesity, child dental health; and interpretation of health trends and inequalities.

Contributions to CPP policies, plans and decisions in the past year

6.5 Twelve DsPH gave one or more examples of SPH contributions. Six DsPH cited some form of involvement with the development and implementation of SOAs, e.g. ensuring HEAT targets were reflected in local outcomes. Also mentioned were:

- Priority setting, including for allocating resources (e.g. Fairer Scotland Fund),
- Strategy development,
- Partnership working at various levels,
- Collaboration on training and employment initiatives,
- Health inequalities initiatives,
- Health protection for pandemic flu.

6.6 Fifteen CHPs respondents gave one or more examples. Contributions to the SOA, HEAT targets or the JHIP were mentioned by six. Other examples covered alcohol, smoking, obesity, health inequalities planning at locality level, homelessness and suicide. Health protection in relation to H1N1 was mentioned and input to planning the local CHP. There were similar responses from the CPP respondents. Examples focused on the integrated outcomes approach leading to the SOA document, priority setting for JHIPs, and the implementation of inequalities targeted anticipatory care (Keep Well). Substantive health improvement topics included parenting, healthy weight, alcohol and drugs problems prevention, suicide prevention, smoking cessation, child dental health, physical activity, improving older peoples' services, shifting the balance of care, mental health, and cardiovascular disease.

Satisfaction with provision of specialist public health input to CPPs

6.7 Respondents were asked to rate their satisfaction with the overall provision of SPH to their own local CPPs. The results are shown in Table 11.

Table 11 Satisfaction with SPH input to the CPP

	DsPH % (n=14)	CHPs% (n=19)	CPPs % (n=18)
Very Satisfied	14	32	44
Fairly Satisfied	43	42	39
Not satisfied	36	16	11
Not answered	7	10	6

6.8 Three-quarters or more of the CHP and CPP respondents said they were fairly or very satisfied with specialist public health input to the CPP compared with 57% of the DsPH. DsPH in the smaller areas appeared more likely to be satisfied than those in larger areas. Indeed, the only two DsPH who expressed themselves as very satisfied with the SPH input to the CPP overall were located in the smaller NHS Boards.

6.9 Ten DsPH commented further about existing arrangements and how they thought they might be improved. The main themes were that although DsPH would like to give more SPH input to CPPs, resource was limited. To provide more SPH input to CPPs, e.g. health impact assessments, and 'industrial level implementation of effective public health interventions' (DPH) more SPH resource would be needed. There was also a theme about organisational structures, and whether they needed to be changed to make the best use of the scarce SPH resource. Input could currently be fragmented and not always prioritised as desired by DsPH. Some CPP structures were seen as 'over elaborate'.

CHPs

6.10 There were many positive comments about SPH input, e.g. "an integral part of CPP work", "SPH are influential in key agenda items", "their input to the CPP is useful and valued". However, a number highlighted the lack of capacity and the wish to have more SPH resource embedded in the CHP to focus on local work.

CPPs

6.11 A number of respondents made positive comments: e.g. "the SPH people are very willing to work with us", "the amount of input is good and the quality satisfactory" "the social policy and regeneration manager was very happy with the input and the level". Several CPPs commented that the value added by SPH came through focusing on health and on outcomes for partnership working, where regular attendance and input through joint meetings was appreciated. Devolution of health improvement to CHPs was applauded by some as giving a more visible and available local resource. Some CPPs had reservations about structural issues. General issues included needing more clarity on the allocation of roles and responsibilities for SPH work between CHP and NHS Board, including responsibility for agenda setting, concerns about duplication of effort, and more SPH support for delivery and implementation of Health Improvement initiatives related to HEAT. The DPH resource was thinly spread in places, with sometimes insufficient SPH involvement at local level. One CPP respondent was not satisfied that there was no SPH representation on either CPP or CHP boards, but was hopeful that this would change with a recent new appointment.

Specialist Public Health Inputs to CHPs and CPPs from National Agencies

7.1 CHP and CPP respondents were asked whether they had had an SPH input from Health Protection Scotland (HPS), Health Scotland (HS) or Information Services Division (ISD) in the past 12 months. Responses are shown in Table 12

Table 12 CHP view of SPH input from National Agencies in last 12 months

	Health Protection Scotland % (n=19)	Health Scotland % (n=19)	ISD % (n=19)
Yes	42	58	74
No	47	42	21
Not sure/Don't know	11	0	5

CHPs

7.2 Less than half the CHP sample said they knew of input from HPS in the past 12 months. Inputs were around pandemic flu, healthcare acquired infection, HPV immunisation and specific incidents. More than half the CHP sample had had input from NHS Health Scotland. Inputs were around monitoring, publicity and implementation, with themes of training on health improvement interventions, acting as a pilot site for health improvement interventions, help on monitoring performance indicators (advice meetings), and support for social marketing of health improvement interventions.

7.3 Three quarters of the sample had had input from ISD in the past 12 months. This included data provision and information initiative developments, with themes around:

1. information about local population health profiles (general or specific, e.g. long term conditions) to inform planning,
2. performance information e.g. from SOA indicators, vaccination uptake rates, immunisation, breast feeding, Standard Morbidity Record (SMR), Scottish Patients at Risk of Readmission and Admission (SPARRA), anticipatory care progress, inequalities,
3. using routine reports
4. working with ISD to design new information systems for local use in providing national data (e.g. new general practitioner system, new child health surveillance system, integrated resource framework).

CPPs

7.4 Around half the CPP respondents reported input in the last 12 months from HS and ISD and a quarter from HPS (Table 13). Support for tackling pandemic flu was the most mentioned input from HPS. Input from HS included support on developing outcomes frameworks and outcomes-based performance management, community-led health, support on evidence into action and good practice information for reviewing the CHP. ISD themes included SOA, inequalities, and community profiles for planning health improvement activities.

Table 13 CPP view of SPH input from National Agencies in last 12 months

	Health Protection Scotland % (n=18)	NHS Health Scotland % (n=18)	ISD % (n=18)
Yes	28	56	50
No	56	39	44
D/K	17	6	6

Matched analysis

8.1 A more detailed analysis was carried out in which the responses of DsPH were matched and compared with those from the CHPs and CPP in their own area. This showed that although there was not always complete agreement between the respondents, there were no instances of major disagreement. Overall, DsPH were more likely to be dissatisfied with existing arrangements than their CHP and CPP counterparts but this was not always the case.

Appendix 1

Definitions of consultants in public health

For the purposes of the Overview questionnaire report, the aim was to provide data by NHS Board on the number of posts where the post holder was employed as a consultant in public health medicine or dental public health or was working at an equivalent level. Posts were included if they met the following definitions.

The post-holder is:

A fully accredited consultant in public health medicine

OR
A fully accredited consultant in dental public health

OR
Occupying a post requiring

- an appropriate professional background (e.g. social sciences, statistics, environmental health, nursing, health promotion to at least post-graduate degree level);
  AND
- knowledge, skills and experience needed to manage strategic change in organisations, to work in senior management teams and lead public health initiatives, or more technical areas (e.g. epidemiology);
  AND
- has health improvement, health protection, health service management/development or health intelligence as a major objective of their post;
  BUT NOT
- in such a way as most of their work is "hands on" with community members or clients/patients.

and
Is employed at AfC grade 8d or 9
or
Is on the UK Public Health Register as a generalist or defined specialist **and** the post was subject to appointment by an Appointment Advisory Committee
or
The job title is Consultant in Public Health or Consultant in a recognised sub-specialty of Public Health eg Pharmaceutical Public Health or Public Health Nutrition or Health Protection
or
Is operating at a level that would enable them to deputise effectively for the Director of Public Health

Counting academic posts
For the purposes of the Overview, only record Whole Time Equivalents contracted by the NHS Board for NHS work at the level of Consultant in Public Health as defined above.

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