



Summary Report

SMO Training Needs Survey

Key findings and recommendations

SUMMARY REPORT

SMO Training Needs Survey

Key findings and recommendations

The SMO Training Needs Survey was conducted by a survey planning group from the Royal College of Physicians of Ireland (RCPI) and Public Health in the Health Service Executive (HSE). Members of the group are Professor Cecily Kelleher (joint chair), Dr John Cuddihy (joint chair), Dr Mary Condon, Dr Barbara Gilmer, Dr Paul Kavanagh, Dr Grace McHugh, Mr Brian Ó Murchú, Dr Alice Quinn, Dr Anne Sheahan and Dr Philippa White.

Author

Dr Philippa White

Acknowledgements

The planning group would like to thank all of the SMOs who completed this survey. The planning group would also like to thank Ms. Janet O'Farrell, Research Officer in the RCPI, who provided research expertise and technical support.

Contact: philippa.white2@hse.ie

Dublin, January 2025

Introduction

Background

Senior Medical Officers (SMOs) have played a highly valuable role in the delivery of public health services in Ireland over many decades. In Ireland the specialty of public health medicine has undergone and continues to undergo significant reform, including an expansion of the role of public health doctors in all domains of public health, including health service improvement, health improvement and health intelligence, the introduction of a new hub and spoke service delivery model, and reconfiguration of regional Departments of Public Health to align and embed with the newly established HSE health regions. The new public health model is responsible for delivering an agile, dynamic, intelligence-led public health medicine service across all domains of public health.

Given the fundamental changes occurring within the reform of the specialty of public health, it is important to assess the role of SMOs and ensure that the workforce can adapt to the new context and is fit for purpose. In late 2023 the National Office of Public Health within the Health Service Executive (HSE) commissioned the Faculty of Public Health Medicine (FPHM) in the Royal College of Physicians of Ireland (RCPI) to conduct a survey of SMOs working within public health on their training and educational needs. It was envisaged that this survey would highlight the training and educational gaps of the current SMO workforce and provide insight on how to enhance their role and adapt it in response to the ongoing reform programme.

Aim

The aims of the survey were to inform the development of a training plan for the SMOs working in public health and help train an agile SMO workforce with a mixed skillset who could step in to new roles, as required.

Methods

Target population

At the time of survey development, there were 61 SMOs working within the specialty of public health in the HSE. SMOs working in other specialties (e.g. community medicine) or in agencies outside of the HSE were outside the scope of this project and were not invited to participate in this survey.

Survey planning

A survey planning group was convened in February 2024 and consisted of representatives from the FPHM, the HSE's National Office of Public Health, and the SMO workforce within public health. The group met six times between February and November 2024 to discuss and agree the aims of the survey, the contents of the survey instrument, the survey dissemination strategy, ethical considerations, project timelines, survey results and recommendations. A smaller group consisting of a representative from the National Office of Public Health and the SMOs from the wider survey planning group met on a regular basis over this timeframe to have in-depth discussions about the survey instrument.

Survey design

Development of the survey was informed by the survey's pre-agreed aims, consultations with SMOs in the survey planning group, discussions with the wider survey planning group and a piloting exercise. Discussions with SMOs and the wider survey planning group provided clear guidance on modifying the survey prior to piloting and finalisation. The survey was piloted on four SMOs; they provided feedback

on specific elements of the survey they believed could be improved and this feedback was incorporated insofar as possible before the survey was finalised.

The core survey consisted of 21 questions (see Appendix A for survey instrument). There were 17 closed questions, of which 11 allowed respondents to provide free-text responses for some response categories, and four were open-ended questions. There were four additional and optional closed questions at the end of the survey to collect respondents' demographic information. The core survey contained questions covering the broad areas of previous experience working in and outside of public health, including postgraduate qualifications, experience working as an SMO, career intentions, training needs and attendance at training events.

The survey was self-administered on the Qualtrics platform (https://www.qualtrics.com/) and took approximately ten minutes to complete.

Survey dissemination

All SMOs working within the public health specialty in the HSE were invited to complete the survey. The joint chairs of the survey planning group, the Dean of the FPHM and the National Director of Public Health, composed a letter to all eligible SMOs informing them of the purpose of the survey and inviting them to participate. This letter was circulated prior to the launch of the survey. All eligible SMOs were subsequently sent an individualised link to the survey page once the survey went live. Emails reminding non-responders to complete the survey were circulated shortly before the survey was closed. As some SMOs did not receive individualised links to the survey from Qualtrics due to technical issues, a generic link was also circulated to all non-respondents in the week before the survey closed. The survey was open for responses for three and a half weeks between 4 and 28 June 2024.

Data analysis

Data in this report are presented descriptively. Survey responses were collated and analysed in Microsoft Excel and Stata version 17 (1). Counts and proportions were calculated to describe the quantitative data. Qualitative responses were analysed using thematic analysis (2). All survey responses were included in the primary analysis; respondents were also divided into subgroups according to years of experience working in public health (≤3 years vs. >3 years of experience) and completion of a master's in public health. The responses of these subgroups were analysed separately to explore whether the training needs differed between them. Fisher's exact test was used to detect statistical differences between the responses of the subgroups.

Efforts were made to ensure that no identifiable information was reported. Consequently, where the number of respondents is less than 5, the exact number is not supplied in the Results section, but 'n<5' is stated instead, and categories with small numbers of responses have been merged in the graphs for the same reason. Additionally, any identifiable information from free-text responses was redacted and only broad themes emerging from the aggregate data were reported.

Data protection and consent

As this survey collected personal data, the data were processed in accordance with the General Data Protection Regulation (GDPR) and the Data Protection Act 2018 by the data controller, the National Office of Public Health. Survey respondents were made aware of this prior to completing the survey. Survey respondents were informed that the information they provided would be kept strictly confidential, that they would not be asked for any identifying information and that identifiable information would be redacted in any reporting. Respondents were also provided with an email address to contact to receive further information on their rights as a data subject.

As previously described, SMOs were provided with information outlining the purpose of the survey by the joint chairs of the survey planning group prior to receiving a link to complete the survey. Prior to commencing the survey, respondents were informed on the survey landing page of their right to not participate and to withdraw from the survey at any point without any adverse consequences to them. Respondents had to indicate that they understood the nature and purpose of the survey and consent to participate prior to commencing the survey. Respondents also had to provide consent towards the end of the survey to complete the four optional questions collecting demographic information

Ethics approval

As this survey was conducted as part of routine service evaluation procedures, research ethics approval was not sought.

Results

Respondent characteristics

Of 61 eligible SMOs, there were 45 survey respondents, providing a response rate of 73.8%. One SMO (1.6%) initiated the survey but did not participate after declining the terms and conditions of participation. 40 (88.9%) respondents agreed to complete the additional demographic questions.

Table 1. Characteristics of survey respondents (n=40)

	n	%
Sex		
Female	32	80
Male	8	20
Non-binary	0	0
Other	0	0
Prefer not to say	0	0
Age group		
<25 years	0	0
25–44 years	17	42.5
45-64 years	21	52.5
≥65 years	<5	-
Prefer not to say	<5	-
Employment status		
Permanent contract	33	82.5
Locum/fixed-term contract	7	17.5
Prefer not to say	0	0
Work location		
Regional Department of Public Health	34	85
Specialty agency/national office	6	15
Other	0	0
Not currently working	0	0
Prefer not to say	0	0

Note: 40 (88.9%) respondents completed these additional questions collecting demographic information.

Professional experience

Clinical experience

Prior to working in public health, respondents worked across a variety of settings, with the highest proportions working in hospital-based medicine (n=24, 53.3%) and general practice (GP; n=24, 53.3%) (**Figure 1a**). In terms of where they worked immediately prior to working in public health, the highest proportion of respondents worked in GP (n=13, 28.9%) or community medicine (n=12, 26.7%) (**Figure 1b**). Respondents' work in areas of medicine outside of public health represented 605 years of experience, with the highest number of years spent working in GP (250.1 years) and hospital-based medicine (175 years) (**Table 2**). Of the 24 respondents who worked in hospital-based medicine prior to working in public health, the most common hospital specialties were paediatrics (n=10), emergency medicine (n=6) and general medicine (n<5).

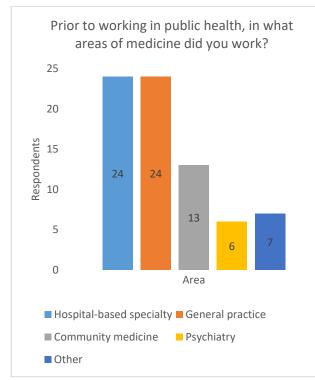


Figure 1a. Respondents' areas of work at any point prior to working in public health (n=45).

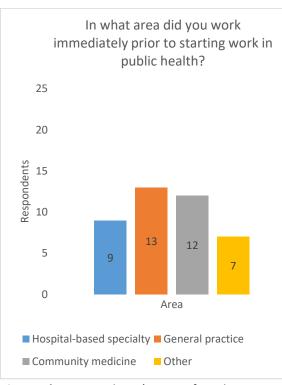


Figure 1b. Respondents' areas of work directly prior to working in public health (n=45).

Note: For Figures 1a and 1b, the "non-clinical role in medicine" response category was selected by <5 respondents and is not represented in either figure. In Figure 1b, the response categories "psychiatry" was not selected by any respondent and is therefore not represented in the figure.

Table 2. Respondents' years of experience working in areas outside of public health (n=45).

Specialty area	N=Respondents	Years spent working in area
Hospital speciality	24	175
General practice	24	250.1
Community medicine	13	86.9
Psychiatry	6	6
Non-clinical role	<5	40

Other	7	47
Total	45	605

In terms of formal postgraduate clinical training, 23 respondents (51.1%) completed GP training, 16 (35.6%) completed Basic Specialty Training (BST) in general internal medicine, general paediatrics, psychiatry, obstetrics and gynaecology or histopathology, 8 (17.8%) completed General Professional Training (a precursor to the BST), and a smaller number of respondents completed Higher Specialty Training (HST) in a medical or surgical specialty (n<5) or an international clinical fellowship (n<5).

Postgraduate qualifications

Respondents had a range of academic and professional postgraduate qualifications. The most common academic qualifications included postgraduate diplomas (n=22, 48.9%), master's degrees in public health (n=20, 44.4%), postgraduate certificates (n=7, 15.6%) and higher research degrees (i.e. MD or PhD) (n<5). The most common professional qualifications included Membership of the Irish College of General Practitioners (MICGP) (n=19, 42.2%), Membership of the Royal College of Physicians of Ireland (MRCPI) (n=10, 22.22%), membership of a postgraduate college outside of Ireland (n=9, 20%), Membership of the Faculty of Public Health Medicine in Ireland (MFPHMI) (n<5), Diplomate Membership of the Faculty of Public Health Medicine in Ireland (n<5), Membership of another RCPI faculty or other college in Ireland (n<5), and fellowship of a college (excluding fellowship of the Faculty of Public Health Medicine) in or outside Ireland (n<5).

Public health experience

In terms of time spent working in public health, the majority of respondents had worked fewer than 10 years in the specialty at the time of survey completion (n=31, 68.9%). 9 (20%) respondents had spent 10–19 years working in public health, while 5 (11%) had spent \geq 20 years working in public health, including a smaller number of respondents whose experience working in the specialty was \geq 30 years (**Figure 2**).

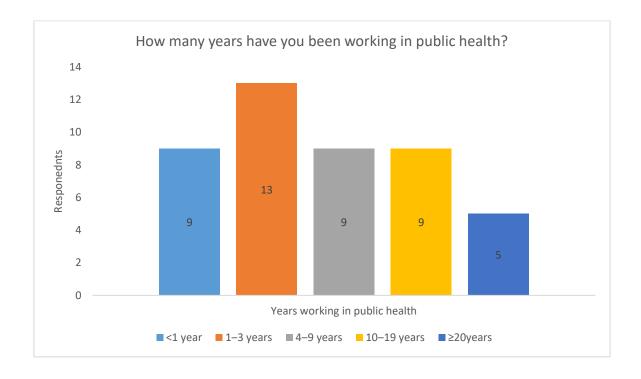


Figure 2. Respondents' years spent working in public health (n=45).

Note: Response categories "20–29 years" and "≥30 years" were merged due to small numbers of respondents choosing these categories.

A minority of respondents completed some or all of the MFPHMI exams. 10 (22.2%) respondents completed Part 1 MFPHMI exam, while <5 respondents had completed more than one part. The majority of respondents (n=33, 73.3%) had not completed any MFPHMI exams.

Experience working as an SMO

Two thirds (n=30, 66.7%) of respondents reported working full-time as an SMO, while the remaining third (n=15, 33.3%) reported working less than full-time (**Figure 3**). Of the 15 respondents who work less than full-time, 9 (60%) do not work in another role during their working week, while 6 (40%) do. The roles of these respondents are mostly in other areas of medicine.

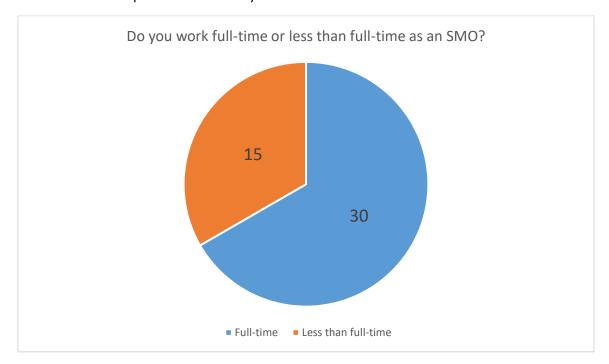


Figure 3. Respondents' working patterns (n=45).

Roles and responsibilities

Respondents reported working in a variety of roles as an SMO. The most common roles cited included responding to notifiable diseases and outbreak management (n=34, 75.6%), participating in on-call health protection activities (n=30, 66.7%), and immunisation-related work (n=27, 60%) (**Figure 3**). Responding to notifiable diseases and outbreak management (n=38, 84.4%), participating in on-call health protection activities (n=27, 60%), and TB-related work (n=19, 42.2%) were the main roles which respondents had in the preceding year (**Figure 4**).

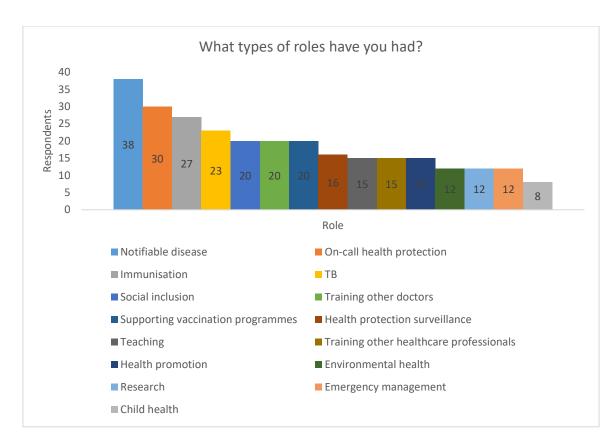


Figure 3. Respondents' roles in public health (n=45).

Note: The following response categories were selected by <5 respondents and are not represented in the figure: chronic disease management; cancer screening; health intelligence; and other areas.

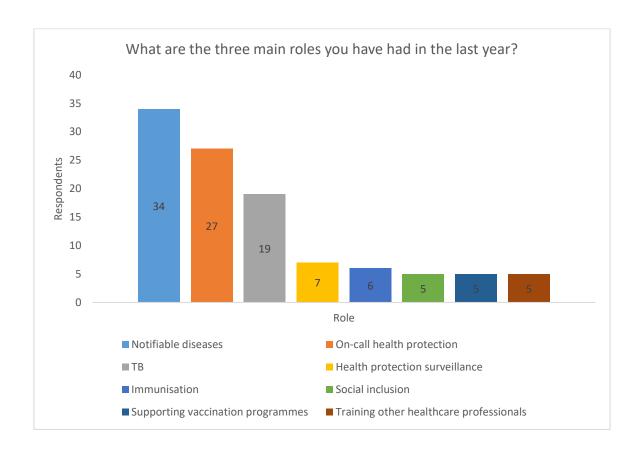


Figure 4. Respondents' roles in public health in the preceding year (n=45).

Note: The following response categories were selected by <5 respondents and are not represented in the figure: emergency management; child health; teaching; training other doctors; research; health promotion; health intelligence; and other areas.

Roles and responsibilities in the context of the COVID-19 pandemic

19 respondents (n=42.2%) thought the COVID-19 pandemic affected their roles and responsibilities as an SMO; the remaining respondents were either hired during or since the pandemic or did not respond to this question. The primary ways in which the pandemic affected the work of SMOs included having a greater role in training other staff members, an increased workload and increased working hours, and ultimately having a narrower scope of practice – many respondents stated that the pandemic solidified the SMOs' role in delivering health protection services, with many focusing exclusively on non-COVID-19 health protection work during and after the pandemic. A small proportion of respondents thought that the COVID-19 pandemic established greater working for SMOs within multidisciplinary teams and with new partners and stakeholders. A small number of respondents thought the COVID-19 pandemic did not affect their role and responsibilities as an SMO at all.

Training needs and career intentions

Maintaining professional competence

18 (40%) of respondents are registered with the Irish College of General Practitioners (ICGP) for maintaining professional competence, 12 (26.7%) are registered with the RCPI, 9 (20%) with the FPHM and smaller numbers (n<5) are registered with other bodies, such as the Faculty of Paediatrics in RCPI, the Institute of Obstetricians and Gynaecologists in RCPI and the Faculty of Occupational Medicine in RCPI.

Training needs

Less than half of respondents were satisfied with the training they received at induction (n=21, 46.7%) or on an ongoing basis (n=21, 46.7%) (**Figure 5**). A somewhat smaller proportion of respondents were clear as to what their training needs are (n=20, 44.4%). The majority of respondents participate in training activities (to fulfil annual CPD requirements) that are relevant for their day-to-day job (n=29, 64.4%), and can easily take contractual leave to attend training and learning activities (n=27, 60%). A minority of respondents have quarterly performance reviews in which training and educational needs are identified (n=16, 35.6%). Two thirds of respondents (n=30, 66.7%) have an annual discussion with their manager to discuss their training and educational needs. Further, 24 (53.3%) respondents' managers help them to address their training and educational needs.

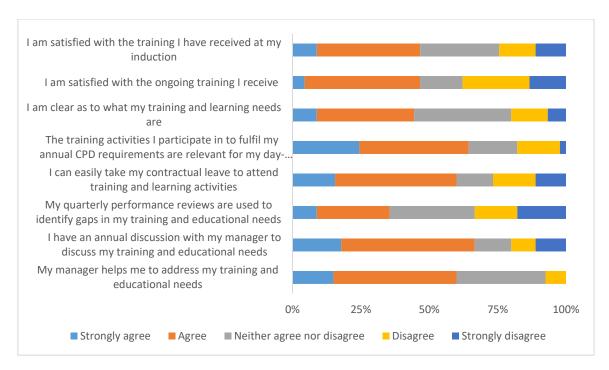


Figure 5. Respondents' opinions on their training needs and whether they are identified and addressed (n=45).

In terms of training, more than half of all respondents felt they need more training in all domains of public health (**Figure 6**).

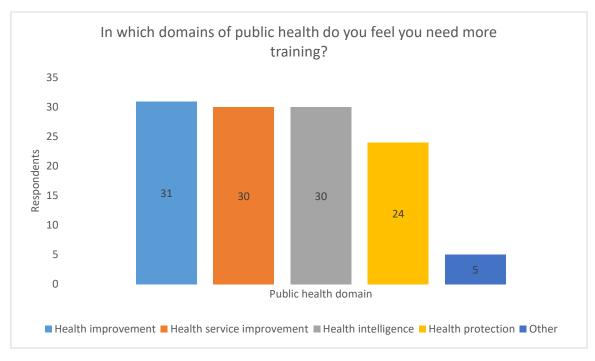


Figure 6. Public health domains in which respondents feel they need training Note: The response category of "no training needed" was selected by <5 respondents and is not represented in the figure.

In the domains of health improvement, health service improvement, and health intelligence, many respondents stated that they had limited experience working in these domains and would therefore like training in all aspects of them. For health improvement, health inequities, social determinants of health, preventive health services, public mental health and advocacy were all cited as specific topics or areas in which respondents felt they need training. Health needs assessment, quality and patient safety, population-based screening programmes, health system strengthening, health workforce development, health system innovation and capacity management were all cited as specific topics within health service improvement in which some respondents felt they needed training. Data analysis, statistical analysis, health informatics, Health Atlas, health economics and small area analysis were cited by respondents as areas in which they would like more training in health intelligence.

In the domain of health protection, a number of respondents stated that they would like more training in the broad public health management of infectious diseases and in outbreak management. In addition to this, specific areas that respondents said they would like training in included environmental health, TB, vaccination, research, surveillance, leadership and communication.

In terms of more general training, a number of respondents highlighted that they would like training in conducting research, survey design, project management, leadership, change management and IT (e.g. using Microsoft Excel).

Career intentions

The vast majority of respondents (n=38, 84.4%) would like to receive training in areas of public health outside their current role to expand their future job options (**Figure 7**). Similarly, the vast majority (n=39, 86.7%) would like to develop a special interest within public health, which will require additional training.

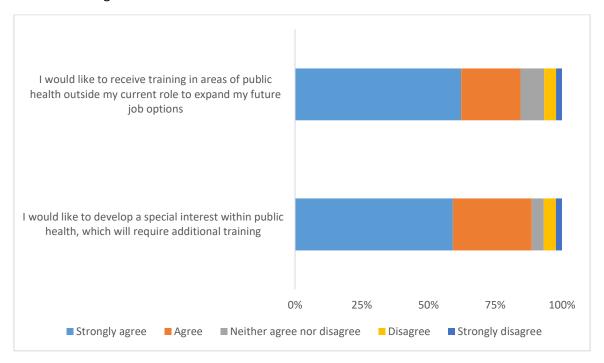


Figure 7. Respondents' opinions on their future career intentions (n=45).

Membership of the Faculty of Public Health Medicine of Ireland (MFPHMI) exams

One third of the 42 respondents who had yet to complete any of the MFPHMI exams (n=14, 33.3%)

were very interested in attempting the exams in the future, while 13 (31%) were somewhat interested,

6 (14.3%) were neither interested nor disinterested, 1 (2.4%) was somewhat disinterested and 8 (19%) were very disinterested.

Training events

FPHM events

Most respondents (n=35, 77.8%) attend the Summer or Winter Scientific Meetings organised by the FPHM. 21 (46.7%) respondents attend webinars organised or hosted by the FPHM, 8 (17.8%) attend meetings organised by the FPHM and 3 (6.7%) attend other FPHM events. Six respondents (13.3%) do not attend any events organised by the FPHM.

When asked if there are particular events respondents would like the FPHM to host in order to provide them with training, many respondents stated that they would like in-person training events, such as study days, seminars or workshops for SMOs specifically. A fewer number of respondents said that they would like more online events, such as webinars or online modules, targeting the training and educational needs of SMOs. While some respondents cited a wish for training events in the domain of health protection (e.g. covering the public health management of infectious diseases, emerging threats, environmental health, and immunisation), more respondents expressed a desire to have more FPHM events that provide training to SMOs in the other domains of public health. Many respondents stated that they would like more events tailored to the training and educational needs of SMOs specifically.

Useful training events

In terms of events that respondents find useful, the FPHM's Summer and Winter Scientific Meetings (n=36, 80%) and in-house workplace training activities (n=35, 75.6%) were identified by the most respondents as being useful for training purposes (**Figure 8**).

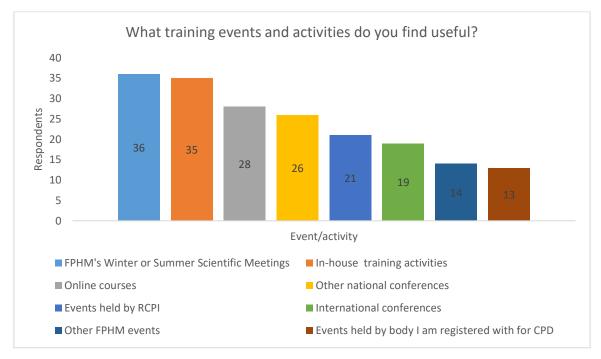


Figure 8. Training events respondents found useful (n=45)

In terms of the single training event in the preceding year that respondents found most useful, the FPHM's Summer and Winter Scientific Meetings (n=11, 24.4%) and an advanced TB course in London (n=7, 15.6%) were most commonly cited by respondents. A smaller number of respondents cited the

National Health Protection Conference in Dublin (n<5), the national TB conference in St James's Hospital Dublin (n<5), and a drinking water incident study day in Dublin Castle (n<5) as the most useful training events.

Other comments

The vast majority of respondents (n=35) gave specific feedback on how they thought the training and learning needs of SMOs could be addressed. Many of the suggestions fell under the same broad themes.

Protected time

A number of respondents cited a lack of protected time for SMOs as a barrier to learning and training. Respondents stated that they receive a very limited amount of paid educational leave to attend training and educational activities and this hindered their ability to attend conferences, courses, and other training activities, participate in research, or enrol in a Master's in Public Health programme.

Resources

Some respondents emphasised a need for SMOs to receive more resources, including monetary support, to complete a Master's in Public Health, diplomas or MFPHMI exams. Respondents made a contrast between consultants, non-consultant hospital doctors (NCHDs) and some GPs, who are entitled to monetary supports to complete training and educational activities, and SMOs, who are not entitled to any such support.

Role definition

Some respondents expressed that given the absence of a clear definition of the SMO role currently and a lack of articulation of the scope of the role in the future makes identifying the training needs of SMOs and solutions needed to address them difficult. Some expressed that this is lack of clarity on the role of SMOs is further exacerbated by the variability of the role across settings.

Working outside of the domain of health protection

Many respondents emphasised that they wish to work outside of the domain of health protection for different reasons. Some stated that working in the other domains of public health would make the SMO role more rewarding and engaging, while others recognised that health protection nurses are playing an ever-growing role in the domain of health protection and fulfilling duties once left to SMOs, therefore, necessitating that SMOs extend their scope of practice beyond health protection. A number of respondents expressed a wish to receive training in the non-health protection domains of public health, suggesting they could receive training via courses, online modules, and teaching sessions from Consultants in Public Health Medicine with a special interest in the wider domains of public health.

Structured training and teaching

A number of respondents stated that they would like a more formal training structure for SMOs. Some expressed the need for nationally stream-lined induction training for SMOs. Many respondents cited a need for more teaching targeted at SMOs and delivered to a high standard by experts, including Consultants in Public Health Medicine, members of the FPHM, and other professionals who work within and outside of the health sector. Some respondents expressed a wish for the FPHM to oversee, with input from SMOs, a teaching programme for SMOs, with strong leadership from a Consultant in Public Health Medicine and the establishment of an oversight group. Other respondents suggested creating a learning log or using standardised performance indicators to add structure to SMO training.

Other

Some respondents suggested that facilitating SMOs to undergo training experiences and opportunities abroad would be beneficial. Respondents stated that a mentoring scheme for SMOs could help to advance their training, while others suggested that notes from Specialist Registrar (SpR) teaching sessions could be a useful resource for learning purposes. Further, some respondents reported that they would like to enrol with the RCPI for maintaining professional competence, but are ineligible to do so.

Subgroup analyses

Responses according to respondents' years of experience working in public health

22 respondents (48.9%) had worked in public health for ≤ 3 years, whereas 23 respondents (51.1%) had worked in public health for more than 3 years. Sentiments regarding training and training needs were similar in both groups (**Table 3**). On the whole, respondents with more than 3 years of experience were less positive about their training, with smaller proportions of respondents agreeing with the positive statements about their training than respondents with less experience. Most of these differences were not statistically significant, however. More experienced respondents were less positive about induction training, with a statistically significantly higher proportion of them disagreeing with the statement "I am satisfied with the training I have received at my induction" than less experienced respondents (39.1% vs. 9.1%, p=0.02).

Compared to more experienced respondents, a greater proportion of respondents with less than 3 years of experience expressed an interest in receiving training in areas of public health outside their current role (90.9% vs.78.2%, p=0.19) and in developing a special interest within public health, but these difference were not statistically significant (95.4% vs. 78.3%, p=0.09). Similarly, greater proportions of less experienced respondents stated that they would like more training in all four public health domains compared to more experienced respondents, but these differences were not statistically significant.

Table 3. Training needs and career intentions of respondents with ≤3 years vs. >3 years of experience working in public health

	SMOs with >3 years' experience (n=23) n (%)	SMOs with ≤3 years' experience (n=22) n (%)	p-value
I am satisfied with the training I have	11 (76)	11 (76)	
received at my induction			
Strongly agree	0 (0)	<5	
Somewhat agree	6 (26.1)	11 (50.0)	
Neither agree nor disagree	8 (34.8)	5 (22.7)	
Somewhat disagree	<5	<5	
Strongly disagree	5 (21.7)	0 (0)	0.02
I am satisfied with the ongoing training I	3 (21.7)	0 (0)	0.02
receive			
Strongly agree	0 (0)	<5	
Somewhat agree	9 (39.1)	10 (45.5)	
Neither agree nor disagree	9 (39.1) <5	10 (45.5) <5	
Somewhat disagree	6 (26.1)	5 (22.7)	
Strongly disagree	5 (21.7)	3 (22.7) <5	0.34
I am clear as to what my training and	3 (21.7)	<3	0.54
learning needs are			
-	<5	<5	
Strongly agree		8 (36.4)	
Somewhat agree	8 (34.8)		
Neither agree nor disagree	7 (30.4) <5	9 (40.9)	
Somewhat disagree		<5	0.02
Strongly disagree	5 (21.7)	<5	0.93
The training activities I participate in to			
fulfil my annual CPD requirements are			
relevant for my day-to-day job	C (2C 4)	E (22.7)	
Strongly agree	6 (26.1)	5 (22.7)	
Somewhat agree	10 (43.5)	8 (36.4)	
Neither agree nor disagree	< 5	< 5	
Somewhat disagree	<5	< 5	
Strongly disagree	0 (0)	<5	0.96
I can easily take my contractual leave to			
attend training and learning activities	- ()	_	
Strongly agree	5 (21.7)	<5	
Somewhat agree	8 (34.8)	12 (54.5)	
Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.36
My quarterly performance reviews are			
used to identify relevant gaps in my			
training and educational needs			
Strongly agree	<5	<5	
Somewhat agree	6 (26.1)	6 (27.3)	
Neither agree nor disagree	6 (26.1)	8 (36.4)	
Somewhat disagree	<5	<5	
Strongly disagree	6 (26.1)	<5	0.51
I have an annual discussion with my			
manager to discuss my role and this			
includes a discussion about my training			
and educational needs			
Strongly agree	<5	5 (22.7)	
Somewhat agree	13	9 (40.9)	

Neither agree nor disagree	<5	5 (22.7)	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.24
My manager helps me to address my			
training and educational needs			
Strongly agree	<5	5 (22.7)	
Somewhat agree	11 (47.8)	7 (31.8)	
Neither agree nor disagree	5 (21.7)	8 (36.4)	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.18
I would like to receive training in areas			
of public health outside my current role			
to expand my future job options			
Strongly agree	11 (47.8)	17 (77.3)	
Somewhat agree	7 (30.4)	<5	
Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	0 (0)	
Strongly disagree	<5	0 (0)	0.19
I would like to develop a special interest			
within public health, which will require			
additional training			
Strongly agree	10 (43.5)	16 (72.7)	
Somewhat agree	8 (34.8)	5 (22.7)	
Neither agree nor disagree	<5	0 (0)	
Somewhat disagree	<5	0 (0)	
Strongly disagree	<5	0 (0)	0.09
In which domains of public health do you			
feel you need more training?			
Health protection	9 (39.1)	15 (68.2)	
Health improvement	12 (52.2)	19 (86.4)	
Health service improvement	11 (47.8)	19 (86.4)	
Health intelligence	13 (56.5)	17 (77.3)	
Other	<5	<5	
I do not feel I need more training	<5	0 (0)	0.19

In terms of their thoughts on the training needs of SMOs and how they thought they should be met, respondents' answers varied little by whether or not they had more or less experience working in public health. Both subgroups articulated a need for more protected time to attend educational and training events, a desire to work in public health domains outside of health protection, to be provided with SMO-specific training events, and to receive more support from the FPHM and others to carry out further studies (e.g. MFPHMI exams, diplomas and master's in public health). More respondents with ≤3 years of experience working as an SMO expressed a desire for the role of SMOs to be better defined, whereas more SMOs with more than 3 years of experience articulated a need for public health leadership to improve the training and role of SMOs.

Responses according to respondents' completion of a master's in public health

20 respondents (44.4%) had completed a master's in public health, while 25 respondents (55.6%) had not completed one. Sentiments about training and training needs were broadly similar in both groups (**Table 4**). On the whole, respondents who had completed a master's in public health were less positive

about their training, with smaller proportions of respondents agreeing with the positive statements about their training than respondents without a master's in public health. Most of these differences were not statistically significant, however. Respondents with a master's in public health were less positive about their quarterly performance reviews, with a statistically significantly higher proportion of them disagreeing with the statement "My quarterly performance reviews are used to identify relevant gaps in my training and educational needs" than respondents without a master's in public health (60.0% vs. 12.0%, p=0.01). Additionally, a statistically significantly greater proportion of respondents without a master's in public health agreed with the statement "I have an annual discussion with my manager to discuss my role and this includes a discussion about my training and educational needs" (84.0% vs 45.0%, p=0.05). There were no statistically significant differences in the responses of those with and without a master's in public health relating to career intentions or domains of public health in which they would like more training.

Table 4. Training needs and career intentions of respondents with vs. without a master's in public health

	SMOs with MPH (n=20)	SMOs without MPH (n=25)	p-value
	n (%)	n (%)	
I am satisfied with the training I have			
received at my induction			
Strongly agree	<5	<5	
Somewhat agree	8 (40.0)	9 (36.0)	
Neither agree nor disagree	7 (35.0)	6 (24.0)	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.87
I am satisfied with the ongoing training I			
receive			
Strongly agree	0 (0)	<5	
Somewhat agree	9 (45.0)	10 (40.0)	
Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	7 (28.0)	
Strongly disagree	<5	<5	0.65
I am clear as to what my training and			
learning needs are			
Strongly agree	<5	<5	
Somewhat agree	7 (35.0)	9 (36.0)	
Neither agree nor disagree	8 (40.0)	8 (32.0)	
Somewhat disagree	<5	5 (20.0)	
Strongly disagree	<5	<5	0.51
The training activities I participate in to			
fulfil my annual CPD requirements are			
relevant for my day-to-day job			
Strongly agree	6 (30.0)	5 (20.0)	
Somewhat agree	6 (30.0)	12 (48.0)	
Neither agree nor disagree	5 (25.0)	<5	
Somewhat disagree	<5	<5	
Strongly disagree	0 (0)	<5	0.53
I can easily take my contractual leave to			
attend training and learning activities	_	_	
Strongly agree	<5	<5	
Somewhat agree	6 (30.0)	14 (56.0)	
Neither agree nor disagree	<5 -	<5	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.44
My quarterly performance reviews are			
used to identify relevant gaps in my			
training and educational needs			
Strongly agree	<5 .5	<5	
Somewhat agree	<5	9 (36.0)	
Neither agree nor disagree	<5	10 (40.0)	
Somewhat disagree	7 (35.0)	0 (0)	0.01
Strongly disagree	5 (25.0)	<5	0.01
I have an annual discussion with my			
manager to discuss my role and this			
includes a discussion about my training			
and educational needs		E (20.6)	
Strongly agree	<5	5 (20.0)	
Somewhat agree	6 (30.0)	16 (64.0)	

Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	0 (0)	
Strongly disagree	<5	<5	0.05
My manager helps me to address my			
training and educational needs			
Strongly agree	<5	5 (20.0)	
Somewhat agree	7 (35.0)	11 (44.0)	
Neither agree nor disagree	7 (35.0)	6 (24.0)	
Somewhat disagree	<5	<5	
Strongly disagree	<5	<5	0.48
I would like to receive training in areas			
of public health outside my current role			
to expand my future job options			
Strongly agree	12 (60.0)	16 (64.0)	
Somewhat agree	5 (25.0)	5 (20.0)	
Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	0 (0)	
Strongly disagree	0 (0)	1 (4.0)	0.47
I would like to develop a special interest			
within public health, which will require			
additional training			
Strongly agree	11 (55.0)	15 (60.0)	
Somewhat agree	6 (30.0)	7 (28.0)	
Neither agree nor disagree	<5	<5	
Somewhat disagree	<5	0 (0)	
Strongly disagree	0 (0)	<5	0.63
In which domains of public health do you			
feel you need more training?			
Health protection	8 (40.0)	16 (64.0)	
Health improvement	15 (75.0)	16 (64.0)	
Health service improvement	14 (70.0)	16 (64.0)	
Health intelligence	16 (80.0)	14 (56.0)	
Other	<5	<5	
I do not feel I need more training	<5	<5	0.55

Discussion

Key findings

The SMO workforce in Ireland consists of highly qualified medical professionals with deep experience and expertise in a diverse range of areas both within and outside of public health medicine. Collectively, they represent hundreds of years of experience working in public health and many more years working in a broad range of other medical specialties. Almost all of them have completed training in an area of medicine distinct from public health, whether completing BST or HST in a hospital-based specialty or qualifying as fully trained GPs, and have attained postgraduate professional or academic qualifications, with many having attained multiple postgraduate qualifications. Evidently, they are a highly qualified and skilled workforce whose chosen career in public health represents a considerable asset for the specialty.

The respondents of this survey have clearly conveyed that they want to expand SMOs' scope of practice, with 84% of respondents stating that they would like to receive training in areas of public

health outside their current role to expand their future job options and 87% stating that they would like to develop a special interest within public health. There appear to be considerable deficiencies in the training of SMOs, however. Less than half of survey respondents are satisfied with their ongoing training and at induction; a smaller number of respondents are clear as to what their training needs even are; and fewer respondents still discuss their training and educational needs with their line managers at quarterly reviews.

Barriers and enablers to change

There are numerous challenges that need to be surmounted in order for SMOs to receive improved training opportunities and enhance their role. These include a lack of protected training time, a lack of understanding among SMOs and others alike of what the SMO role involves, and priority given to work in health protection before, during and since the COVID-19 pandemic.

These challenges notwithstanding, there are many reasons why it is essential to advance the training and enhance the role of SMOs. Firstly, the public health specialty needs a workforce that is able to competently and confidently work across the wider domains of public health. Consultants in Public Health Medicine with a special interest in non-health protection domains have been appointed and require multidisciplinary teams to mobilise their knowledge and skills to improve health services, promote health and provide an intelligence-led public health medicine service. Secondly, within the domain of health protection, the specialty requires a workforce that is trained and ready to respond to health protection threats that extend beyond infectious diseases in order to provide a health protection function with an all hazards approach. Further, with an increase in the number of health protection nurses employed in regional departments of public health since the pandemic, there is capacity for SMOs to work in new areas of work. Finally, SMOs themselves are ready for change and appear to be highly motivated to take on new responsibilities and challenges, develop new skills, cultivate more expertise, and expand their scope of practice. It is imperative that they afforded the opportunity to do so, to ensure the SMO role is interesting, challenging and fulfilling, and remains an attractive career pathway to medical graduates in Ireland.

Recommendations

To advance the agenda of addressing the training needs of SMOs and enhancing their role, we propose a number of recommendations based on the survey findings.

- 1. The HSE National Director of Public Health should convene a working group to examine the role of the SMO in light of Sláintecare implementation and the emerging multidisciplinary public health teams.
- 2. The current job description for SMOs outlines a remit extending beyond the domain of health protection and many SMOs participate in work outside health protection. The diversity of this work, as evidenced by the survey results, should now be formally recorded and circulated to all SMOs and their line managers. This formal list could inform Recommendation 1, and help SMOs and their line managers to identify new areas of work when making work plans and as part of the formal performance achievement process.
- 3. Performance achievement provides an opportunity for regular conversations with one's line manager in relation to goal setting, achievements, training needs and career plans. Performance achievement should be an integral component of the SMO role, to ensure SMOs are reaching their training and professional goals.

- a. The line managers of all SMOs should regularly be made aware by HSE Public Health Human Resources (HR) of the need to hold at least one performance achievement meeting with their SMO over a 12-month cycle.
- b. The line managers of all SMOs should regularly be made aware by HSE Public Health HR of their need to complete the HSeLand module on performance achievement.
- c. The line managers of all SMOs should regularly be made aware by HSE Public Health HR of the need to report any initial performance achievement meetings to national HSE HR.
- d. Public Health HR should conduct an annual audit of SMOs' and line managers' adherence to HSE performance achievement requirements.
- 4. A directory of courses, conferences, and other training opportunities should be developed, made available to SMOs in association with the National Director of Public Health and a FPHM representative, and be regularly updated.
- 5. The engagement of SMOs in the scientific programmes of the FPHM is welcomed and should continue. Participation of a SMO nominee in the FPHM's Meetings Committee would ensure input into relevant content.
- 6. The FPHM already recognises master's in public health as part of HST and is reviewing other equivalent programmes on the island of Ireland. The FPHMI should set up a working group in association with universities (e.g. University College Dublin, Royal College of Surgeons in Ireland, Trinity College Dublin, Queen's University Belfast, etc.) to examine offerings at master's level and shorter micro credentials courses relevant to public health training and CPD.
- 7. The pathway to MFPHMI is open to medically qualified applicants and, as many respondents already hold a master's in public health or its equivalent, SMOs should in particular consider availing of the MFPHMI diplomate membership route, which entitles holders to certain privileges of the FPHM. The FPHM should work to promote the MFPHMI exams among SMOs and highlight the benefits of diplomate membership to SMOs. https://www.rcpi.ie/Learn-and-Develop/Examinations/RCPI-Examinations/Membership-of-the-Faculty-of-Public-Health-Medicine/Overview
- 8. The HST programme continues to be open to suitably qualified medical practitioners. https://www.rcpi.ie/Learn-and-Develop/Training-Programmes/Higher-Specialist-Training/Public-Health-Medicine-Higher-Specialist-Training/Overview

References

- 1. StataCorp. Stata: Release 17. Statistical Software. College Station, TX: StataCorp LLC; 2021.
- 2. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77-101.

Appendix A: Survey Instrument

- 1. How many years have you been working in public health?
 - a. <1 year
 - b. 1-3 years
 - c. 4-9 years
 - d. 10-19 years
 - e. 20-29 years
 - f. ≥30 years
- 2. Prior to working in public health, in what areas of medicine did you work in Ireland or elsewhere? Please select all that apply. [For each option chosen, excluding options f and g, respondents will have to indicate the time spent working in this area i.e. <1 year, 1-3 years, 4-9 years, 10-19 years, 20-29 years, ≥30 years]
 - a. Hospital-based medical specialty [option to select specialty/specialties]
 - b. General practice
 - c. Community medicine
 - d. Psychiatry
 - e. Non-clinical role in medicine (e.g. lecturer, researcher)
 - f. Other (please specify and indicate number of years spent in role(s))
 - g. I had no other role prior to working in public health
- 3. In what area did you work in Ireland or elsewhere <u>immediately prior</u> to starting work in public health?
 - a. Hospital-based medical specialty [option to select specialty/specialties]
 - b. General practice
 - c. Community medicine
 - d. Psychiatry
 - e. Non-clinical role in medicine (e.g. lecturer, researcher)
 - f. Other (please specify)
 - g. I had no other role prior to working in public health
- 4. In terms of formal postgraduate clinical training, please select all options from the list below that you have completed.
 - a. Basic Specialty Training (BST) (in general internal medicine, general paediatrics, psychiatry, obstetrics and gynaecology, or histopathology)
 - b. General Professional Training
 - c. Core Surgical Training (CST)
 - d. Higher Specialty Training (HST) in medical/surgical/other specialty
 - e. General practice training
 - f. International clinical fellowship in medical/surgical/other specialty
 - g. Other clinical training (please specify)
 - h. None of the above
- 5. In terms of postgraduate and professional qualifications, please select all options from the list below that you have completed.
 - a. Master's in Public Health

- b. Master's degree in area related to public health e.g. epidemiology, global health, etc. (please specify)
- c. Master's degree in other area not related to public health (please specify area)
- d. Postgraduate diploma (please specify area)
- e. Postgraduate certificate (please specify area)
- f. MD/PhD
- g. Membership of the Faculty of Public Health Medicine in Ireland (MFPHMI)
- h. Diplomate Membership of the Faculty of Public Health Medicine in Ireland
- i. Membership of the Royal College of Physicians of Ireland (MRCPI)
- j. Membership of the Irish College of General Practitioners (MICGP)
- k. Membership of other RCPI faculty or other college in Ireland (e.g. RCSI, College of Psychiatrists, Faculty of Occupational Medicine in RCPI, etc.)
- I. Membership of college outside of Ireland (e.g. MRCGP, MFPHUK)
- m. Fellowship of the Faculty of Public Health Medicine (FFPHM)
- n. Fellowship of other faculty or college in or outside Ireland (please specify)
- o. Other qualification (please specify)
- p. None of the above
- 6. Have you passed any Membership to Faculty of Public Health Medicine in Ireland (MFPHMI) exams?
 - a. Part 1
 - b. Part 1 and diplomate membership awarded
 - c. Parts 1 and 2
 - d. Parts 1, 2 and 3
 - e. I have not completed any MFPHMI exams to date

[Respondents who choose response categories a, b, c and e for question 6 will be directed to question 7. Respondents who choose response option d will bypass question 7 and be directed to question 8.]

- 7. You indicated that you have not completed any or all MFPHMI exams to date. What is your interest in attempting these exams in the future?
 - a. Very interested
 - b. Interested
 - c. Somewhat interested
 - d. Somewhat uninterested
 - e. Uninterested
 - f. Very uninterested
- 8. In your experience working as an SMO in public health, what type of roles and responsibilities have you had? Please select all that apply.
 - a. Responding to notifiable diseases and outbreak management
 - b. On-call ID work (either first or second on-call)
 - c. Immunisation-related work
 - d. Supporting vaccination programmes
 - e. National health protection surveillance
 - f. TB-related work
 - g. Environmental health-related work

- h. Work in the area of emergency management (including health threats)
- i. Child health-related work
- j. Social inclusion-related work
- k. Teaching
- I. Training other doctors
- m. Training other healthcare professionals
- n. Conducting research
- o. Work related to health promotion (including health and wellbeing)
- p. Chronic disease management-related work
- q. Work in the area of cancer screening
- r. Health intelligence
- s. Other (please specify)
- 9. In the past year, what are the three main roles and responsibilities you have had?
 - a. Responding to notifiable diseases and outbreak management
 - b. On-call ID work (either first or second on-call)
 - c. Immunisation-related work
 - d. Supporting vaccination programmes
 - e. National health protection surveillance
 - f. TB-related work
 - g. Environmental health-related work
 - h. Work in the area of emergency management (including health threats)
 - i. Child health-related work
 - i. Social inclusion-related work
 - k. Teaching
 - I. Training other doctors
 - m. Training other healthcare professionals
 - n. Conducting research
 - o. Work related to health promotion (including health and wellbeing)
 - p. Chronic disease management-related work
 - q. Work in the area of cancer screening
 - r. Health intelligence
 - s. Other (please specify)
- 10. In what way, if any, did the COVID-19 pandemic affect your role and responsibilities as an SMO?

(Free text response)

- 11. Do you work full-time or less than full-time as an SMO?
 - a. Full-time [Respondents who choose this option will be brought to question 12, bypassing question 11]
 - b. Less than full-time
 - c. Prefer not to say [Respondents who choose this option will be brought to question 12, bypassing question 11]
- 12. You indicated that you work less than full-time as an SMO; do you work in any other role outside of your SMO role during your working week?

- a. Yes (please specify)
- b. No
- 13. Which professional body are you registered with for maintaining professional competence?
 - a. Faculty of Public Health Medicine (FPHM)
 - b. Irish College of General Practitioners (ICGP)
 - c. Faculty of Paediatrics, RCPI
 - d. Faculty of Occupational Medicine, RCPI
 - e. Royal College of Physicians of Ireland (RCPI)
 - f. Royal College of General Practitioners (RCGP)
 - g. Other (please specify)
 - h. Prefer not to say
 - I am not currently registered with any professional body for maintaining professional competence
- 14. In relation to your training and training needs, please state your level agreement with the following: [Response categories: strongly agree/agree/neither agree nor disagree/disagree/strongly disagree]
 - a. I am satisfied with the training I have received at my induction
 - b. I am satisfied with the ongoing training I receive
 - c. I am clear as to what my training and learning needs are
 - d. The training activities I participate in to fulfil my annual CPD requirements are relevant for my day-to-day job
 - e. I can easily take my contractual leave to attend training and learning activities
 - f. My quarterly performance reviews are used to identify relevant gaps in my training and educational needs
 - g. I have an annual discussion with my manager to discuss my role and this includes a discussion about my training and educational needs
 - h. My manager helps me to address my training and educational needs
- 15. In relation to your career intentions, please state your level agreement with the following: [Response categories: strongly agree/agree/neither agree nor disagree/disagree/strongly disagree]
 - a. I would like to receive training in areas of public health outside my current role to expand my future job options
 - b. I would like to develop a special interest within public health, which will require additional training
- 16. In which domains of public health do you feel you need more training? Please select all that apply.
 - a. Health protection (please specify the areas within the domain for you which you need training)
 - b. Health improvement (please specify the areas within the domain for you which you need training)
 - c. Health service improvement (please specify the areas within the domain for you which you need training)

- d. Health intelligence (please specify the areas within the domain for you which you need training)
- e. Other (please specify)
- f. I do not feel I need more training
- 17. What Faculty of Public Health Medicine-related events do you attend? Please select all that apply.
 - a. Winter/Summer Scientific Meetings [Option to choose attending only or presenting research]
 - b. Faculty webinars
 - c. Faculty workshops
 - d. Faculty meetings
 - e. Other events held by the Faculty (please specify)
 - f. I do not attend any Faculty of Public Health Medicine events
- 18. What events, if any, would you like the Faculty of Public Health Medicine to host in order to provide training to you?

(Free text response)

- 19. What training events and activities do you find useful to you? Please select all that apply.
 - a. Winter/Summer Scientific Meetings of the Faculty of Public Health Medicine
 - b. Other Faculty of Public Health Medicine events
 - c. Other events held by the RCPI
 - d. Events held by the body with which I am registered for maintaining professional competence
 - e. Other national conferences e.g. ISCPHM, IDSI, EPA National Water Conference, etc. (please specify)
 - f. International conferences
 - g. Online courses
 - h. Attendance at in-house activities where I work
 - i. Other (please specify)
 - j. I do not find any training events or activities useful
- 20. In the past year, what was the best event you attended in terms of providing useful, relevant training?

(Free text response)

21. Do you have any other thoughts on the training and learning needs of SMOs and how they might be met?

(Free text response)

The following questions will collect some demographic information. This information will be useful in providing background context to the results of this survey and will be collected in confidence. No identifiable information will be reported. Your response to these questions is voluntary.

22. What age are you?

- a. <25 years
- b. 25-44 years
- c. 45-64 years
- d. ≥65 years
- e. Prefer not to say

23. What is your gender?

- a. Male
- b. Female
- c. Non-binary
- d. Other
- e. Prefer not to say

24. Are you employed permanently as an SMO?

- a. Yes (permanent contract or contract of indefinite duration)
- b. No (locum/agency work or fixed term contract)
- c. Prefer not to say

25. Where are you currently working?

- a. Regional department of public health/regional health area (RHA)
- b. Specialty agency or national office (e.g. NIO, HPSC, Social Inclusion, etc.)
- c. Other
- d. Not currently working (e.g. on leave, career break, etc.)
- e. Prefer not to say

