Supplementary Material

Supplementary information 1: Completed Checklist for Reporting Of Survey Studies (CROSS)

Section/topic	Item	Item description	Reported on page #
Title and abstract			
Title and abstract	1a	State the word "survey" along with a commonly used term in title or abstract to introduce the study's design.	2
	1b	Provide an informative summary in the abstract, covering background, objectives, methods, findings/results, interpretation/discussion, and conclusions.	2
Introduction			
Background	2	Provide a background about the rationale of study, what has been previously done, and why this survey is needed.	2-4
Purpose/aim	3	Identify specific purposes, aims, goals, or objectives of the study.	4
Methods			
Study design	4	Specify the study design in the methods section with a commonly used term (e.g., cross-sectional or longitudinal).	4
Data collection methods	5a	Describe the questionnaire (e.g., number of sections, number of questions, number and names of instruments used).	4
	5b	Describe all questionnaire instruments that were used in the survey to measure particular concepts. Report target population, reported validity and reliability information, scoring/classification procedure, and reference links (if any).	4
	5c	Provide information on pretesting of the questionnaire, if performed (in the article or in an online supplement). Report the method of pretesting, number of times questionnaire was pre-tested, number and demographics of participants used for pretesting, and the level of similarity of demographics between pre-testing participants and sample population.	4
	5d	Questionnaire if possible, should be fully provided (in the article, or as appendices or as an online supplement).	Supplementary
Sample characteristics	6a	Describe the study population (i.e., background, locations, eligibility criteria for	4

participant inclusion in survey, exclusion criteria).

	6b	Describe the sampling techniques used (e.g., single stage or multistage sampling, simple random sampling, stratified sampling, cluster sampling, convenience sampling). Specify the locations of sample participants whenever clustered sampling was applied.	4
	6c	Provide information on sample size, along with details of sample size calculation.	
	6d	Describe how representative the sample is of the study population (or target population if possible), particularly for population-based surveys.	4
	7a	Provide information on modes of questionnaire administration, including the type and number of contacts, the location where the survey was conducted (e.g., outpatient room or by use of online tools, such as SurveyMonkey).	4-6
Survey administration	7b	Provide information of survey's time frame, such as periods of recruitment, exposure, and follow-up days.	4-6
	7c	Provide information on the entry process: –>For non-web-based surveys, provide approaches to minimize human error in data entry. –>For web-based surveys, provide approaches to prevent "multiple participation" of participants.	
Study preparation	8	Describe any preparation process before conducting the survey (e.g., interviewers' 4training process, advertising the survey).	4
Ethical considerations	9a	Provide information on ethical approval for the survey if obtained, including informed consent, institutional review board [IRB] approval, Helsinki declaration, and good clinical practice [GCP] declaration (as appropriate).	6
	9b	Provide information about survey anonymity and confidentiality and describe what mechanisms were used to protect unauthorized access.	6
	10a	Describe statistical methods and analytical approach. Report the statistical software that was used for data analysis.	4
Statistical analysis	10b	Report any modification of variables used in the analysis, along with reference (if available).	NA
	10c	Report details about how missing data was handled. Include rate of missing items, missing data mechanism (i.e., missing completely at random [MCAR], missing at random [MAR] or missing not at random [MNAR]) and methods used to deal with missing data (e.g., multiple imputation).	5
	10d	State how non-response error was addressed.	

	10e	For longitudinal surveys, state how loss to follow-up was addressed.	NA
	10f	Indicate whether any methods such as weighting of items or propensity scores have been used to adjust for non-representativeness of the sample.	NA
	10g	Describe any sensitivity analysis conducted.	NA

Results

Respondent characteristics	11a	Report numbers of individuals at each stage of the study. Consider using a flow diagram, if possible.	7,15
	11b	Provide reasons for non-participation at each stage, if possible.	NA
	11c	Report response rate, present the definition of response rate or the formula used to calculate response rate.	NA
	11d	Provide information to define how unique visitors are determined. Report number of unique visitors along with relevant proportions (e.g., view proportion, participation proportion, completion proportion).	
Descriptive results	12	Provide characteristics of study participants, as well as information on potential confounders and assessed outcomes.	7,15
Main findings	13a	Give unadjusted estimates and, if applicable, confounder-adjusted estimates along with 95% confidence intervals and p-values.	NA
	13b	For multivariable analysis, provide information on the model building process, model fit statistics, and model assumptions (as appropriate).	NA
	13c	Provide details about any sensitivity analysis performed. If there are considerable amount of missing data, report sensitivity analyses comparing the results of complete cases with that of the imputed dataset (if possible).	NA

Discussion

Limitations	14	Discuss the limitations of the study, considering sources of potential biases and imprecisions, such as non-representativeness of sample, study design, important uncontrolled confounders.	25
Interpretations	15	Give a cautious overall interpretation of results, based on potential biases and imprecisions and suggest areas for future research.	25
Generalizability	16	Discuss the external validity of the results.	24

Other sections

Role of funding source	17	State whether any funding organization has had any roles in the survey's design, implementation, and analysis.	26
Conflict of interest	18	Declare any potential conflict of interest.	26
Acknowledgements	19	Provide names of organizations/persons that are acknowledged along with their contribution to the research.	26

Agenda – PPH Workshop 02 September 2021

Introduction – put title and interest in chat (10 mins) – 11:00- 11:15

Presentation from the PPH team – (30 mins) (11:15-11:45)
- Literature and call for evidence
- Survey of Pharmacy professionals
- Survey of Public Health Professionals
- Summary of pharmacists working in public health institutions and NE public health pharmacy network
- Key Recommendations

Presentation on behalf of Health Education Enlgand on the Advanced Clinical Practice (in Public Health) programme (10 mins) (11:45-11:55)

Presentation from Royal Pharmaceutical Society (RPS) on Advanced Specialist and Consultant credentialing for Public Health (10 mins) (11:55-12:05)

Presentation from a Director of Public Health: journey from Pharmacy Technician to DPH and why. (10 mins – including Q & A) (12:05-12:15)

Presentation from North East Public Health Pharmacists Network who are employed 1 or 2 days per week by local authorities (10 mins) (12:15-12:25)

5 min break
Focus Group Discussions (30 mins) – 12:30-1:00pm
- Reflections and one recommendation from the group – 1min max
- Comments on recommendations – discuss each recommendation to determine if to adapt/edit, strengthen
- What needs to change within the profession to enable pharmacists to remain as pharmacists as well as public health specialists
- Impact of COVID on public health and how pharmacists have engaged (in addition to vaccination)

Box 2. Examples of quotes on barriers provided by pharmacy technician respondents.

> *"Pharmacy technicians not utilised enough"*
>
> *"Pharmacy technicians are not on the MHRA list of HCPs who can supply /administer medicines under a PGD. This is a systemic barrier to multiple opportunities to support public health, e.g. administering flu vaccines, continued supply of regular medicines following monitoring, e.g. statins, anti-hypertensives. There are a host of other examples, but this is fundamentally a piece of legislation that requires amendment to enable circa 20k professionals to support PH more autonomously within structured safeguards"*
>
> *"Pharmacist IPs could optimise medicines in multiple settings if they were the first option when commissioned services are designed"*
>
> *"The pharmacy technician role is underused and often not appreciated. Technicians are clinically able to provide more services and advice than 20yrs ago."*
>
> *"pharmacy technicians constrained by outdated laws that do not allow us to practice to our full potential as registered professionals.*
>
> *"Normally advertised at degree level, which excludes pharmacy technicians"*

Box3. Examples of opportunities highlighted by pharmacy technicians.

> *"Pharmacy technicians are highly trained, knowledgeable and experienced in providing direct patient care, liaising professionally with other healthcare professionals and are experts in medicines supply and storage"*
>
> *"Pharmacy technicians should be utilised more to allow them to provide services through PGD such as COVID-19 vaccinations"*
>
> *"I believe the clinical knowledge I have as an experienced pharmacy technician would enhance commissioning of services"*
>
> *"Pharmacists/ technicians are easily accessible on the high street without an appointment to provide advice/ support/ signposting. Lots of opportunity for brief advice in both community and also primary care pharmacy when undertaking medication optimisation/ medication reviews."*

Supplementary box 2:

Knowledge mobilisation of the project and next steps

Public Health Community: Faculty of Public Health and People in Public Health and National Pharmacy Groups

Key findings of the evidence review have been presented to the four committees of the Faculty of Public Health - Health Improvement, Academic research, health services and health protection as well as the national UK People in Public Health Group, national pharmacy groups led by the Chief Pharmaceutical Officers of England and Northern Ireland.

Conferences:

- *Clinical Pharmacy Congress (May 2022) – oral presentation - Evidence Review of Pharmaceutical Public Health in the United Kingdom*
- *RPS Conference (November 2022) – poster presentation - Barriers and facilitators to pharmacy professionals' specialist public health roles: a mixed methods UK-wide Pharmaceutical Public Health evidence review*
- *FIP Research conference (June 2023): Poster presentation - Rapid evidence review of pharmaceutical public health in high and upper middle-income countries: case studies of mesoand macro level activities*
- *UK Public Health Science conference (November 2023): Poster presentation - Public health qualifications, motivation, and experience of pharmacy professionals: exploratory cross-sectional surveys of pharmacy and public health professionals*
- *UKHSA Conference (November 2023): e-Poster presentation - Specialist contribution of pharmacy professionals to public health in high and upper middle-income countries*

UK-Wide Survey for Pharmacy professionals with an interest in public/ population health ⚙

Dear Colleague,

You are invited to participate in a short survey of pharmacy professionals who have an interest or experience in public health or population health. Please click submit for your responses to be recorded.

This is part of a wider programme of work led by Dr Diane Ashiru-Oredope, commissioned by the four UK Chief Pharmaceutical Officers.

The survey should take approximately 9 minutes to complete. You do not have to provide any identifiable information. Your views are important to us and we take privacy very seriously, so your details will be kept completely confidential.

The data will be used only for the purposes of this survey, reporting on the findings in the pharmaceutical public health review and in further developing recommendations.

The survey has been designed to:

* Explore the number of pharmacy professionals who have experience in leading public/population health projects or have completed/ are undertaking additional public/ population health qualifications,
* Explore the context in which pharmacists are currently involved in public/ population health related roles (excluding nationally commissioned public health services)
* Understand the drivers and barriers associated with pharmacists undertaking public/ population health roles

There is also an opportunity on the final page to connect to a network of pharmacy professionals focused on public/population health.

Thank you for your time and we hope this work will make a difference to our professional practice.

Please do feel free to share this survey link with other colleagues - https://forms.office.com/r/hXqgyNLNZB

If you have any questions, do not hesitate to contact Diane via d.ashiru-oredope@nhs.net

Survey Project Team:
Diane Ashiru-Oredope
Emma McClay
Roeann Osman
Christina Narh

* Required

1. By proceeding to the next page:

   I consent to the information that I provide for the purposes of the survey to be used to inform the Pharmaceutical Public Health Evidence Review and that I do not have to provide any identifiable data/information.

   I have read, understand and agree to the information provided above. *

   ○　Yes

   ○　No

2. How do you self-identify? *

○ Prefer not to say

○ Female (including trans women)

○ Male (including trans men)

○ Non-binary

○ Prefer to self describe

3. Which of the following best describes your ethnic group or background? *

○ Prefer not to say

○ White - British

○ White - Irish

○ White - Any other White background

○ Mixed - White and Black Caribbean

○ Mixed - White and Black African

○ Mixed - White and Asian

○ Mixed - Any other mixed background

○ Asian or Asian British - Indian

○ Asian or Asian British - Pakistani

○ Asian or Asian British - Any other Asian background

○ Black or Black British - Caribbean

○ Black or Black British - African

○ Black or Black British - Any other Black background

○ Other Ethnic Groups - Chinese

○ Other Ethnic Groups - Any other ethnic group

○ Not stated

4. Which of the following describes your job role? *

○ Pharmacist

○ Pharmacy technician

○ Pre-reg pharmacist

○ Other

5. Which country do you work in? *

○ England

○ Scotland

○ Wales

○ Northern Ireland

○ Other

6. Which region do you work in? *

○ East of England

○ London

○ Midlands

○ North East and Yorkshire

○ North West

○ South East

○ South West

○ National

7. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

- [ ] Acute national health service (NHS) trust

- [ ] Health boards or trusts

- [ ] Ambulance services

- [ ] Arm's-Length Body/ Organisation such as National Institute for Health and Care Excellence (NICE), Care Quality Commission (CQC), NHS Digital (NOT Public Health England as this is captured seperately)

- [ ] Care home

- [ ] Clinical Commissioning Group (CCG)

- [ ] CCG, with some work into general practices and care homes

- [ ] Commissioning body, national/ regional E.g. NHS England or Health Boards

- [ ] Community Health Services

- [ ] Community pharmacy

- [ ] General practice

- [ ] Health and Justice

- [ ] Sustainability and Transformation Plans (STP) / Integrated Care Providers (ICP) / Integrated Care Systems (ICS)

- [ ] PharmCAS/ 111

- [ ] Private healthcare trust/ service

- [ ] Primary Care Network

- [ ] Mental Health trust

- [ ] Military

- [ ] Local Authority council

- [ ] Public Health England – national

- [ ] Public Health England – regional/ local

- [ ] Professional body – national

- [ ] Professional body– regional/ local

- [ ] University

- [ ] Other

8. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

- [ ] NHS Ayrshire and Arran

- [ ] NHS Borders

- [ ] NHS Dumfries and Galloway

- [ ] NHS Fife

- [ ] NHS Forth Valley

- [ ] NHS Grampian

- [ ] NHS Greater Glasgow and Clyde

- [ ] NHS Highland

- [ ] NHS Orkney and Shetland

- [ ] General Practice

- [ ] Health Improvement Scotland

- [ ] NHS Education for Scotland

- [ ] NHS National Waiting Times Centre

- [ ] NHS24

- [ ] The State Hospitals Board for Scotland

- [ ] NHS National Services Scotland

- [ ] Military

- [ ] Public Health Scotland

- [ ] Scottish Ambulance Service

- [ ] Community pharmacy

- [ ] Care Home

- [ ] Professional body – national

- [ ] Professional body– regional/ local

- [ ] University

- [ ] Other

9. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

- [ ] Aneurin Bevan University Health Board

- [ ] Betsi Cadwaladr University Health Board

- [ ] Cardiff and Vale University Health Board

- [ ] Cwm Taf Morgannwg University Health Board

- [ ] Hywel Dda University Health Board

- [ ] Powys Teaching Health Board

- [ ] Swansea Bay University Health Board

- [ ] Welsh Ambulances Services NHS Trust

- [ ] Digital Health and Care Wales

- [ ] General Practice

- [ ] Public Health Wales

- [ ] Health Education and Improvement Wales (HEIW)

- [ ] All Wales Therapeutics and Toxicology Centre (AWTTC)

- [ ] NHS Wales Shared Services Partnership

- [ ] Military

- [ ] Community Pharmacy

- [ ] Care Home

- [ ] Professional body – national

- [ ] Professional body– regional/ local

- [ ] University

- [ ] Other

10. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

☐ Belfast Health and Social Care (HSC) Trust

☐ South Eastern HSC Trust

☐ Western HSC Trust

☐ Southern HSC Trust

☐ Northern HSC Trust

☐ Powys Teaching Health Board

☐ Health and Social Care Board

☐ Welsh Ambulances Services NHS Trust

☐ Public Health Agency

☐ Regulation and Quality Improvement Authority

☐ GP Federation Support Unit

☐ General Practice

☐ Northern Ireland Centre for Pharmacy Learning and Development

☐ Medicines Optimisation Innovation Centre

☐ Pharmacy Forum NI

☐ Military

☐ Care Home

☐ Community Pharmacy

☐ Professional body – national

☐ Professional body– regional/ local

☐ University

☐ Other

Public/Population Health Qualifications

11. How many years have you been qualified? *

[   ]

12. Do you have any public health training or experience, or a non-formal/ non-university qualification?
For example, a fellowship, a secondment, on-the-job-training

◯ Yes

◯ No, but I am interested

◯ No, not currently a priority

◯ Sort of

◯ I am not sure

13. Please provide further detail on your training or experience

[   ]

14. Do you have any formal public/ population health qualifications? *
For example a masters, or certificate.

◯ Yes

◯ No

◯ Other

15. Which public health body are you a member of (full or associate)?

☐ Royal Society for Public Health (RSPH)

☐ UK Public Health Register (UKPHR)

☐ Faculty of Public Health (FPH)

☐ Scientist professional registration

☐ None

☐ Other

16. Which of the following do have the qualifications in or working towards?

	Undergrad	PG Cert/ Dip	Master	MPhil/ PhD	Module	As part of MPH
Public/ population health	○	○	○	○	○	○
Health improvement/ promotion	○	○	○	○	○	○
Health protection	○	○	○	○	○	○
Epidemiology	○	○	○	○	○	○
Infectious and tropical diseases	○	○	○	○	○	○
Health policy	○	○	○	○	○	○
Global health/ global health policy	○	○	○	○	○	○
Health services	○	○	○	○	○	○
Health systems	○	○	○	○	○	○
Other	○	○	○	○	○	○

17. If other, please specify

[   ]

18. How long have you been using your public health qualification or skills within role(s)? *

○ I have not used my qualification

○ <1 year

○ 1 - 2 years

○ 3 - 4 years

○ 5 + years

19. Which of the following best describes your motivation for undertaking an additional public/ population health qualification(s)? *

Please select no more than three options

☐ Ambition to work in public/ population health as a pharmacy professional

☐ Ambition to work in public/ population health as an alternative career to pharmacy (i.e Public Health Registrar training or inclusion on the UK Public Health Register)

☐ The qualification was required for my role

☐ It was recommended to me

☐ General interest

☐ I don't know

☐ Other

20. How much did your pharmacy education (pre-qualification) influence your interest in pursuing a career in public health?

1 = Not at all to 5 = strongly influenced

1	2	3	4	5

Public/Population Work place experience

21. Which of the following public/ population health areas (non-COVID-19 related), best describes the work you are / were involved in or leading on?

Please provide responses for the relevant projects

	Pre COVID-19 pandemic	Since the COVID-19 pandemic	Both pre and since the COVID-19 pandemic
Antimicrobial resistance	○	○	○
Global health	○	○	○
Pharmaceutical Needs Assessment	○	○	○
Health equity	○	○	○
Data analysis/statistics	○	○	○
Commissioning of public health services	○	○	○
Health inequalities/ serving underserved communities	○	○	○
Health improvement	○	○	○
Health protection	○	○	○
Secondary prevention	○	○	○
Disease screening	○	○	○
Long term conditions	○	○	○
Diet and Obesity	○	○	○
Smoking	○	○	○
Alcohol or Substance misuse	○	○	○
Physical activity	○	○	○
Mental Health	○	○	○
Vaccination	○	○	○
Dental hygiene	○	○	○
Wider Determinants of Health	○	○	○

22. Please list any other areas not included above

[   ]

23. What COVID-19 related public/ population health work are you currently involved in?

24. Have the findings from any of your project(s) (public health or otherwise) been disseminated/ shared wider?

☐ No

☐ Yes – conference abstract/presentation

☐ Yes – peer reviewed publication

☐ Yes – reports available online

☐ Yes – other publication (e.g. Pharmaceutical Journal or blogs etc.)

☐ Yes – guidance, protocols or PGDs

25. Please highlight which of your project(s) that have been disseminated/ shared wider by topic area

	Public health projects	Non-public health projects	Both	None
Conference abstract	○	○	○	○
Conference presentation	○	○	○	○
Publication	○	○	○	○
None	○	○	○	○

26. Please provide the details of your project and how to access the reports/abstracts/presentations

Please provide title and URL to access to project on e.g. website, conference, abstracts, reports etc. Please feel free to use the Call for Evidence webpage to provide further details. Right click and open in another tab - https://forms.gle/cKy2h8zvULmG4u9S7

27. What data sources do you use, if any, to support your work related to public/ population health?

- [ ] PHE Fingertips

- [ ] Office of National Statistics (ONS)

- [ ] Institute for Health Metrics and Evaluation (IHME)

- [ ] Open prescribing

- [ ] National Cancer Registry

- [ ] Hospital Episode Statistics (HES)

- [ ] Local Health

- [ ] Clinical Practice Research Datalink (CPRD)

- [ ] Health inequality dashboard

- [ ] Strategic Health Asset Planning and Evaluation (SHAPE)

- [ ] Other

28. Do you believe there are opportunities for pharmacy professionals to get involved in public/ population health?

- ( ) Yes

- ( ) No

- ( ) Maybe

29. Please explain:

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30. Do you believe there are barriers for pharmacy professionals to get involved in public/ population health?

- ( ) Yes

- ( ) No

- ( ) Maybe

31. Please explain:

[   ]

32. Please list below any work, reports or documents that you are aware of that highlight projects led by pharmacy professionals working or influencing population/public health in UK. Alternatively, please provide details of a colleague we can contact who can provide further details

[   ]

33. How did you find out about this survey?

○ Colleague

○ Manager

○ Friend

○ Professional body email cascade or newsletter

○ Social media - Twitter

○ Social media - Facebook

○ Social media - LinkedIn

○ Telegram/WhatsApp or other Instant messaging service

○ University

○ Other

34. We would appreciate if you share this survey link with other colleagues. Kindly let us know approximately how many colleagues. If none, please state 0.

[   ]

35. Thank you very much once again, please use this section to provide any other comments or feedback

[   ]

36. Would you like to join a network of pharmacists with interest/experience in public/population health? If yes please click on this link to provide details (this is to ensure that your answers are not linked to identifiable data) https://forms.office.com/r/nngn7zCucw. This will open on another tab. Please return to click submit

○ Yes

○ No

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Microsoft Forms

Survey for Public Health Professionals about Pharmacy professionals (Final) ⸜

Dear Public Health Colleague,

There are potentially functions of public health that can benefit from pharmacists' unique expertise including access to care, prevention services as well as pharmacotherapy, pharmacoepidemiology and economics. To better understand this area of work, you are invited to participate in a short survey seeking the views of public health professionals on the contributions of pharmacy professionals* to public/population health (in addition to traditionally/nationally commissioned community pharmacy services) in the four UK nations.

This survey provides an opportunity amongst other things, for public health professionals to share the leadership/operational challenges they face that pharmacy professionals can support with. Your contribution to this survey is really important as it will help in shaping the public health offer across the UK going forward.

Please click submit for your responses to be recorded. We would appreciate responses **before 27 October 2021**

This is part of a wider programme of work, commissioned by the four UK Chief Pharmaceutical Officers.

The survey should take approximately 12 minutes to complete. You do not have to provide identifiable information. Your views are important to us and we take privacy very seriously, so your details will be kept completely confidential.

The findings of this survey along with a call for evidence, literature review and survey for pharmacy professionals with interest in public health will be summarised in publications and included in a report and recommendations to the four UK Chief Pharmaceutical Officers.

The project supports the aims of the NHS Long term plan including the development of new structures of integrated care systems (ICSs) and primary care networks (PCNs) (England); Health and social care delivery plan (Scotland); 'Making Life Better - a whole system framework for public health (2013-23) (Northern Ireland) and A Healthier Wales (Wales) to improve the health and wellbeing of the population of UK by bringing together different professionals including pharmacy professionals to coordinate care better.

The data will be used only for the purposes of this survey, reporting on the findings in the pharmaceutical public health review and in further developing recommendations.

Please do feel free to share this survey link with other public health colleagues - **https://forms.office.com/r/JDVs6Xrcw5**

If you have any questions, do not hesitate to contact Dr Diane Ashiru-Oredope via d.ashiru-oredope@nhs.net or diane.ashiru-oredope@phe.gov.uk

* By Pharmacy Professional, we mean pharmacists or pharmacy technicians

* Required

1. By proceeding to the next page:

   I consent to the information that I provide for the purposes of the survey to be used to inform the Pharmaceutical Public Health Evidence Review and that I do not have to provide any identifiable data/information.

   I have read, understand and agree to the information provided above. *

   ○ Yes

   ○ No

2. Which of the following describes your job role? *

   ○ Director of Public Health (DPH)

   ○ Public Health Consultant

   ○ Consultant in Communicable Disease Control

   ○ Public Health Specialist

   ○ Public Health Academic

   ○ Public Health Registrar ST1-3

   ○ Public Health Registrar ST 4-5

   ○ Strategist

   ○ Practitioner

   ○ Other

3. Current main area of speciality *

   ○ General

   ○ Health Improvement

   ○ Health Protection

   ○ Healthcare Public Health

   ○ Commissioning

   ○ Screening

   ○ Other

4. How do you self-identify? *

○ Prefer not to say

○ Female (including trans women)

○ Male (including trans men)

○ Non-binary

○ Prefer to self describe

5. Which country do you work in? *

○ England

○ Scotland

○ Wales

○ Northern Ireland

○ Other

6. Which region do you work in? *

○ East of England

○ London

○ Midlands

○ North East and Yorkshire

○ North West

○ South East

○ South West

○ National

7. Which of the following describes your main area(s) of work? *

Please select up to a maximum of three roles.

- ☐ Acute national health service (NHS) trust

- ☐ Health boards or trusts

- ☐ Ambulance services

- ☐ Arm's-Length Body/ Organisation such as National Institute for Health and Care Excellence (NICE), Care Quality Commission (CQC), NHS Digital (NOT Public Health England as this is captured seperately)

- ☐ Care home

- ☐ Clinical Commissioning Group (CCG)

- ☐ CCG, with some work into general practices and care homes

- ☐ Commissioning body, national/ regional E.g. NHS England or Health Boards

- ☐ Community Health Services

- ☐ Community pharmacy

- ☐ General practice

- ☐ Health and Justice

- ☐ Sustainability and Transformation Plans (STP) / Integrated Care Providers (ICP) / Integrated Care Systems (ICS)

- ☐ PharmCAS/ 111

- ☐ Private healthcare trust/ service

- ☐ Primary Care Network

- ☐ Mental Health trust

- ☐ Military

- ☐ Local Authority council

- ☐ Public Health England – national

- ☐ Public Health England – regional/ local

- ☐ Professional body – national

- ☐ Professional body– regional/ local

- ☐ University

- ☐ Other

8. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

- [ ] NHS Ayrshire and Arran

- [ ] NHS Borders

- [ ] NHS Dumfries and Galloway

- [ ] NHS Fife

- [ ] NHS Forth Valley

- [ ] NHS Grampian

- [ ] NHS Greater Glasgow and Clyde

- [ ] NHS Highland

- [ ] NHS Orkney and Shetland

- [ ] General Practice

- [ ] Health Improvement Scotland

- [ ] NHS Education for Scotland

- [ ] NHS National Waiting Times Centre

- [ ] NHS24

- [ ] The State Hospitals Board for Scotland

- [ ] NHS National Services Scotland

- [ ] Military

- [ ] Public Health Scotland

- [ ] Scottish Ambulance Service

- [ ] Community pharmacy

- [ ] Care Home

- [ ] Professional body – national

- [ ] Professional body– regional/ local

- [ ] University

- [ ] Other

9. Which of the following describes your main area(s) of work? *
Please select up to a maximum of three roles.

☐ Aneurin Bevan University Health Board

☐ Betsi Cadwaladr University Health Board

☐ Cardiff and Vale University Health Board

☐ Cwm Taf Morgannwg University Health Board

☐ Hywel Dda University Health Board

☐ Powys Teaching Health Board

☐ Swansea Bay University Health Board

☐ Welsh Ambulances Services NHS Trust

☐ Digital Health and Care Wales

☐ General Practice

☐ Public Health Wales

☐ Health Education and Improvement Wales (HEIW)

☐ All Wales Therapeutics and Toxicology Centre (AWTTC)

☐ NHS Wales Shared Services Partnership

☐ Military

☐ Community Pharmacy

☐ Care Home

☐ Professional body – national

☐ Professional body– regional/ local

☐ University

☐ Other

10. Which of the following describes your main area(s) of work? *

Please select up to a maximum of three roles.

- [ ] Belfast Health and Social Care (HSC) Trust

- [ ] South Eastern HSC Trust

- [ ] Western HSC Trust

- [ ] Southern HSC Trust

- [ ] Northern HSC Trust

- [ ] Powys Teaching Health Board

- [ ] Health and Social Care Board

- [ ] Welsh Ambulances Services NHS Trust

- [ ] Public Health Agency

- [ ] Regulation and Quality Improvement Authority

- [ ] GP Federation Support Unit

- [ ] General Practice

- [ ] Northern Ireland Centre for Pharmacy Learning and Development

- [ ] Medicines Optimisation Innovation Centre

- [ ] Pharmacy Forum NI

- [ ] Military

- [ ] Care Home

- [ ] Community Pharmacy

- [ ] Professional body – national

- [ ] Professional body– regional/ local

- [ ] University

- [ ] Other

Pharmacy Professionals and Public/Population Health

11. In current or previous roles, have you ever encountered a pharmacy professional working as a member of any public health team/organisation (Including yourself if applicable)? They may not be working in a pharmacy role *

	Yes	No	Not sure	Not applicable
Your current public health team or public health organisation	○	○	○	○
Your previous public health team or public health organisation	○	○	○	○

12. If yes, please describe their role within your **current** public health team/public health organisation

[   ]

13. If yes, please describe their role within your **previous** public health team/public health organisation

[   ]

14. Apart from your current or previous roles,

	Yes	No	Don't remember/Dont know	Not applicable
Are you aware of any pharmacy professional who is **also** a public health professional or member of any public health team/public health organisation	○	○	○	○
Were they employed in their pharmacist/pharmacy technician role	○	○	○	○

15. Thinking about **12 months pre COVID-19** and within your public health role, did the correct and efficient use of medicines come up as an area of challenge or consideration?

○ Yes

○ No

○ Unsure

○ Not applicable

16. If applicable, please describe and share examples of **how correct and efficient use of medicines currently or previously come up as an area of challenge or consideration?**

Examples could be using prescription/medicines use data to inform planning and delivery of relevant public health interventions, development of PGDs, providing strategic advice to commission pharmacies to deliver interventions, use of knowledge, intelligence and evidence of treatment effectiveness to inform interventions.

Public/Population Work place experience

17. In your opinion, would there be any benefits of having pharmacists/pharmacy technicians specialising in public health?

  ◯ Little or no benefit

  ◯ Somewhat benecicial

  ◯ Beneficial

  ◯ Very beneificial

  ◯ Unsure

  ◯ Prefer not to answer

  ◯ Other

18. Please explain your response to previous question on benefits of having pharmacy professionals with advanced public health skills

  [   ]

19. If a pharmacist or pharmacy technician were to be funded to join your public health team, please describe how this post could best be utilised?

  In addition to your suggestions, please specify (if not already done) if there are any leadership/technical/clinical challenges you face that pharmacy professionals with public health expertise or embedded in public health teams could support with in first place before liaising with pharmacists in other organisations

  [   ]

20. In what areas of population/public health do you feel that there would be benefit achieved by having individuals with pharmacy background working directly as part of your public health team?(tick top 5)

☐ Antimicrobial Resistance/Stewardship

☐ Cancer

☐ Cardiovascular disease

☐ Child and maternal health

☐ Comparison, practice and performance

☐ Dementia

☐ Communicable Disease control (excluding pandemics)

☐ Climate change

☐ Drug Misuse

☐ Environmental health

☐ Equality analysis

☐ Emergency Planning

☐ Health Needs Assessments – Health Profiles

☐ Health economics and return on investment

☐ Health impact assessment

☐ Health inequalities

☐ Health protection

☐ Healthy Living Pharmacy

☐ Healthy ageing

☐ Injuries and violence

☐ Learning disabilities

☐ Public Mental health

☐ Neurological conditions

☐ Obesity, diet and physical activity

☐ Oral public health

☐ Palliative and end of life care

☐ Pandemics

☐ Screening

☐ Sexual health, reproductive health and HIV

21. Please list any other areas not included above

[   ]

22. Do you believe there are barriers for pharmacy professionals to get involved in public/ population health?

○ Yes

○ No

○ Other

23. Please explain your reply to question above

[   ]

24. What level of qualification or experience in public health would you expect a pharmacist wanting to focus on medicines/pharmacy related public health activities to have?

[   ]

25. Pharmaceutical Needs Assessment (England); Director of pubic health report or delivery planning (Scotland, Wales, Northern Ireland)

	Yes	No	Don't know	Not applicable
England: Has your public health team contributed to a pharmaceutical needs assessment in the last 5 years?	○	○	○	○
England: Did the public health team include a pharmacy professional?	○	○	○	○
Scotland, Wales, NI: Did a pharmacy professional contribute to the latest director of public health report or delivery strategy?	○	○	○	○

26. For England: How involved were the following stakeholders with the development of your last published Pharmaceutical Needs Assessment?

	No at all involved	Somewhat involved	Very involved	Critical to process	Not sure	Not Applicable
Medicines management Team/pharmacy team from the CCG	○	○	○	○	○	○
Local Pharmaceutical Committee (LPC)	○	○	○	○	○	○
NHS England Pharmacy Team	○	○	○	○	○	○

27. England: If you work in a local authority, are medicines/pharmacy services included as part of your memorandum of understanding with the CCG.

○ Yes

○ No

○ Unsure

○ Not applicable

○ Other

28. Please list below any work, reports or documents that you are aware of that highlight public or population health projects led by pharmacy professionals working or influencing population/public health in UK. Alternatively, please provide details of a colleague we can contact who can provide further details

[text box]

29. Would your service/organisation be able to provide a placement to a funded pharmacy professional to complete a secondment or fellowship in public health?

○ Yes

○ No

○ Maybe

○ Other

30. Which of these terms do believe would best represent pharmacy's contribution to public health

○ Pharmaceutical Public Health

○ Public Health Pharmacy

○ Population Health Pharmacy

○ Other

31. Please add any further comments in relation to your views on a pharmacy professionals' contribution to public health.

[   ]

32. How did you find out about this survey?

○ Colleague

○ Manager

○ Friend

○ Professional body email cascade or newsletter

○ Social media - Twitter

○ Social media - Facebook

○ Social media - LinkedIn

○ Telegram/WhatsApp or other Instant messaging service

○ University

○ Other

33. Thank you very much once again, please use this section to provide any other comments or feedback

[   ]

34. If you know of any pharmacists with experience in public/population health, we would be grateful if you can kindly share the link below with them to join a network. https://forms.office.com/r/nngn7zCucw.

○ Yes

○ No

35. If you would like to find out more about the project and the findings, please provide your name and email address *

[   ]

Microsoft Forms

Appendix V – Call for Evidence

Request for unpublished reports of public health coordinated by pharmacists working at a population/ strategic level in UK

NHS England has commissioned PHAST to carry out a PPH Evidence Review, working with Dr Diane Ashiru-Oredope.

The aim is to identify any documentation describing pharmacists working at a public/population health strategic level in UK. This will support the NHS Long term plan (or equivalent in the devolved domains,) to improve the health and wellbeing of the population of UK by bringing together different professionals including pharmacy to coordinate care better.

We wish to identify any published or unpublished reports or documents or case histories that describe how pharmacists in UK who have received public health training or experience are working at a strategic level and influencing population health in UK. Please only list documents that you can either send as an attachment or send a link to us.

You have been identified as a key stakeholder that could contribute to this review and we would therefore like to invite you to respond to the following short questions.

Please complete the questions listed below and email your responses back to me. Please state NO if you have no information for a question.

Please feel free to forward this email to other colleagues you believe may have information to share.

Your name

Your role:

Your email address:

Name of organisation:

UK country organisation located in:

1. Please list below any reports or documents you are aware of that describe public health trained pharmacists working at a strategic level influencing population health in UK.

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-

-

-

2. Please list below any reports or documents you are aware of that describe pharmacists involved in expanding public health service delivery beyond community pharmacy and working at a population health level in UK.

-

-

-

-

3. Please list below any reports or documents you are aware of that describe pharmacists working in the field of optimisation of medicines at a population health level in UK.

-

-

-

-

4. Please list below any reports or documents you are aware of that describe pharmacists working in the field of emergency preparedness or emergency response at a population health level in UK.

-

-

-

-

5.   Please list below any unpublished reports or documents you are aware of that describe pharmacists working in the field of health protection or health improvement at a population health level in UK.

-

-

-

-

6. Please list below any unpublished reports or documents you are aware of that describe pharmacists working in the field of public health skills training in UK.

-

-

-

-

7. Please list below any unpublished reports or documents you are aware of that describe pharmacists working in the field of health inequalities at a population health level in UK.

-

-

-

-

8. Have you funded staff to undertake PH training in UK?   YES / NO

If YES please describe number of staff and type of training.

Would you like to continue supporting this project through a further survey or an interview?   YES / NO

Many thanks for completing this request.

Recommendations by theme

1. **National Strategic Approach**

a. Define national standards and career pathway

b. Engage health and care system policy makers / commissioners / legislation

c. ICS to identify population health priorities from which pharmacy plans can address use of medicines for population health management

d. Construct an effective national professional development network

e. Continual sharing of good practice models (e.g. capture and measure using QI methodology / tools) and ongoing research

f. Advocate champions for pharmacy professionals in PPH both within and outside the pharmacy profession

- "Improve strategic engagement with health and care system policy makers / commissioners to influence PH policy and maximise the PPH offer through the whole pharmacy workforce"

- "Transform the role of community pharmacists through national policy"

- "Define national standards for population health knowledge to support consistency across all localities of GB and support capability for roll out of national services"

- "Each ICS to identify three local population health priorities (from which pharmacy plans can be developed)"

- "Develop a clear national strategy"

- "Define scope and principles of PPH"

- "Present outputs of this research project to relevant pharmacy and public health bodies in order to educate decision makers and inform future policy around PPH"

- "Contextualise pharmacist practice within health policy so as to understand how the work undertaken improves the health of communities and addresses health inequalities. The commitment and endeavour that this entails needs to be recognised within a career structure that rewards the practitioner with enhancing clinical skills"

- "Drive national and local PH by strategy not simply by a 'nice (thing) to do' to ensure effective contribution from the pharmacy"

- "Advocate for uniformity in local public health services to develop an evidence base for community pharmacy's impact on public health"

- "Improve the integration / joint working between ICS / LA / PHE to address use of medicines for population health management – as currently addressed at individual sector level but not at strategic level"

- "Strengthen the strategic and operational structure to support staff working in PPH. Construct an effective professional development network"

- "Promote systems-level improvements and related policy activity to promote public health pharmacy practice"

- "Define the scope and breadth of PPH principles and practice in the UK"

- "Clearly define the need/expectations/roles associated with PPH"
- "There should be active consultation with Public Health policy makers in government about their vision and strategic plan for delivering the PH ambitions of the NHS Long-Term Plan"
- "Need for shared learning across GB countries"
- "Put in place infrastructure to support and direct the local efforts of pharmacists"
- "Welcome a wider survey of the PH community to provide assurance of support and endorsement of a potential expansion of public health pharmacy"
- "Pharmacy staff should take their audit / research findings to public health conferences and submit to PH journals / newsletter / media"
- "Pharmacy policy makers should engage urgently with government PH policy makers"
- "Include actions to minimise the impact of pharmaceuticals on the environment within PPH strategies"
- "Find champions of PPH outside the pharmacy professions"
- "Develop a compelling narrative for PPH for communicating the need for the specialism and for socialising/communicating with non-pharmacy professionals"
- "Use ambassadors to promote the involvement of pharmacy professionals in public health and the potential value added by their involvement"
- "Future national policies to focus on:
  - Ways to effectively integrate community pharmacy into primary care"
- "Undertake a funding reform to promote greater pharmacy involvement in population health"
- "Consider / address gaps such as strategic leadership for PPH policy / strategy / implementation, surveillance and assessment of population health, emergency response planning"
- "Understand and define the different aspects of public health across the pharmacy services e.g. public health in community pharmacy and pharmacists supporting public health teams in local authorities (or other more strategic roles) - rather than putting them all under the same description"
- "When looking at system level improvements, ensure that data is captured and measured to demonstrate improvements using Quality Improvement (QI) methodology and tools"
- "Amend legislation for Patient Group Direction to include pharmacy tech. This would allow expansion of community led clinics with ~20,000 further healthcare professionals able to add to the PH agenda"

2. Expanding Service Delivery Beyond Community Pharmacy

a. Develop shared vision across pharmacy services
b. Integrate sector within primary care team
c. Engage multidisciplinary team and ICS

- "Future national policies to focus on:
  - Ways to develop a shared vision for different levels of pharmacist services"
- "Better integrate the sector into the primary care team. The appropriate service(s) should provide the right population interventions, while assisting general practice with case finding and patient / public interventions to improve care and long-term health"
- "Consider role of PPH in ICS"
- "Bring elements of public health into pharmacist practice"
- "Recognise the breadth of work being done currently by pharmacists in LAs"
- "Recognise LA pharmacy specialists as part of pharmacy workforce, e.g. workforce survey / plan and put training in place to support junior pharmacists moving into role to allow continuity of organisational/specialist subject memory"
- "Need to ensure we engage on multidisciplinary level rather than focus solely within pharmacy, and within pharmacy engage at an ICS level rather than solely community pharmacy"
- "Each ICS to prepare compulsory ICS driver diagrams selecting top priority for population health pharmacy"
- "Further explore primary care PHH"
- "Consider an MDT approach for Public health planning including pharmacy professionals"

3. Embedding Optimisations of Medicines at a Population Health Level

a. Clarify PPH, to include medicines optimisation

- "Clarify what PPH involves. Clearly optimising medicines is one element and medicines do prevent ill health, not just treat ill health"

4. Emergency Preparedness, Resilience and Response

5. Integration of Pharmacy to Better Support PH Protection & Improvement Goals

a. Promote PPH community pharmacy programmes
b. Involve pharmacy in PH leadership

- "Promote the delivery of PH programmes via community pharmacies to improve health and prevent disease, particularly those aimed at primary prevention"
- "Need for greater integration of community pharmacy within primary care"
- "Involve pharmacy in leading PH services, e.g. NCSCT practitioners"

6. Public Health Skills Training

a. Define PHH career pathway

b. Align to PPH competencies within undergraduate and postgraduate degrees, ranging from:

    i. Undergraduate core fundamental training

    ii. Postgraduate studies to embed alongside clinical work

    iii. Specialism in PHH, including joint recognition/registration with GPhC and FPH

c. Embed PHH into pharmacy technician training

d. Create research opportunities

e. Create in-house training programmes to engage staff with public health, to include health policy, financial drivers of population health

f. Encourage dissemination of research / audits / projects, e.g. PJ involvement

- "Align / define PPH career pathway within the wider career portfolio / frameworks available in and out of pharmacy"
- "Review the undergraduate / postgraduate pharmacist and technician educational offers and identify gaps against PPH competencies"
- "Explore research opportunities"
- "Training for all pharmacy sectors"
- "Education and training in public health services delivered in a pharmacy environment to form part of IET of all pharmacy professionals – consider Miller's triangle approach used by GPhC"
- "Develop pharmaceutical expertise within LAs/ICSs"
- "Share education and knowledge within the profession, e.g. create a campaign / network / forum of pharmacy professionals interested in public health"
- "Incorporate structured public health learning into undergraduate and postgraduate training, highlighting the opportunities that exist (or could exist) for pharmacy professionals. Running alongside that, develop PPH career development pathway or framework to help individuals map competencies"
- "Improve pharmacist training to include PH knowledge, especially health policy and financial drivers of population health to improve population outcomes, and opportunities for professional advancement"
- "Define and measure efforts of effective contribution"
- "Embed PH as a topic in the undergraduate curriculum for pharmacy and in pharmacy technician training to build workforce capability"
- "Consider how to develop and maintain PPH specialists and what the training pathway should look like - link to foundation and advanced pharmacist pathways"
- "Create clear training pathway for pharmacists looking to pursue careers in public health"
- "Increase education and awareness from undergraduate level about the opportunities for pharmacy professionals to pursue a public health career"
- "Improve pharmacist training to include public health knowledge, especially health policy and financial drivers of population health to improve population outcomes as well as improve opportunities for professional advancement"

- "Develop career pathway for pharmacists in PH without the need to give up pharmacy (e.g. joint recognition between Faculty of PH and GPhC)"
- "Develop a career development pathway that does not require pharmacy professionals to work outside the speciality to be recognised as qualified PH professionals"
- "Need to look at opportunities presented by reforms to initial education and training of pharmacists to embed training in PPH"
- "Consider developing career pathways for dedicated PPH roles"
- "Need fundamental training on public health (pre-qualification) to ensure a minimum core set of knowledge and skills to 'make every contact count'"
- "Consider modules appropriate within wider CPD for pharmacist i.e. MSc courses"
- "Need a balance between specialisation vs imbedding skills in pharmacy workforce"
- "Pharmacy technicians should also be given opportunities to develop as PPH specialists"
- "End the professional bias towards pharmacists. Give equal consideration to the pharmacy technician profession in respect of research and education. Communicate different access to public health courses (not all at degree level)"
- "Require both a skilled healthcare workforce (jobbing pharmacists) and pharmacists embedded in the public health system (or clear collaborative links)"
- "Get more pharmacists registered with such bodies as FPH and UKPHR"
- "Support pharmacy professionals involved in public health to publish and disseminate projects"
- "Disseminate high-quality case studies of pharmacy staff working in PH and their achievements, to inspire colleagues and convince policymakers"
- "Equip pharmacists to specialise into the PH environment"
- "Equip pharmacists working outside PH with skills and awareness of PH"
- "Better support pharmacists working in public health services as most 'dropped in the deep end' - not necessarily needing to complete a public health qualification, but to support a better understanding of public health and how pharmacy experts (pharmacists and technicians) can contribute to this maximising on the skills they have to offer"
- "Consider how pharmacy and public health qualifications can be used together rather than choosing one or the other - which appears to be what people are currently doing (i.e. how can the CPD / revalidation be inclusive rather than exclusive to each professional body)"

7. **Mitigating Health Inequalities**

a. Tackle health inequalities through PH services
b. Involve pharmacy in ICS health inequalities agenda

- "National programmes to embed public health services to tackle local health inequalities"
- "Each ICS health inequalities agenda to produce a review of what pharmacy can do to make a difference"
- "The reach of pharmacies into communities experiencing socioeconomic disadvantage compares very well with that of other providers. Many of the non-communicable diseases exhibit a social gradient, with poorer communities experiencing a greater burden of disease. Access to pharmacies by these communities provides opportunity to improve health and address inequalities"

8. **Other**

8a. Commissioning

a. Give responsibility for commissioning PPH services and funding to the ICS – which should have pharmacy representation
b. Develop national service specifications for commissioners – to reduce commissioning variation across PH services, drive uniform training and accreditation requirements and reduce cost of service development

- "Review the fragmented commissioning system where some services are commissioned by NHSEI (e.g. flu vaccination) and the majority by local authorities. In line with the move towards commissioning moving to statutory ICSs, give ICS the sole responsibility for commissioning pharmacy public health services irrespective of which sector the service is commissioned from so patients are treated holistically and true standards put in place. ICS should also be given the associated funding to undertake such commissioning responsibilities"
- "Increase involvement of pharmacy in the commissioning process"
- "Future national policies to focus on:
  - Devise new incentive mechanisms for improving quality and outcomes"
- "Utilise community pharmacy providers as care providers within an ICS, using the opportunities and skills that complement the efforts of other health care providers. Base pharmacy contracts on the delivery of healthcare and outcomes, not dispensing volume"
- "Identify further key areas in public health that community pharmacy would be best placed to support and influence the commissioning of national services to support this"
- "Reduce the commissioning variation of public health services"
- "Consider how some of the funding that is supplied to local authorities can be better used at a national level to support the commissioning of national public health services as part of the community pharmacy contractual framework"
- "Develop national service specifications for commissioners to use when commissioning local public health services. This will have the benefit of reducing variation, driving uniform training and accreditation requirements and reducing the cost of local service development"
- "There is a need to address this variation in commissioning to focus on the most cost-effective and impactful services"
- -"Need for more national commissioning of public health services to harness the impact community pharmacy can have and reduce the variable commissioning"
- "Seek to use funding from NHS Digital to fund procurement of one IT platform that all commissioners could use when commissioning a public health service through community pharmacy that also enables evaluation and patient surveys"
- "The further development and commissioning of national services needs to provide new funding as the existing community pharmacy global sum will not sustain new services without additional and ongoing funding"
- "Pay attention to where commissioning areas meet / fringe areas, especially if there is large

Summary of Recommendations

National Strategic Approach/ Commissioning

- Clearer national and regional leadership required
- Define national standards and career pathways for pharmacy professionals in public health – competence and accreditation
- Addressing health inequalities through focused and integrated public health interventions through pharmacy professionals in areas with high population of underserved communities
- Agree terminology
- Review of Pharmaceutical Needs Assessment (PNA) regulations to ensure that the emerging role of pharmacists in public health (such as their key role in addressing health inequalities) is highlighted and that data is formally collected on this as part of the PNA process which is undertaken every three years.
- Enhanced PPH Delivery Beyond Community Pharmacy-Key Priorities
- Emergency planning
- Health protection
- Addressing inequalities
- Medicines surveillance / intelligence - to support understanding of intended and unintended consequences (optimisation / ADRs)
- Integration across primary, secondary and tertiary care

Workforce Development

- Define PPH career pathway to allow pharmacy professionals remain within the profession but contribute/lead on public health including at strategic level
- Better align/embed PPH competencies within undergraduate and postgraduate pharmacy degrees, ranging from:
- Undergraduate core fundamental training
- Postgraduate studies to embed alongside clinical and prescribing
- Specialism in PPH e.g., RPS Consultant credentialing and/or joint recognition/registration with GPhC and FPH (or UKPHR)
- Embed PPH into pharmacy technician training and pharmacy support staff
- Increase training available for pharmacy professionals to undertake high quality research including within practice.
- Create/embed available training programmes for pharmacy professionals to undertake public health activities, including health policy, wider determinants of health and financial drivers of population health

Evidence Development/Research

- Promote the sharing of good pharmaceutical public practice models
- Create and embed high quality research and funding for pharmaceutical public health
- Increase the dissemination and adoption of research / audits / project findings