Research for all? An analysis of clinical participation in research

This report is based on a survey of 1,137 RCP members and fellows carried out in January 2020, prior to the UK response to the COVID-19 pandemic. The survey asks about their engagement with medical research, and was adapted from a similar survey carried out in 2015.¹

Key findings

▶ Physicians have a very positive attitude towards research, with 57% wanting to be more involved and 80% saying they participated in research because it improves patient care.

▶ Relatively little progress has been made in the last 5 years to overcome the barriers to more participation. A lack of time is still the biggest obstacle to more research participation, cited by over half (53%) of respondents, with funding, a perceived lack of skills and supportive culture in their organisation reported as other key challenges.

▶ There appears to be unequal access to research opportunities. Women and physicians in rural hospitals participate in research in disproportionately lower numbers. This is not for lack of interest: over a third (35%) of women not participating would like to become involved in research and 40% of those in rural hospitals not research-active would like to be, 12% higher than reported respondents in city hospitals.

Next steps

▶ Further work to investigate these inequalities and to understand the barriers is urgently needed. NHS trusts should then take clear steps to tackle this unequal access.

▶ A stronger commitment at board level to supporting research and development (R&D) departments would help, as would more time in job plans and better publicised research-focused mentoring schemes. R&D departments that are more visible could help address the daunting nature of research and support clinicians by explaining the simple ways to become involved – from recruiting patients to quality improvement.

▶ Targeted funding is crucial to encouraging and supporting more research activity in rural areas, which are often the areas with highest disease burden but lowest research activity. NHS England should incentivise research engagement in rural trusts with research-dependent funding, while the National Institute for Health Research (NIHR) should specifically target rural areas for support to deliver research.
How do RCP members feel about research and what are they involved in?

Physicians have a very positive attitude towards research, with over half (57%) wanting to be involved or more involved, and 80% saying they participated in research because it improves patient care.

Although only 7% of overall respondents, geriatricians represented 31% of those reporting not being interested in research. However it is worth noting that they were also top of the specialty list among those citing ‘interested but not involved’, along with acute internal medicine (both 9%).

This mixed picture is likely to be due to historical underfunding and lack of support for academic training in geriatric medicine. As a result, the consultant workforce may not understand the importance of research to developing healthcare services for older people, or how to support their trainees to become involved. Given our ageing population, rapid investment in and prioritisation of training in academic geriatric medicine is needed. We will work with the British Geriatrics Society to consider what is required and how it can be secured.

Fig 1. Are you interested in becoming involved or more involved in research?

Fig 2. Have you been involved in any of the following activities in the last 2 years? (multi choice)

* (eg to study the causes or development of diseases or to evaluate aspects of clinical practice)
** (eg to study the effectiveness or safety of a new medicine/device/diagnostic)

The most popular reasons for engaging with research were intellectual stimulation (83%) and improving patient care (80%), followed by the ability to develop a wider set of skills, which was cited by three-quarters (75%) of respondents (Fig 3).
Fig 3. What aspects of research do you find appealing? (multi choice)

- It is intellectually stimulating: 83%
- I feel I am contributing to my field and improving care for patients: 80%
- It brings more variety to my job and makes it more enjoyable: 78%
- It allows me to develop a wider set of skills: 75%
- I can pursue a special interest more deeply than my clinical work alone would allow: 61%
- I feel it makes me a better doctor: 59%
- It enhances my CV or publications record: 47%
- It is a way to distinguish myself amongst my peers or cohort: 41%
- It allows me to build relationships with my colleagues: 40%
- It will help me to get onto the career path I want: 22%
- It is recognised and rewarded by my employer: 14%
- It is something many of my peers do: 6%
- It is financially rewarding: 2%

Women and research

Women were much more likely than men to report not participating in research (a 12% gap), alongside a strong desire to become more involved (Figs 4 and 5). This indicates there is an untapped research potential.

The reasons for this are complex but may relate to the impact of less-than-full-time (LTFT) working and women’s own perceived lack of knowledge or skills (Fig 14).

There is a strong correlation between LTFT working and lower formal employment in research roles – an 11% gap compared with full-time working. Coupled with the fact that women were 17% more likely than men to be working LTFT, this may go some way to explaining why 8% fewer women than men reported being formally employed in research roles.

The impact of LTFT working only goes some way to explaining the difference though. This is because LTFT workers overall are noticeably more likely to be involved in research but not formally employed in this role (an 8% difference compared with full-time workers). A gender gap in participation also exists here, however, with 35% of women involved in research but not formally employed, compared with 39% of men.

The barriers self-identified by respondents may explain why participation of women is lower. One of the only areas where women were more likely than men to report a barrier was in ‘lack of knowledge or skills’ – suggesting the participation gap may be influenced by women feeling less able to put themselves forward to take part in research. The gap was only 4% here though, so more work is needed to better understand women’s significantly lower participation in clinical research.

Two-thirds (67%) of physicians surveyed said having dedicated time for research would make them more likely to apply for a role.

Women are 12% less likely to participate in clinical research than men, despite over a third (35%) of women saying they want to become involved in research.

Physicians working in rural hospitals are 18% less likely to participate in clinical research than those in cities, although 40% of them say they do want to become involved in research.
Almost a third (29%) of women reported working LTFT compared with 12% of men (Fig 6). Those working LTFT were overall more likely to be involved in non-research roles (an 8% difference). LTFT respondents were 11% less likely to be formally employed in a research role (Fig 7).

**Less-than-full-time working**
Research in rural hospitals

Just 7% of respondents from rural hospitals were formally employed in a research role, compared with 20% in urban hospitals (Fig 8). However, 40% of physicians in rural hospitals reported an interest in research although they were not involved, compared with 28% from urban hospitals. This again appears to represent a notable untapped research potential.

Research among BAME people

As with women and those working in rural areas, physicians from black, Asian and minority ethnic (BAME) backgrounds appeared to struggle to access research in specific ways. There was a much smaller difference in overall participation (5% lower) for BAME respondents (Fig 9), compared with the 12% lower participation of women vs men. The 18% difference for those in rural vs city hospitals was also much greater. There was, however, a 13% gap between those who were formally employed in research roles, with 16% of BAME respondents reporting this compared with 29% of white respondents.
Although time is still by far the most important barrier to engagement with research, time was a less important barrier for BAME physicians than white physicians (Fig 10). BAME respondents reported culture in trusts and a perceived lack of skills as more significant barriers than white respondents did.

**New consultants**

One of the most important areas to focus on is supporting the next generation of early career researchers. One-hundred and fifty-six respondents (14%) were new consultants – those with less than 5 years’ experience. Encouragingly, new consultants were particularly keen to become involved in research (Fig 11). Three-quarters (75%) reported wanting to become more involved in research, compared with an average of 57% for all respondents.
Worryingly though, 82% of new consultants were not aware of research-focused mentoring schemes, compared with 66% of total respondents (Fig 12). New consultants who had accessed mentorship found the schemes to be very beneficial (84%).

Inequality of access to research and skills appears to exist at this early career stage for women, with divergence potentially occurring during training. Women who responded were 13% less likely to have reported having a formal academic training programme (20% for women vs 33% of men), and 10% less likely to have completed a higher degree (52% for women vs 62% for men). They were also less likely to have university-funded time as a new consultant (5% vs 13% for women compared with men).
What barriers stop physicians engaging with research?

Lack of time to do research was the most common barrier to engagement with research across all demographic groups, cited by 53% of respondents (Fig 13). Over two-thirds (67%) of respondents also said that having dedicated time for research would make them more likely to apply for a role.

However, women (Fig 14) and people from BAME backgrounds (Fig 10) were more likely to cite lack of knowledge or skills as a barrier to their engagement with research, suggesting they may feel less confident or find it harder to access appropriate training.

A lack of research-focused mentoring scheme, or awareness of such a scheme, also appeared to be a barrier to research involvement. Two-thirds (66%) of respondents were not aware of any mentoring scheme (Fig 15), although for those who had used a mentoring scheme, 76% found it beneficial (Fig 16).
Fig 15. Are you aware of any access to focused mentoring?

- No: 66%
- Not applicable: 10%
- Yes: 16%
- (blank): 8%

Fig 16. How beneficial was your experience of mentoring?

- Beneficial: 40%
- Extremely beneficial: 36%
- Neither beneficial nor not beneficial: 8%
Action plan to increase research engagement and tackle inequity of access

The government, NHS trusts, research funders and royal colleges need to work together to establish the scale of the issue of unequal access to research identified by this survey, with particular attention to the participation of women and physicians working in rural hospitals.

The response to the COVID-19 pandemic has seen many more clinicians positively engaging with clinical research. This enthusiasm needs to be harnessed so that more continue to participate in research in the long term, and that patient care is boosted across the NHS.

The following actions to address research culture, funding, time and skills should be prioritised.

Research culture and funding

- Many physicians, particularly those working LTFT, are daunted by the prospect of doing research, feeling like they do not have the time or skills to do so. NHS trusts, royal colleges and research organisations must do more to highlight the simple ways that all clinicians can become research active, whether that’s recruiting patients, doing quality improvement (QI), or as part of ‘team science’ involving two or more research groups.

- With backing at board level, NHS trusts should support a highly visible R&D function in their organisation that coordinates high-quality research and clearly explains the different ways clinicians can become involved in research and what support is available.

- NIHR research funding must actively target those regions where less research activity is taking place, such as lower proportions of chief or principal investigators, especially targeting rural areas and where burden of disease is high.

- Rural trusts face higher costs, as highlighted by the Nuffield Trust, and more difficulty recruiting staff than urban trusts, often leading to less research activity. NHS England should tackle this discrepancy by incentivising research engagement in rural trusts with research-dependent funding. This in turn will make it easier for trusts to recruit and retain high-quality clinical staff. In Wales for example, the number of people applying for posts increased from one applicant to two posts to five applicants per post when an academic component was added.

- To ensure that learning and best practice on how to increase research activity in the NHS is shared, R&D departments and royal colleges should work collaboratively to disseminate examples of good practice.

Time and skills

- NHS trusts need to explore viable ways to allow clinicians more time to participate in patient-facing research through job planning, whether this is on an individual or team basis. This should particularly help those working LTFT who may be forced to undertake research activity in their own time due to other commitments.

- NHS trusts must do more to publicise research-focused mentoring schemes, especially to those underrepresented in research such as women and people from BAME backgrounds. The mentoring schemes offered to clinical academics by the Academy of Medical Sciences provide an excellent model that should be replicated to support physicians to become research active.

- To support those who feel they do not have the knowledge or skills to participate in research, royal colleges, education bodies, NIHR and trusts should work to provide alternative routes into research – for example through credentialing schemes.
Methodology and demographics

A total of 1,137 respondents completed this survey, conducted between January and February 2020. The survey was open to RCP members and fellows of all grades, although most respondents (63%) were consultants. 90% of respondents were based in England, with 6% in Wales and 1% in both Northern Ireland and Scotland. 58% of respondents were men and 41% were women (1% preferred not to say). This is comparable with the gender balance from our 2015 ‘Research for all’ survey and reflects the findings of the most recent workforce census which found that 63% of the consultant workforce were men and 37% were women.

People from white British, Irish or other white backgrounds made up 65% of respondents, with 30% from BAME backgrounds.

References

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