INTRODUCTION & CONTENTS

OBJECTIVES OF THIS REPORT

We have an ambition to encourage the UK healthcare community to take greater action on the air pollution challenge.

To achieve this aim, we conducted comprehensive research among the UK medical community to:

• Understand how key health communities in the UK perceive air pollution.

• Explore what kinds of communications and strategies would encourage them to act on the issue, and what stops them from acting on air pollution today.

The findings within this report are based on 16 in-depth qualitative interviews and a quantitative survey with 200 UK healthcare professionals.*

CONTENTS

This report is structured in 5 parts:

1. Key take-outs and strategic recommendations for driving action among UK HCPs (Health care professionals)

2. HCP Personal-Professional Motivations

3. UK health culture

4. UK HCP perceptions of air pollution

5. Summary of key motivators and barriers to action on air pollution

*See appendix for detail on sample
PART 1
KEY TAKEOUTS AND STRATEGIC RECOMMENDATIONS
In order to act on any issue HCPs need high levels of both:

**AGENCY + ISSUE MOTIVATION**

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>ISSUE MOTIVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH</strong></td>
<td><strong>HIGH</strong></td>
</tr>
<tr>
<td><strong>LOW</strong></td>
<td><strong>LOW</strong></td>
</tr>
</tbody>
</table>

HCPs that feel empowered and in control of their actions and their consequences. This creates perceived ability to act.

When an issue is perceived as important at both a public health level but also to HCPs as individuals with their own ambitions and values. This creates desire to act.

<table>
<thead>
<tr>
<th>VOLUNTARY DISENGAGEMENT</th>
<th>INSPIRED ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCPs have the means to act, but don’t want to</td>
<td>HCPs have the desire to act and feel empowered to do so.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISEMPOWERED INDIFFERENCE</th>
<th>FRUSTRATED INTENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCPs neither want to act, nor have the means to do so</td>
<td>HCPs want to act, but do not have the means</td>
</tr>
</tbody>
</table>
We found that most UK HCPs sit in the ‘voluntary disengagement’ space. HCPs have the means to act, but don’t make it a priority. Therefore the air pollution issue requires greater prominence and urgency.
There are 5 personal-professional motivations that spur HCP action

These motivations tend to be shared with HCPs around the world and reveal potential drivers and barriers for acting on public health issues:

**SECURITY**
“I want to get through the day unscathed.”

**CARE**
“I want to give meaningful help to individuals”

**COMMUNITY**
“I want to belong and to contribute to the collective”

**DUTY**
“I want to fulfil my role and act as a role model for others.”

**GROWTH**
“I want to be leading challenges.”

**HCP considerations for acting on public health issues**

- Can I make time and headspace for this issue?
- Am I too junior to act?
- Does it fit with the official rules and guidelines?
- How will my action enhance the lives of my patients in a meaningful way?
- How will my action make tangible, positive changes within my community?
- Does acting on this issue help fulfil my duties as a health professional?
- Will my efforts be rewarded with high status recognition?
- Is acting on this issue a good use for my skills and status?
- Does acting on this issue create any risks to my reputation?

Health Communities Research UK
A stable and advanced national health system...

with a focus on tackling the causes of non-infectious disease – such as obesity and smoking.

High HCP confidence in training and evidence base

HCPs are quietly confident in the standard of training, national guidance and scientific leadership that they receive. Decisions are based on scientific evidence.

The system has flaws, but is trusted

Frequent complaints and frustrations with sluggishness of national system and pressures on resourcing (which can create bystander effect), but the NHS and national authorities are trusted.

Low hierarchy and ‘flat’ interaction between roles

No role is inherently superior and each has its own culture. Different roles aim to collaborate effectively together.

Action both inspires and intimidates

Growing awareness of activism within UK (especially towards the environment), but some hesitation and uncertainty around adopting more assertive campaigning on an issue.

We found that the UK health culture gives HCPs a high sense of agency and 72% HCPs have taken action on a public health issue in the past.
Despite a high willingness to act on public health issues, only 31% UK HCPs consider air pollution to be a priority. Awareness of its presence and impacts is growing and it is increasingly on city leaders’ agendas. However, health issues such as obesity and smoking, and social issues such as poverty are regarded as more urgent.
Most UK HCPs underestimate the presence and urgency of air pollution in the UK. They mainly reason they deprioritise it are:

- **An incomplete understanding of the health impacts**: Only 65% of HCPs would be confident explaining some of all of air pollution’s health impacts. Long term consequences are particularly misunderstood.

- **A feeling of insufficient evidence**: While HCPs intuitively believe air pollution is damaging, they don’t think there is good enough clinical data or local measurement. 79% want to see more evidence of the health impacts.

- **A rosy view of the air quality situation in the UK**: Air pollution in the UK is subtle and hidden. HCPs don’t know how to assess what is bad, and compare to countries where the situation is a lot more visible (e.g. China and India).

- **It’s an environmental problem, for higher powers to solve**: It’s regarded as a complex systemic challenge that requires environmental organisations and governments to solve. Their own skills are better used to advise patients (if a practical solution exists).

**62%** have taken no action on air pollution

- **33%** have advised patients - seen as the most accessible role.
- **14%** sought to influence the policies/practices of where they work.
- **13%** researched or shared knowledge.
There are three roles where there is particularly high potential for UK HCPs to take greater action

1. Advising patients
2. Influencing their place of work
3. Sharing knowledge

Influencing policy/government and charity work are also potential areas to encourage more action, but are not such high potential opportunities. This is due to HCPs feeling less able to take part in these roles compared to others, and a lack of regular charity/NGO participation as part of their daily jobs.

The chart below shows how UK HCPs responded to two survey questions:

1. How able they feel to act in certain roles
2. Action they have taken on air pollution

We have highlighted where there is both high ability and low action – revealing roles with the highest potential for greater HCP involvement.
THIS LEADS US TO A STRATEGIC FOCUS:

DRIVE VISIBILITY AND URGENCY OF AIR POLLUTION

1. MAKE THE PROBLEM VISIBLE AND MEASURABLE
2. DRIVE EVIDENCE OF MEDICAL AND HUMAN IMPACTS
3. EMBED IN HEALTH SYSTEM AND TRAINING

In order to unlock HCP action in...

- Advising patients
- Influencing their workplace
- Sharing knowledge
# Key Areas for Acting on Strategic Focus

## Strategic Focus

Drive the visibility and urgency of air pollution to unlock greater action in advising patients, changing workplaces, and sharing knowledge.

<table>
<thead>
<tr>
<th>Priority Action Areas</th>
<th>Make the problem visible and measurable</th>
<th>Drive evidence of medical and human impacts</th>
<th>Embed into healthcare system and training</th>
</tr>
</thead>
</table>
| **Who** | - All HCPs, particularly those who are working in locations with broad patient reach (e.g. GP surgeries) | - Specialists in particular are looking for evidence that is more targeted to their area.  
- Generalists need quick and easy facts to give them confidence in their advice. | All HCPs |
| **How** | - Distribute air quality meters to hospitals and clinics and install local alert systems  
- Issue best practice guidelines on clean air for hospitals and clinics in terms of managing their own air pollution levels. | - Involve more HCPs in data-gathering / monitoring of patients with exposure to air pollution.  
- Look for platforms to share more clinical evidence – make sure air pollution is on the agenda of major health conferences  
- Tell more individual, human stories about the impacts of air pollution on patients  
- Drive evidence of the links between air pollution and economic impacts. | - Make sure it is part of health curriculum and NHS guidance on patient risk factors.  
- Embed into NHS preventative health campaigns and partnerships |

Health Communities Research UK
SEQUENCING OF FUTURE ACTION AREAS

Looking beyond the immediate priorities outlined in the previous slide, there are a number of further action areas that organisations looking to engage HCPs could consider as their trajectory for action. We have laid these out as horizons as certain areas depend upon the success of other areas before they can be successfully implemented.

HORIZON 1
- Make air pollution visible and measurable
- Generate and drive evidence
- Embed air pollution guidance into health systems

DRIVES URGENCY & ISSUE MOTIVATION
INCREASES AGENCY TO ACT

THE UK IS CURRENTLY AT HORIZON 1

HORIZON 2
- Humanise the issue
- Facilitate and celebrate role models
- Make wider action easy and simple

HORIZON 3
- Create a community of HCP’s dedicated to the challenge
- Turn action into professional currency

= current priority area
= future action area
HORIZON 2
Deepening emotional engagement and increasing ease of action

4. FACILITATE AND CELEBRATE ROLE MODELS

- Share stories of HCPs who have made a difference in their local clinic/community by acting on AP.
- Run campaigns, in collaboration with government or health bodies, that highlight HCPs' role in the challenge.

TACTICS:

5. MAKE WIDER ACTION EASY AND SIMPLE

- Creating and sharing templates for lobbying govt./businesses
- Share a directory of organisations/individuals who they could contact.
- Provide bite-sized activities (e.g. possible to do in little time)

TACTICS:

6. HUMANISE THE ISSUE

- Identifying potential victims of air pollution and telling their stories (e.g. the Ella Kissay Debra story in the UK)
- Tell the stories of how people's lives have improved as a consequence of small, everyday actions on air pollution

TACTICS:
HORIZON 3
Scaling action and engagement to the wider HCP community

7. TURN ACTION INTO PROFESSIONAL CURRENCY

- Connecting air pollution to specific professional qualifications
- Showcasing stories of HCPs whose action on AP has helped them to achieve professional goals and growth.
- Share stories of HCPs successfully working with other actors of status (e.g. politicians, environmental leaders)

8. CREATE A COMMUNITY OF HCPs DEDICATED TO THE CHALLENGE

- Creating online/offline platforms where HCPs can collaborate across hospitals and cities to improve air quality
- Convene citizens forums where HCPs can engage directly with communities on the issue.

DRIVES URGENCY & ISSUE MOTIVATION
INCREASES AGENCY TO ACT
PART 2
PERSONAL-PROFESSIONAL MOTIVATIONS
WE FOUND 5 PERSONAL-PROFESSIONAL MOTIVATIONS THAT SPUR HCPS TO ACT:

Summarising the motivation…

<table>
<thead>
<tr>
<th>SECURITY</th>
<th>CARE</th>
<th>COMMUNITY</th>
<th>DUTY</th>
<th>GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I want to get through the day unscathed.”</td>
<td>“I want to give meaningful help to individuals”</td>
<td>“I want to belong and to contribute to the collective”</td>
<td>“I want to fulfil my role and act as a role model for others.”</td>
<td>“I want to be leading challenges.”</td>
</tr>
</tbody>
</table>

They are seeking…

- Financial and job security.
- A release from day to day stress.
- Successfully conform to existing systems and protocols.
- Financial or material reward.
- Seeing an individual/patient improve and recover
- Helping others to improve their lives.
- Relationship building with individuals.
- A feeling of altruism.
- Relationship building within their community.
- Recognition as a contributor.
- Perceiving visible improvements to their local networks.
- A feeling that they are part of something meaningful.
- Gaining social respectability.
- Fulfilling their role as a healthcare professional.
- Correctly following scientific evidence
- Demonstrating competence to themselves and others.
- Demonstrating socially respectable behaviours to others.
- Contributing to professional causes and challenges.
- Professional advancement and status.
- The buzz and stimulation of solving difficult problems.
- Being in the limelight, and seen as a source of inspiration (flattering their professional ego).
- Personal growth and challenge.

MICRO / INTERNAL FOCUS
Orientated towards their personal needs and relationships

MACRO / EXTERNAL FOCUS
Orientated towards how others view them

These are motivation that apply across the international healthcare community, although they are expressed in different ways in different cultures.
MOTIVATION #1

SECURITY

“I want to make it through the day unscathed.”
SECURITY
DEALING WITH THE STRESSES AND PRESSURE OF THE JOB

Security-driven HCPs are most often found working in hectic and low paying roles within the medical community.

The combination of an unrelenting role, plus their relatively low status in the medical community means that they don’t often have the headspace to think about causes beyond their day-to-day, and that their main focus is upon achieving basic needs such as financial stability, sleep, and taking care of their own health.

Among their pressures and concerns are:

• Overwork within their role
• Long hours
• Anti-social hours
• Demands to work at short notice / with urgency
• Under-compensation within their role, leading to financial worries
• Managing family and home life

They are most likely to be nurses, pharmacists, health workers, and midwives, but can also be GPs and Specialists who are junior in their career journey.

DESIRES OF HCPS WITH A SECURITY MINDSET:

• Financial security
• Emotional security / freedom from stress
• Following official systems or protocols
• Extra financial or material reward

Health Communities Research UK
A FUNCTIONAL AND DEFERENTIAL MINDSET
SECURITY ORIENTATED HCPS PRIORITISE THE HERE-AND-NOW AND STICK TO DIRECTION AND GUIDELINES FROM THOSE WITH AUTHORITY

<table>
<thead>
<tr>
<th>RESTRICTIVE WORLD VIEW</th>
<th>REALIST, NOT IDEALIST</th>
<th>NON-CONFRONTATIONAL AND RISK AVERSE</th>
<th>DEFERENTIAL TO AUTHORITY AND PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life is about coping with multiple realities and not losing control.</td>
<td>They are hardworking but also aware that they have limited resources &amp; tools to work with. Hence, recognize that their efforts can only go so far.</td>
<td>Security-driven HCPs prefer to go with the flow. They do not wish to jeopardize their hard earned position, and are therefore are unwilling to take risks or make themselves stand out.</td>
<td>They are either consciously or subconsciously aware of their juniority – either in terms of inexperience, or because they occupy a less “expert” role. Therefore, they look to seniors and official protocols for guidance. When they do have ideas or solutions for improvements to the system and services, these are often held back unless solicited or if others first provide similar suggestions.</td>
</tr>
</tbody>
</table>

Health Communities Research UK
“Often it’s hard to find the time – we’re so busy that you just want to relax.”
Junior Pulmonologist, Liverpool
MOTIVATION #2

CARE

“I want to give meaningful help to individuals.”
The idea of giving care and helping others is often the central reason why many HCPs decided to enter the medical field.

Most HCPs feel rewarded when they can see progress and recovery in the patients that they work with. For some, even helping a patient to have a good death is seen as an important way of providing help and care. It is all about the positive impact that they are able to have on individuals.

Conversely, it is demotivating for HCPs when they feel that their patients do not listen to them or are indulging in self-destructive behaviours that they have no power to change.

THE REWARDS OF CARE:

HCPs are motivated by the concept of care-giving because it provides the following outcomes:

- The tangible reward of seeing an individual/patient improve and recover
- The feeling of altruism that comes from helping other individuals to improve their lives:
  - Through education, prevention, treatment and advice
  - Especially to vulnerable or at risk demographics (e.g. poor, elderly, wayward youth, teenage mothers)
- A feeling of virtue.
LISTENING TO THE PATIENT
Good care can come from being the person that a patient confides in, and HCPs get a lot of out two-way conversations with patients where it feels like they are building a relationship. This is particularly important to fully understand the patient on an individual and human level.

IMPROVING THE ISSUE OR DELIVERING A CURE
All HCPs want to see that they have made a tangible positive difference to the patient’s health. This could be guiding them on the road to full recovery, or providing an improvement in their quality of life.

PROVIDING EMOTIONAL SUPPORT
Keeping the patient’s spirits high, consoling them in times of difficulty, and ensuring that they are treated as a human throughout their experience.

SUPPORTING THE PATIENT’S FAMILY
Some HCPs see their duty of care as considering the patient’s wider network, and how their loved-ones may also need supporting through their patient’s illness.

EDUCATING THE PATIENT AND THEIR FAMILY
Going beyond specific diagnosis and treatment, to ensure improved wellbeing of the patient, by creating awareness of issues and risks that has come to HCP’s knowledge, and to introduce preventative measures.
“I wanted to be a nurse from a very young age, I think I just liked the caring aspect and the human contact... also my grandmother was in hospital a lot as a child and I used to just love watching the nurses, and I thought how friendly they were and how nice they were to my grandmother. The nurses would always look after her, but they would always look after the family as well.”

Nurse, London
MOTIVATION #3

COMMUNITY

“I want to belong and contribute to the collective.”
As well as being medical professionals, HCPs are also regular citizens who seek to belong and contribute to their local communities.

The desire to make a positive difference in the community was common across HCP types. Social glue and teamwork is an important aspect of this motivation, with HCPs looking to be invited to take part in activities that will create a sense of togetherness as well as positive local change.

When they engage in community building activities, they are not necessarily thinking as medical professionals, but in other social roles; whether as parents, friends, teachers or neighbours.
COMMUNITY

PARTICIPATION HAPPENS AS BOTH AS MEDICAL PROFESSIONALS AND REGULAR CITIZENS

HCPs can play two roles in the community:

• **AS HEALTHCARE PROFESSIONALS**
  If there is a healthcare angle, they can step forward as to help develop healthcare guidelines and solutions, while also serving as educators and trainers of other volunteers.

• **AS REGULAR CITIZENS**
  If there is no healthcare angle, they participate as a regular citizens to execute ideas developed by others, their status as HCPs not giving them additional influence or deference over others. In these moments they are thinking in other social roles; whether as parents, friends, teachers or neighbours.

Both roles are fulfilling, but it gives them an extra buzz to be able to use their healthcare skills.

THE REWARDS OF COMMUNITY ACTION:

• Teamwork
• Relationship-building and social cohesion
• Social recognition
• Tangible improvement to their community
• The feeling of investing in a better future and being part of something meaningful

At present, many contribute as regular citizens, so there is also an opportunity to connect this activity to their skills and interests as HCPs.
“I’ve campaigned within my local village on how to make the area cleaner and greener for kids... it was prompted by my older neighbours, they feel like the concept of a village has vanished.”
Neurologist, Birmingham
MOTIVATION #4

DUTY

“I want to fulfil my role in society and set a good example.”
DUTY

DEMONSTRATING THE RIGHT KNOWLEDGE, BEHAVIOUR AND VALUES TO FULFIL THEIR POSITION AS A ROLE MODEL

Duty-driven HCPs were often attracted to their professions due to the reputation of healthcare as a respectable career path and its status as a vital pillar of society.

Crucially, their sense of duty extends beyond the delivery of individual care to embrace the responsibility of being a role model within the wider community.

They are conscious of how others see them and are serious about setting an example not just through good medical practice, but by living the values and behaviours that are seen as fitting of a healthcare professional.

As a consequence, they have an innate sense of their own authority and potential influence. But as this understanding is also based on respect for traditional hierarchies, societal structures and communal practices, they are not necessarily egocentric or outspoken characters.

On the contrary, when it comes to overcoming a challenge, they are often humble and don’t automatically see it as their place to speak out or create disruption.

THE DESIRES OF THE DUTY-DRIVEN:

- Being a "good" guardian of their patients
- Social respectability
- Fulfilling their role as a doctor to promote awareness of health issues
- Contributing to shared medical knowledge
- Promoting harmony and balance
- Keeping up to date on medical knowledge and news

Health Communities Research UK
### DUTY

**OPERATING WITH A MINDSET THAT IS CONVENTIONAL, HARMONIOUS AND DEDICATED**

<table>
<thead>
<tr>
<th>RELIABLE AND CONSCIENTIOUS</th>
<th>CONSERVATIVE AND CONVENTIONAL</th>
<th>RESPECTFUL OF PEERS AND INSTITUTIONS</th>
<th>SERVICE ORIENTATED</th>
<th>UNCOMFORTABLE WITH CONFLICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have a high sense of their duty of care as a health professional – and reliability and working hard are a key part of this.</td>
<td>They adhere to established medical norms and practices. They have a strong sense of professionalism that tends to centre around notions of tradition, integrity and commitment.</td>
<td>While duty-driven HCPs may see areas of improvement in health systems, they are overall respectful of their peers and the protocols in place. They look to official institutions for guidance.</td>
<td>The idea of acting (and being seen to act) for the wider good is a principle that guides them in their professional practice. Taking on the role of guide and mentor for patients and the wider community is therefore appealing..</td>
<td>On the whole, they prefer harmonious engagements. Conflict is un-welcome for them and they would prefer to achieve change through supportive and collaborative action.</td>
</tr>
</tbody>
</table>

“Protesting is not my thing. I’m not the type to put my head above the parapet. I prefer to lead by example... and show the positives when things are going right.”

GP, London
“I’ve been a trainer for the last 20 years - it’s important to keep the standards up. The continuity of care is satisfying, seeing people through illnesses and keeping them away from hospital. I like working with people and having communications.”

GP, Croydon
MOTIVATION #5

GROWTH

“I want to be leading conversations”
GROWTH
HCPS WITH A GROWTH ORIENTATION ARE EXCITED BY OPPORTUNITIES TO ADVANCE THEIR SPECIALISM AND THEIR CAREERS

Growth-driven HCPs are often found in more senior, specialist or prestigious positions.

Like many HCPs, their core desire is to help others, but they also have a strong career and growth orientation and are energetic about advancing their own individual prospects.

They are very confident in their own abilities and active in the wider medical community. Whether it’s through teaching, training, writing for journals, or lobbying and advocacy, they feel it is important for them to have a voice.

However, the impact of action on their career is always in the back of their mind.

They are a small portion of HCPs, and most likely to be specialists, but some more motivated HCPs may adopt this mindset in other roles.

THE DESIRES OF THE GROWTH-DRIVEN:

- Professional advancement and status
- Intellectual challenge and problem-solving
- Being in the limelight, and seen as a source of inspiration for other doctors (flattering their professional ego)
- Know they have done all they can to help their patients/society
- The promise of personal growth

Health Communities Research UK
**GROWTH**

**THEY FEEL OBLIGED TO USE THEIR STATUS AND EXPERTISE FOR THE GREATER GOOD, AND TO BE SEEN AS THE ONES MAKING A DIFFERENCE**

<table>
<thead>
<tr>
<th>AMBITIOUS AND DETERMINED</th>
<th>EAGER WITH A CHALLENGE</th>
<th>READY TO LEAD</th>
<th>BIG-PICTURE ORIENTATED</th>
<th>OCCASSIONALLY EGOCENTRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have their eyes on a bigger prize.</td>
<td>Problem-solving is not a daunting task for Growth-orientated HCPs.</td>
<td>They are naturally confident in their own abilities, and feel it is only right to use their gifts to be vocal on the issues that matter.</td>
<td>They tend to have a better awareness of the wider situation in their country – both current and future.</td>
<td>They take pride in their achievements and often consider themselves superior in their knowledge and skills.</td>
</tr>
<tr>
<td>They are always looking for ways to enhance their career and opportunities for personal and professional growth.</td>
<td>Many enjoy embracing a new challenge and get a buzz from finding solutions.</td>
<td>They seek power and authority and want to be able to influence the wider medical community.</td>
<td>This relates to health issues, but also to the politics of the medical world, and how that links to wider societal systems and government.</td>
<td>They want to be viewed as pioneers in their profession, and measure success by these individual achievements.</td>
</tr>
</tbody>
</table>

Health Communities Research UK
“As was I becoming a consultant – I realised I had a lot of responsibility for people’s lives I started to think about the world as a whole, and felt that since I had a voice, I needed to use it.”

Respiratory Paediatrician, London
IMPLICATIONS FOR ACTION ON AIR POLLUTION

These motivations reveal potential drivers and barriers for acting on public health issues:

**SECURITY**
“I want to get through the day unscathed.”

**CARE**
“I want to give meaningful help to individuals”

**COMMUNITY**
“I want to belong and to contribute to the collective”

**DUTY**
“I want to fulfil my role and act as a role model for others.”

**GROWTH**
“I want to be leading challenges.”

**HCP considerations for acting on public health issues**
- Can I make time and headspace for this issue?
- Am I too junior to act?
- Does it fit with the official rules and guidelines?
- How will my action enhance the lives of my patients in a meaningful way?
- How will my action make tangible, positive changes within my community?
- Does acting on this issue help fulfil my duties as a health professional?
- Will my efforts be rewarded with high status recognition?
- Is acting on this issue a good use for my skills and status?
- Does acting on this issue create any risks to my reputation?

Health Communities Research UK
PART 3

UK HEALTH CULTURE
## UK Health Culture at a Glance

<table>
<thead>
<tr>
<th>A stable and advanced national health system</th>
<th>High HCP confidence in training and evidence base</th>
<th>The system has flaws, but is trusted</th>
<th>Low hierarchy and ‘flat’ interaction between roles</th>
<th>Action both inspires and intimidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>...with a focus on tackling the causes of non-infectious disease – such as obesity and smoking.</td>
<td>HCPs are quietly confident in the standard of training, national guidance and scientific leadership that they receive. Decisions are based on scientific evidence.</td>
<td>Frequent complaints and frustrations with sluggishness of national system and pressures on resourcing (which can create bystander effect), but the NHS and national authorities are trusted.</td>
<td>No role is inherently superior and each has its own culture. Different roles aim to collaborate effectively together.</td>
<td>Growing awareness of activism within UK, but some hesitation and uncertainty around adopting more assertive campaigning on an issue.</td>
</tr>
</tbody>
</table>

**Results in HIGH sense of agency across roles**

72% UK HCPs have taken action on a public health issue in the past.
HEALTH CULTURES: UK

The NHS is the heart of medical life in the UK, providing training, guidance and structure for the majority of HCPs

Most healthcare in the UK is provided through the public National Health Service (NHS) with a smaller private healthcare market.

The NHS is highly trusted, and alongside PHE (Public Health England), is a consistent touchpoint for UK HCPs in multiple ways:

**DAY TO DAY DECISION-MAKING**
Local Clinical Commissioning Groups typically cascade the latest guidance to different regions. Individual surgeries and hospitals then prioritise based on the profile of their patients.

**MEDICAL CAREER PATHS**
There is clear division between generalist and specialist career paths, and hospitals will all follow the same structure for recognising progression and seniority among doctors.

**GUIDANCE ON NEW MANDATES**
The NHS carries a lot of trust, and there is a general feeling that if something is mandated by the NHS then it is the right thing to do. Doctors, nurses and midwives are consequently wary of straying from NHS guidelines.

[An air pollution campaign] would need the voice of the NHS – people believe what they say.

Nurse, London
Chronic illness is the leading health challenge in the UK, symptomatic of the UK’s status as a developed market.

MOST URGENT HEALTH CHALLENGES: OBESITY AND RELATED ILLNESSES
When prompted, HCPs are also particularly concerned with tackling diabetes and heart disease – both of which are highly correlated to weight.

SMOKING (AND CHRONIC LUNG DISEASE)
Smoking is seen as an urgent issue to solve, however chronic lung illness such as COPD and asthma also come up as high-ranked issues when HCPs are prompted.

POVERTY, THE DRIVER OF ILLNESS
Inequality was perceived as one of the driving factors in patient’s overall health and sometimes even their ability to access necessary healthcare services.

A LOW FOCUS ON INFECTIOUS DISEASE
Of course, Covid-19 has been a disruptive challenge and placed a real strain on ways of working. Even those who are not at the front line of the pandemic are frustrated by the lack of face to face consultation with patients. However there is generally little concern about infectious disease.

Q1. Thinking about the different issues affecting the health and well-being of your community - what are 3 most pressing issues that first come to mind? Please write in order of most urgent first.

- Obesity / Weight
- Smoking
- Poverty / Social Deprivation

TOP of mind issues for UK HCPs in order of URGENCY (ranked as the top 3 issues, unprompted)
Most HCPs still operate with an “in the now” mindset, although there is a growing focus on preventative care

COMMON “HERE AND NOW” MINDSET
HCPs occupy busy roles, and they often only have time to solve the immediate challenge in front of them. Finding the headspace for more holistic conversations about health can be difficult.

BUT PREVENTATIVE FOCUS IS GROWING
Numerous public health campaigns have highlighted the role of preventative interventions in improving the health of the population.

Increasingly, HCPs feel compelled to help patients find solutions to lifestyle stressors such as poor diet or mental health.

In particular, when working with a patient in the long term, HCPs will try and build a wider understanding of their patient’s circumstances.

“We are often reacting and firefighting. When we have a conversation with patients they want to have the cure and are resistant to lifestyle changes. There is a lot of apathy and denial... I will try and get the message across that the treatment doesn’t address the cause.”

GP, London

Preventative care systems are in place (although sometimes inconsistently) for busy HCPs to refer patients to. For example:
- Nutritionists
- Stop Smoking clinics
HEALTH CULTURES: UK

They are quietly confident of the training that they receive and the UK’s overall leadership in the medical profession.

“The guidance that I look at is guided by clinical excellence.”
Neurologist, Birmingham

PERCEPTION OF HIGH STANDARDS
Training and professional standards are perceived as high, and most HCPs feel confident relying on the UK’s teaching structures and professional associations.

While HCPs are open to and interested in international sources of research and training, most of them are fairly UK-centric in the sources that they fall back on.

A RESPECTED INTERNATIONAL PROFILE
The UK is also seen to punch above its weight internationally in medical care and research, which creates further confidence in the existing systems. Specialists and GPs in particular feel confident in the UK healthcare culture and contributions to international medical research and collaboration.

Note: One HCP was concerned around how funding would impact the future of the UK’s work on research.
The system encourages them to base their decisions and actions on approved scientific evidence

SCIENCE-FIRST MINDSETS
HCPs have been trained to act based on evidence and fact and they are uncomfortable making decisions where the supporting evidence feels vague or insubstantial. If they don’t have the time to run their own research or read new studies, they want to feel that there is general consensus from the medical community that the evidence on an issue is sufficient.

SOME OPENNESS TO MULTIPLE EVIDENCE INPUTS
HCPs rely on research from professional organisations and peers, but do also consider traditional media. HCPs most regularly used sources of evidence were:

62% PROFESSIONAL JOURNALS
60% PROFESSIONAL COLLEAGUES
53% NEWS WEBSITES

“Research and building evidence can be used to make a marker for change. For example; the use of non-invasive ventilation for Covid patients. Patients were being referred as evidence has built up.”
Junior Respiratory Specialist, Liverpool

Q3. When considering these and other health issues, what are your main sources of information? Numbers show % that claimed to be “regular” users of the source.
Hierarchy between roles is subtle: HCPs present them as different vocations, rather than one role being superior to another.

Hierarchy exists within roles with different grades of seniority, rather than between them. Most HCPs feel proud of their role’s unique culture and defining super skill:

<table>
<thead>
<tr>
<th>SPECIALISTS</th>
<th>GPS</th>
<th>NURSES</th>
<th>MIDWIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOCUSED PROBLEM SOLVERS</td>
<td>COMMUNITY ORIENTATED</td>
<td>PRACTICAL CARERS</td>
<td>RELATIONSHIP BUILDERS</td>
</tr>
<tr>
<td>• Specialist are by definition focused on a particular areas of interest.</td>
<td>• GPs are often drawn to their role because they enjoy variety and dealing with people.</td>
<td>• Nurses are typically motivated by the concept of giving excellent care.</td>
<td>• They perceive their job as a “calling” more than other roles.</td>
</tr>
<tr>
<td>• They usually have a more academic culture of problem-solving and contribution to research, alongside their duties of care.</td>
<td>• As a result, they see themselves as playing a guiding role at the heart of communities.</td>
<td>• They are sometimes under orders of HCPs in more “educated” roles but generally do not feel patronised by this.</td>
<td>• While they are subject to management edicts they have a strong and proud sub-culture.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• They tend to have a more practical outlook.</td>
<td>• They pride themselves on building deep, intense, relationships with women.</td>
</tr>
</tbody>
</table>

HCPs in the UK tend to view their peers in other roles as collaborators (or sometimes antagonists) rather than above or below them. Consequently, there is a greater culture of working between roles without posturing or dictating from more senior staff.

“We have huddles with social services and inter-disciplinary meetings to establish our priorities.”

GP, London,
HEALTH CULTURES: UK

Senior specialists and GPs are expected to contribute to the future of their practice, and this fosters a culture of sharing

For many HCPs, taking on a teaching or research role within their job is symbolic of dedication and competence, but also status and progression:

<table>
<thead>
<tr>
<th>SPECIALISTS</th>
<th>GPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialists know that they will train the next generation in their specialism. In addition, many achieve status and progression by undertaking and publishing research in their field.</td>
<td>The GP’s focus is on setting a good example within their clinics, training those who will follow them, and helping their clinic manage new guidance</td>
</tr>
</tbody>
</table>

“Research is most accessible aspect [of taking action.] For example, contributing to an article, or where you can add to the weak pool of data. We’re trained to do it.”
Cardiologist, Leicester

“I’ve been a trainer for last 20 years – the medical students and training registrar – it’s important to keep the standards up.”
GP, London

Nurses and midwives were more focused on the day to day, but had some appetite for sharing care skills, and senior nurses on fostering better collaboration on health issues within public/their hospital.
Most UK HCPs are aware of their influence in society, particularly when advising patients and within professional networks.

“People do listen to health professionals – we have authority. We do have more power to alter what [patients] do.” Junior Respiratory Specialist, Liverpool

<table>
<thead>
<tr>
<th>Ability to Influence</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practices within my hospital/ clinic/ practice</td>
<td>83%</td>
<td>5.45</td>
</tr>
<tr>
<td>Practices within my community about health &amp; wellbeing</td>
<td>75%</td>
<td>5.19</td>
</tr>
<tr>
<td>Policies and guidance for the wider medical community</td>
<td>69%</td>
<td>5</td>
</tr>
<tr>
<td>Health &amp; well being Policies &amp; priorities of advocacy, NGOs or charities</td>
<td>66%</td>
<td>4.98</td>
</tr>
<tr>
<td>Local Government legislation about healthcare &amp; wellbeing</td>
<td>50%</td>
<td>4.57</td>
</tr>
<tr>
<td>National Government legislation about healthcare &amp; wellbeing</td>
<td>38%</td>
<td>4.11</td>
</tr>
<tr>
<td>Practices and policies of a commercial organisation (e.g. Pharma company)</td>
<td>27%</td>
<td>3.42</td>
</tr>
<tr>
<td>The behaviour and or beliefs of my friends and family</td>
<td>18%</td>
<td>2.91</td>
</tr>
<tr>
<td>The behaviour and or beliefs of my peers</td>
<td>20%</td>
<td>2.76</td>
</tr>
<tr>
<td>The behaviour and or beliefs of my patients</td>
<td>12%</td>
<td>2.57</td>
</tr>
<tr>
<td>Midwives; 68% Resp. specialists</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>Nurses; 48% Resp. specialists</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Paed. 16% Resp. specialists</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Card.; Paed, Resp. specialists</td>
<td>33%</td>
<td></td>
</tr>
</tbody>
</table>

Q6. Thinking about your ability to influence events and people, please indicate how much or how little that you feel you can affect the following.

Notably, respiratory specialists state having less influence overall when compared to other HCPs.
Most have also taken action in some form on a public health issue, typically to advise patients or share knowledge.

Only 40% of the NEUROLOGISTS stated YES compared to the rest of HCPs, 60%+. 

When it comes to advocating or making a change on an issue, HCPs naturally see their influence in two spaces:

**ADVISING PATIENTS**
Giving their patients advice on how they can make a positive change.

**COLLABORATION WITHIN MEDICAL PROFESSION**
Working with their colleagues to add richness to a conversation or make changes to their ways of working.

Working for a cause or charity were also mentioned, but doesn’t feel as directly related to their skills. For example, they are happy to take part in sponsored walks or other charity initiatives.

They tend to avoid more disruptive methods – working within the stereotypical boundaries of the “polite” UK culture.
HEALTH CULTURES: UK

However, the HCP community needs strong leadership and direction to scale personal influence into wider change.

There is both belief in and precedent for the power of the medical profession to lobby for change.

For example, the role of the medical community in policy decisions such as banning smoking inside cars with children in them.

However, individual HCPs often feel distant from lobbying activity.

In order to scale personal small-scale action to wider societal/policy change, HCPs are looking for:

**LEADERSHIP FROM PROFESSIONAL BODIES**
74% describe professional journals as their most authoritative and trustworthy source of information. If they take leadership on an issue, HCPs will follow.

**SKILLS FOR LOBBYING**
The medical profession does not teach the leadership and communication skills that enable passionate HCPs to carry their message to a wider audience.

“In a lot of Facebook doctor’s groups they get rabid about the things that effect them, but I don’t think those posts are effectual. I’m convinced that large swatches of the medical community are not that bright or savvy. Historically doctors are quite political, but their ability to drive a narrative is not very good.”

Neurologist, London,

Q4. Thinking about the most authoritative and trustworthy information providers that you use - what are the 3 specific ones that first come to mind
And while they are protective of the NHS, they are often critical of under-resourcing and bureaucracy

INNOVATION CAN FEEL PAINFUL
The complexity and internal politics of the healthcare system can make HCPs who want to introduce change feel stifled and blocked.

SLOW SYSTEMS ARE DEMOTIVATING
For example, when applying for grant money for new research, HCPs can feel exhausted with the process before they reach the end of it.

UNDER-FUNDED AND UNDER-RESOUCECED
Doctors in the UK lead busy lives – especially those who are at the start of their careers and haven’t made it into a consultancy position. There is also a feeling that they are not as well-resourced as they could be and some believe that PHE and the NHS require more funding to fulfil its full potential.

“It’s really difficult to have innovation within the NHS – they aren’t up for doing anything radically different.”
Midwife, Southampton

“I spend a lot of time speeding up referrals.”
GP, London

“By the time grants get accepted or rewarded it doesn’t feel exciting, but like more of a relief. The politics is irritating, and not being able to move quickly.”
Neurologist, London

“Things used to run effectively, but now the managers are passing the buck. I think there is a lot of wastage… this is why a lot of people are leaving.”
Nurse, London
Recent activism in the UK has gained many HCPs’ attention but is not always seen as a professionally credible way to act.

**SOME UK HCPS HAVE BEEN IMPRESSED BY RECENT ACTIVISM**

They noted the way that organisations like XR and BLM were protesting for change and many felt aligned with those causes.

**BUT IT’S HARD TO GET INVOLVED AND MAINTAIN CREDIBILITY**

Even though there is relatively little tension with government and authorities, getting involved in this kind of activism was not necessarily a straightforward choice.

They needed to be sure that nobody would interpret their behaviour as rebellious, critical, or diverging from the crowd in a way that threatens their professional standing.

“It doesn’t do your medical career much good if you get labelled a left-wing rebel.”
Paediatrician, London

“Writing and speaking plays to my strengths. I don’t want to become a cook or a clown.”
Respiratory Paediatrician, London
PART 4

UK PERCEPTIONS OF AIR POLLUTION
UK PERCEPTIONS OF AIR POLLUTION AT A GLANCE

31% UK HCPs consider air pollution to be a public health issue

Awareness of its presence and impacts is growing and it is increasingly on city leaders’ agendas. However, health issues such as obesity and smoking, and social issues such as poverty are regarded as more urgent.

They mains reasons they deprivoritise it are:

- **An incomplete understanding of the health impacts**
  - Only 65% HCPs would be confident explaining some of all of air pollution’s health impacts. Long term consequences are particularly misunderstood.

- **A feeling of insufficient evidence**
  - While HCPs intuitively believe air pollution is damaging, they don’t think there is good enough clinical data or local measurement. 79% want to see more evidence of the health impacts.

- **A rosy view of the air quality situation in the UK**
  - Air pollution in the UK is subtle and hidden. HCPs don’t know how to assess what is bad, and compare to countries where the situation is a lot more visible (e.g. China and India).

- **It’s an environmental problem, for higher powers to solve**
  - It’s regarded as a complex systemic challenge that requires environmental organisations and governments to solve. Their own skills are better used to advise patients (if a practical solution exists).

Results in a **LOWER** sense of issue motivation

62% have taken no action

- 33% have advised patients - seen as the most accessible role
- 14% sought to influence the policies/practices of where they work
- 13% researched or shared knowledge
Air pollution has a rising profile in the UK

It is increasingly on the agenda for city leaders, and HCPs themselves have started to notice its impacts

A FOCUS FOR URBAN LEADERSHIP

Some HCPs have noticed urban leaders making a point of improving air quality – for example, the ULEZ in London.

RISING LUNG ILLNESS IN NON-SMOKERS

Others are worried by their own observation that COPD and asthma are on the increase in non-smoking patients.

COVID IMPROVED AIR QUALITY

Covid lockdowns have shown that a reduction in traffic can result in a visceral improvement to air quality – an unexpected and pleasant surprise for many!

71% of the HCPs surveyed have personally seen significant health related consequences as a result of air pollution

50% of them have directly seen negative impacts on their patients health

“One patient was known to have bronchial asthma that was purely related to his locality. He also had hyper cholesterol and other issues with no smoking background.”

Cardiologist, London(?)
Despite this, HCPs do not see air pollution as a high priority issue for attention and action.

UK HCPs are willing to take action on health campaigns, and the chart on the right illustrates that over 70% have been inspired to take some kind of action in the past.

However, only a minority of HCPs would currently rate air pollution in their most important 6 public health issues.
And while it is recognised as damaging to health, there are a host of other issues that are seen as more important.

Issues such as obesity, an aging population and other chronic conditions (e.g. diabetes) create more immediate challenges for patients, so doctors will prioritise these over action on air pollution.

Of course the Covid-19 pandemic is also currently a priority for many HCPs – especially those in a respiratory specialism.

“Doctors have a very busy job and we’re not mandated to talk about it. We know it’s important to influence people’s habits, but... we need to prioritise immediate interventions.”

Respiratory Paediatrician, London
“Air pollution is like a spectre - you know it’s bad, but not why. It needs a big statement [to get people to care].”
Neurologist, London
The 4 most common reasons why the UK HCP community deprioritises air pollution are:

- An incomplete understanding of the health impacts
- A feeling of insufficient evidence
- A rosy view of the air quality situation in the UK
- It is seen as an environmental problem, for higher powers to solve
Only 65% HCPs would be confident explaining some or all of air pollution’s effects to patients and peers*

In particular, HCP’s struggle to bring to life the long term effects of air pollution for patients.

And confidence doesn’t always necessarily mean a full and comprehensive understanding of the impacts...

Most HCPs are able to relate air pollution to respiratory disease at a superficial level, but understanding of its connection to other serious health conditions is vague and inconsistent:

**MOST**
- Increase in the number of asthmatics – especially children
- Aggravation of disease for patients with existing respiratory conditions

**SOME**
- Acute conditions: dry eyes, coughing, discomfort
- Increase in chronic conditions such as COPD, sometimes lung cancer

**FEW**
- Long term serious impacts on cardiovascular health, lung development in children, and potential neurological impacts.
- Aggravation of Covid-19 symptoms

Health Communities Research UK
“I worry about air pollution’s impact on the lung growth of children… the issue is silenced and hard to make a direct link. It doesn’t have an impact on a wider audience. Kids won’t have any symptoms at a young age, it’s too long term [to raise awareness.]”

Respiratory specialist, London

However, there is some variance across different roles in their understanding and success in explaining the impacts:

**GPS:** Had the broadest range of understanding – appreciated that air pollution can be an aggravating factor for cardiovascular and childhood development health issues.

**PULMONOLOGISTS:** Had the most urgent understanding of the impact of air pollution due to their specialism.

**CARDIOLOGISTS:** Suspected air pollution as a contributing factor to cardiovascular disease, but did not consider impacts beyond this.

**NEUROLOGISTS:** Generally acknowledge that AP is bad, but did not connect it to their specialism.

**PAEDIATRICIANS:** Felt that they should know more about it, but generally did not connect AP to childhood illness except respiratory conditions.

**NURSES:** Tended to be focused on treating acute, immediate effects of illnesses, so were not focused on the impact of air pollution beyond aggravating respiratory issues.

**MIDWIVES:** Are already on the lookout to measure women’s CO2 levels, so have some understanding that bad air is bad for pregnancy outcomes, but are otherwise vague in their understanding.
Air pollution is hard to study - most research is done in cities - so people who get recruited live in that locality and it’s hard to study the effects. The risk factors are hard to assess but you need to have them, and you need a clean cut on different risk factors.”

Consultant Neurologist, London

While HCPs intuitively believe that air pollution is damaging, they don’t believe there is a good enough body of evidence around its health impacts.

They are looking for evidence of the impact of air pollution on:

**SCIENTIFIC AND CLINICAL STUDIES**
To give weight to the point of view that air pollution should be a focus

**THE LOCAL SITUATION**
More precise measurement of their local air quality to guide how worried they and their patients should be.

‘EVIDENCE’ CAN ALSO MEAN SENSING THE POPULAR CONSENSUS
Some HCPs said that the medical profession can be convinced by a groundswell of interest in a topic from traditional media and the general public. On some issues, this can be enough to create a feeling that something is well evidenced (even if they haven’t personally explored every study).
PERCEPTIONS OF AIR POLLUTION: UK
A FEELING OF INSUFFICIENT EVIDENCE

HCP’S ARE SEEKING THE FOLLOWING EVIDENCE TYPES:

79% MORE DATA / STUDIES
- Evidence of effects of air pollution / impact on health (31%)
- Studies/data/Evidence (22%)
- Stats (23%)

16% COMMUNICATION
- Accessible/clear info (13%)
- Public awareness (4%)
- Case studies (4%)
- Clinical trials (4%)

6% OTHER
- Steps that can be taken to mitigate/prevent damage / reduce pollution (6%)

HCPs believe the most appropriate providers of evidence are:
- Government agencies (60%)
- The mainstream media (58%)
- University/research organisations (55%)

The BBC, BMJ, NHS/PHE and The Lancet were also identified as the most trusted and used sources for all issues, beyond air pollution.
**PERCEPTIONS OF AIR POLLUTION: UK**

**A FEELING OF INSUFFICIENT EVIDENCE**

HCPs consistently stated that they need more consistent training on air pollution to prioritise it and take action:

“If we had been given guidance [on air pollution] we would bring it in, but we don’t know enough about it to be comfortable.”
Midwife, Midlands

“To engage the medical community we should be involving air pollution training in undergrad training – most don’t know about it.”
Cardiologist, London?

“I don’t know enough about it... I know that pollution isn’t helping their breathing, but not how much it contributes to the disease. We don’t have the real evidence and this should be addressed in teaching.”
Nurse, London
PERCEPTIONS OF AIR POLLUTION: UK

A ROSY VIEW OF THE AIR QUALITY SITUATION IN THE UK

IT’S HIDDEN AND SUBTLE

Air pollution in the UK tends to be invisible – it is rare for there to be smogs or visible signs of poor air quality. HCPs describe air pollution as too subtle and hidden.

Ironically, if the situation was worse and more visible then they would be more likely to prioritise the problem.

THEY DON’T KNOW WHAT COUNTS AS BAD

They are lacking a benchmark or a signal to highlight when air pollution levels are high enough for them to be concerned.

Some local CCGs will monitor air quality and send alerts, but this does not appear to be consistent, and individual surgeries will take their own judgement call on what messages they send out to their patients.

AND IT COULD ALWAYS BE WORSE…

UK HCPs are used to seeing images of foreign cities as the benchmarks for ‘bad air.’

There still remains a sentiment that the air pollution problem could be significantly worse (such as the images seen from India and China.)
“We think [air quality] is getting better from the days of the pea soupers that previous generations experienced – so there is complacency. It’s unseen.”

GP, London
PERCEPTIONS OF AIR POLLUTION: UK
AN ENVIRONMENTAL PROBLEM FOR HIGHER POWERS TO SOLVE

SEEN AS A COMPLEX SYSTEMIC CHALLENGE

It is believed to be caused primarily by car usage. Therefore collaboration between different stakeholders is required to solve it, primarily:

- Businesses and industry (e.g. the automotive sector)
- National government policy
- Local government interventions to improve infrastructure

NOISE CENTRES ON GOVT & ENVIRONMENTALISTS

Better-known air pollution-related initiatives exist outside of the medical sphere, from local governments and other campaigns:

- ULEZ in London (Sadiq Khan)
- Extinction Rebellion and the wider environmental movement

VACCUM OF LEADERSHIP WITHIN MEDICAL WORLD

At the same time there is a vacuum of leadership on AP within the medical community:

- HCPs receive some training on air pollution (especially pulmonologists) but it is not consistent across roles.
- There is limited official guidance from the NHS or PHE
- Professional associations don’t shout loudly about the issue

“What will make a big difference has to be a global decision to cut pollution. States have to join together. It’s like recycling – individually you can make a small impact.”

GP, London
**PERCEPTIONS OF AIR POLLUTION: UK**

As a result, UK HCPs don’t see themselves playing many of the roles to tackle air pollution

<table>
<thead>
<tr>
<th>ACTION TAKEN TO TACKLE AIR POLLUTION OR TO IMPROVE AIR QUALITY</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advised patient groups</td>
<td>33%</td>
</tr>
<tr>
<td>Worry but taken no action</td>
<td>32%</td>
</tr>
<tr>
<td>NOT undertaken any action</td>
<td>30%</td>
</tr>
<tr>
<td>Sought to influence policies and practices of where I work</td>
<td>14%</td>
</tr>
<tr>
<td>Researched or shared knowledge with others</td>
<td>13%</td>
</tr>
<tr>
<td>Supported an NGO or Charity initiative</td>
<td>5%</td>
</tr>
<tr>
<td>Sought to influence policies of government/regulatory/commercial organisations</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
</tbody>
</table>

**“I can only give the educational aspect to patients. The rest relies on action from the environment, government, or local body.”**

Cardiologist, London
PERCEPTIONS OF AIR POLLUTION: UK

And even when they act, UK HCPs struggle to provide their patients with achievable solutions and advice

As far as HCPs are concerned, there are only a few different solutions that they can suggest to patients to manage their exposure to air pollution:

- Avoid travelling in rush hour
- Avoid busy roads
- Stay inside on days where the air is especially bad
- Move home to a location away from busy roads or with better overall air quality
- Use their car less to contribute to overall improved air quality

All of the above are seen as impractical (and sometimes unreasonable) and HCPs are conscious that a lot of poorer patients will not have the means to achieve them.

As a result of the lack of practical solutions, HCPs lack confidence in what they are supposed to recommend to patients and will therefore often leave AP out of their messaging, or de-prioritise it in favour of other advice and issues.

“Part of my job is to absolutely not make my patients feel guilty. A lot of my families are stuck in deprivation – priced out of private rental – I see it as my role not to make them feel bad about things they can’t control.”

Paediatrician, London
PERCEPTIONS OF AIR POLLUTION: UK

However as individual citizens they do feel motivated to care for the environment, including air quality

GROWING ENVIRONMENTAL CONSCIOUSNESS

The wider UK population is becoming more engaged with environmental issues such as climate change. Recent movements such as Extinction Rebellion, but also long term environmental advocates such as David Attenborough have made an impression on HCPs.

KEEN TO SET A GOOD ENVIRONMENTAL EXAMPLE

Within a growing culture of caring for the environment HCPs are happy (and keen) to demonstrating environmentally friendly behaviours that also reduce harmful emissions. For example: cycling and walking more.

They don’t always see this as connected to their medical role, but as something that they should be doing anyway.

“Climate change is a big worry... I love watching David Attenborough and I feel the scientists are the ones doing all the research...We should be looking at hospital wastage and the impact on air pollution.”

Respiratory Nurse, London,
PART 5

SUMMARY OF MOTIVATORS AND BARRIERS TO HCP ACTION ON AIR POLLUTION
## SUMMARY OF HCP MOTIVATORS AND BARRIERS TO ACTION ON AIR POLLUTION

Our engagements across our five countries have revealed several common motivators and barriers to acting on air pollution:

### BARRIERS

- **Competing stressors**
  - “My headspace is occupied with higher priority issues.”
  - “I’m too junior to make an impact.”

- **Maintaining their standing**
  - “Getting action wrong could hurt my reputation.”
  - “It’s not in my official training, guidelines or duties.”

- **Overcoming helplessness**
  - “It’s a fight to get individuals to care.”
  - “There is nothing that my patients can do.”
  - “The government won’t listen or act.”

### MOTIVATORS

- **Giving something tangible**
  - “I want action to enhance the lives of my patients / community in a meaningful and tangible way”

- **Feeling part of something**
  - “I want to work with and contribute towards my community.”

- **Living out core HCP values and identity**
  - “I want my action to help fulfil my duties as a health professional.”
  - “I want to make good use of my unique skills”

- **Gaining recognition**
  - “I want my action to be rewarded with high status recognition”

- **(Mis)understanding the problem**
  - “This is a problem for other experts.”
  - “There isn’t enough evidence of the health impacts.”

- **Lack of inspiration on action they could take**
  - “It’s unclear what kind of action I could take / role I could play”
  - “There is no high status leadership on the issue.”
THANK YOU
## APPENDIX

### SAMPLE & METHODOLOGY

**QUAL**

**1hr in-depth interviews**

<table>
<thead>
<tr>
<th>HCP Specialism</th>
<th>No. UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist (GPs or Family Practice doctors)</td>
<td>3</td>
</tr>
<tr>
<td>Specialists: Lung / Respiratory</td>
<td>2</td>
</tr>
<tr>
<td>Specialists: Paediatricians</td>
<td>2</td>
</tr>
<tr>
<td>Specialists: Cardiologists</td>
<td>2</td>
</tr>
<tr>
<td>Specialists: Neurologists</td>
<td>2</td>
</tr>
<tr>
<td>Nurses</td>
<td>3</td>
</tr>
<tr>
<td>Midwives</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

**QUANT**

**15 minute survey**

<table>
<thead>
<tr>
<th>HCP Specialism</th>
<th>No. UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist (GPs or Family Practice doctors)</td>
<td>40</td>
</tr>
<tr>
<td>Specialists: Lung / Respiratory</td>
<td>25</td>
</tr>
<tr>
<td>Specialists: Paediatricians</td>
<td>25</td>
</tr>
<tr>
<td>Specialists: Cardiologists</td>
<td>25</td>
</tr>
<tr>
<td>Specialists: Neurologists</td>
<td>20</td>
</tr>
<tr>
<td>Nurses</td>
<td>40</td>
</tr>
<tr>
<td>Midwives</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
</tr>
</tbody>
</table>