

# HEE Genomics Education Programme

## Genomics awareness survey report

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# Genomics awareness survey report summary

## Introduction

Each March the Genomics Education Programme (GEP) hosts its annual #GenomicsConversation week of action campaign, with the aim of encouraging health professionals to learn more about genomics. Previous campaigns have targeted specific areas of the workforce successfully. For the 2021 campaign the GEP is intending on engaging with a wider audience of healthcare professionals who don't know about genomics and those not already engaged with the Genomics Education Programme, in particular such individuals from the nursing, midwifery and health visitor workforce.

To engage with our target audience for the #GenomicsConversation 2021 campaign a survey was developed to gain an insight into their understanding of genomics. The results of this survey will be used to inform the messages and activities of the #GenomicsConversation 2021 campaign.

The survey was distributed to the nursing, midwifery and health visitor workforce via email and social media channels. Although, targeted at certain workforce groups, the survey could be completed by anyone and it was available from 20th August 2020 to 21st September 2020. In this time there were 341 responses.

## Key takeaway points

The majority of respondents do not feel that they have a good understanding of genomics.

Across all respondents:

- There are three main ways in which people developed an interest in genomics (if there is an existing interest): education (school or university), work, or for family/personal reasons (e.g. their own illness).
- A range of resources, including webinars, online courses, videos, seminars, workshops, and face-to-face teaching are viewed as useful for developing knowledge further.
- The majority think that (some or all of) their colleagues could benefit from a better understanding of genomics.

Of those who do feel they have a good understanding of genomics:

- Many respondents had come across genomics in their current role.
- Very few do not see genomics as part of their future career plans, although some “don't know”.

Of those who do not feel they have a good understanding of genomics:

- The most common reason for not having a good understanding of genomics is that it is not seen as relevant to their role, closely followed by lack of time to learn something new.
- Easily the biggest barrier to learning more about genomics is time, followed by a perceived level of difficulty and lack of relevance to current roles.

- What would encourage this group to find out more about genomics is “If I had more study/CPD time”, followed by “If it became part of my role” and “My line manager asked me to/part of my CPD”.
- Preferences for methods of learning more about genomics (if all barriers were removed) were fairly evenly spread, with the majority of respondents selecting multiple options.
- The most popular communication channels for finding out more information about genomics were “Education/training lead in my hospital/trust/practice”, followed by “Email/newsletters”, “Word of mouth recommendation from colleague or friends” and “Conferences and specialist events”. Social media channels were the least likely to be selected by respondents.
- Many respondents had not come across genomics in their current role.
- A larger proportion of individuals who do not feel that they have a good understanding of genomics “don’t know” or do not see genomics as part of their future career plans.

Workplace communications (e.g. intranet and email) are viewed as the most effective ways of reaching colleagues to engage them in genomics education. Posters are also considered useful while social media is not considered effective by as many respondents.

Across all respondents 108 gave their email address.

- Of these there are 78 from the nurses, midwives and associated roles group.
- There are 10 respondents that would benefit from a tailored email. There are many others that will benefit from the general email, in particular those who say something along the lines of “I am interested, but I don’t know where to get information from”.

## Recommendations

Based on the responses to the survey there are four key areas to be addressed:

- What is genomics, for those who do not know what it is.
- How genomics is relevant in healthcare, in general and specifically in particular roles, for those who do not see it as relevant.
- Outline the short learning opportunities are available, and specify what “short” means, for those who feel that they don’t have the time to learn.
- Promote introductory/beginners level learning that has been undertaken by others at a similar level, for those that think it is too difficult.

A wide range of resources, including webinars, online courses, videos, seminars, workshops, and face-to-face teaching are viewed as useful for developing knowledge further. To be as accessible to as many learners as possible, it is recommended to continue to use a wide range of education methods and where possible to expand on the types of resources available, for example webinars.

It would also help to show how GEP resources can be used as CPPD.

Recommended communication methods/strategies:

- Workplace communications (e.g. intranet and email) are viewed as the most effective ways of reaching colleagues to engage them in genomics education.
- Posters are also considered useful.
- Social media is not considered as effective by many respondents, this is not to say it should not be used, but it should not be the main focus of communication strategies.

## Results in detail

### 1. The respondents

There were 341 responses, from a range of healthcare professionals.

Over 50% (n=175, 51.3%) of responses are from individuals in the nursing, midwifery and associated roles workforce group (Figure 1).

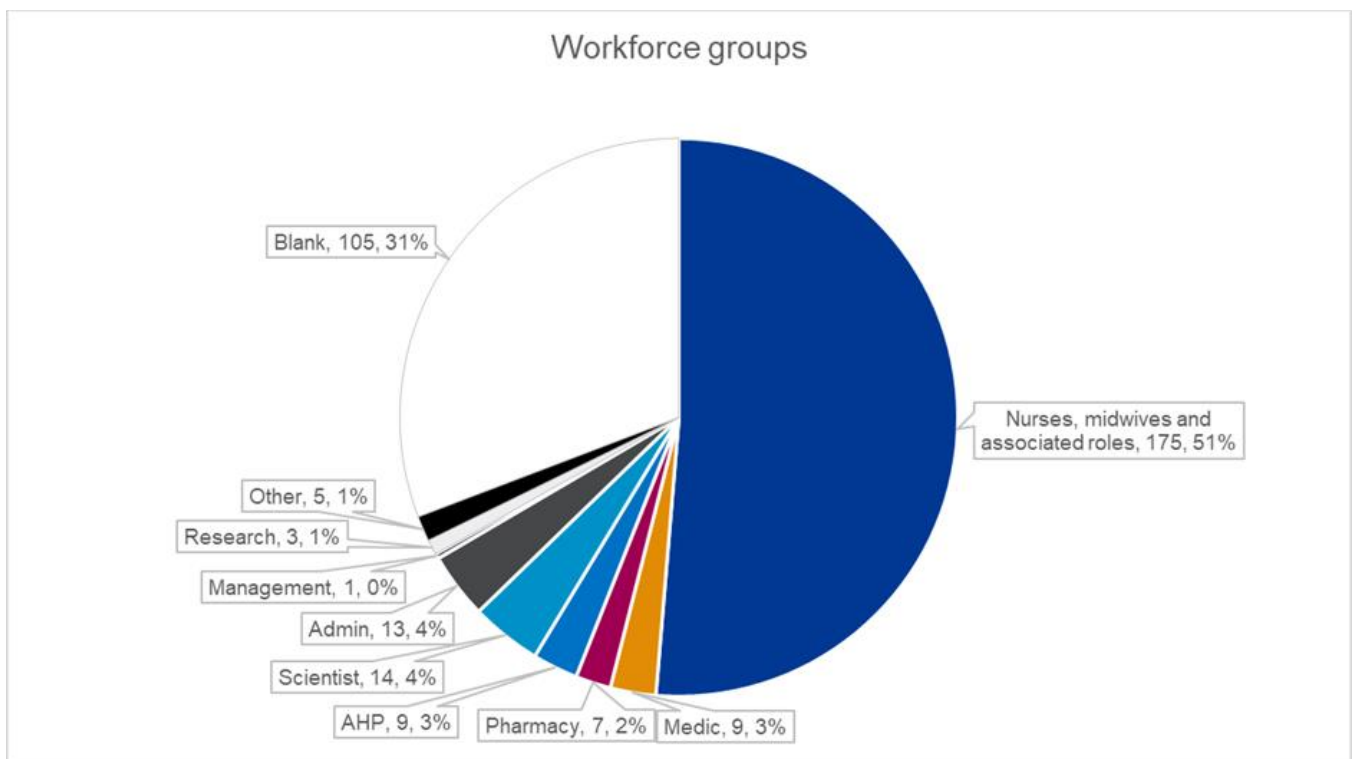


Figure 1. Pie chart showing the number and percentage of respondents in each workforce group. Nurses, midwives and associated roles n=175 (51.3%), medics n=9 (2.6%), pharmacy n=7 (2.1%), allied health professionals (AHP) n=9 (2.6%), scientists n=14 (4.1%), administrators n=13 (3.8%), managers n=1 (0.3%), researchers n=3 (0.9%), others n=5 (1.5%), blanks n=105 (30.8%).

Of the responses from nurses, midwives and associated roles, the majority of respondents (80.0%, n=140) were nurses (Figure 2).

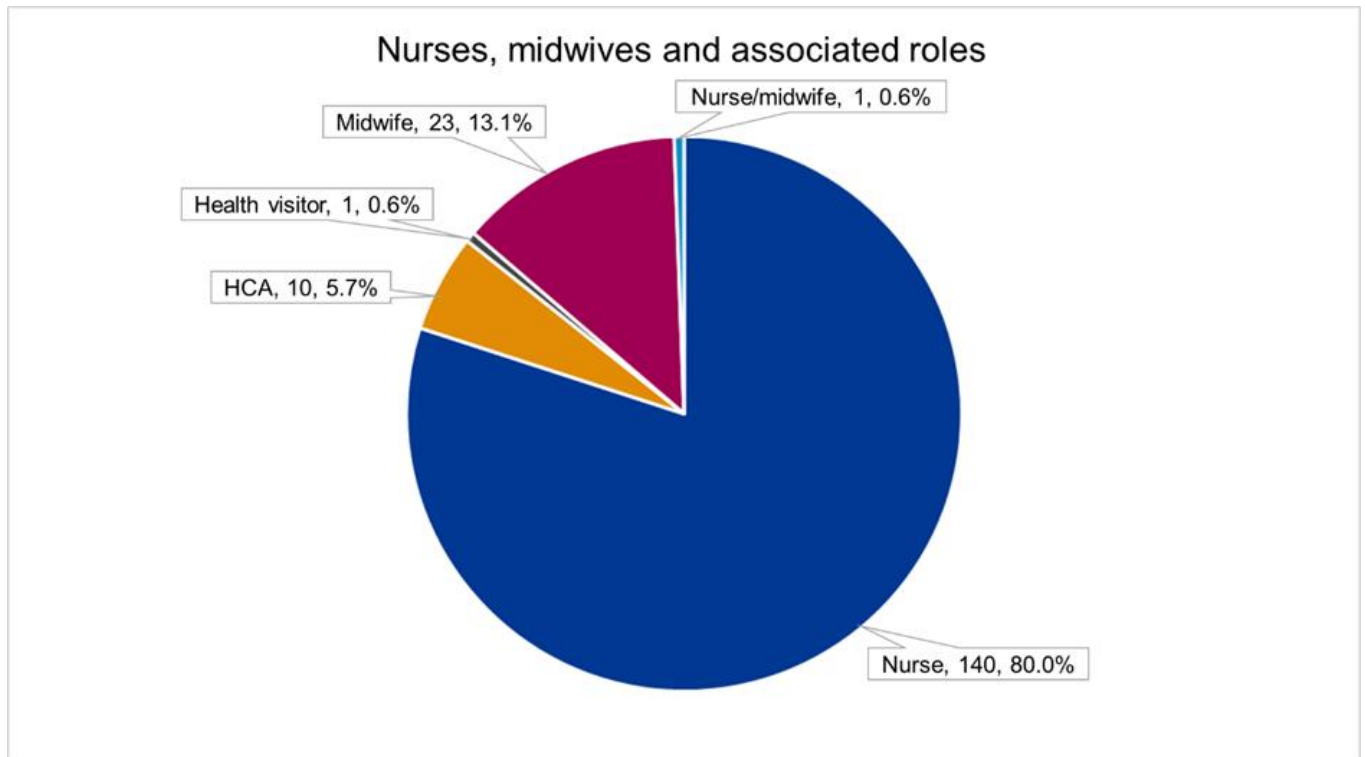


Figure 2. Pie chart showing the type, number and percentage of respondents from the nurses, midwives and associated roles group. Nurses n=140 (80.0%), healthcare assistants (HCA) n=10 (5.7%), health visitor n=1 (0.6%), midwives n=23 (13.1%), nurse/midwife n=1 (0.6%).

## 2. Do you feel you have a good understanding of genomics?

Across all the respondents, 87 (25.5%) responded Yes and 254 (74.5%) responded No.

Within the Nurses, midwives and associated roles group this is broadly similar, with 40 (22.9%) responding Yes and 132 (77.1%) responding No.

## 3. Those who feel they have a good understanding of genomics

### How did your interest in genomics develop?

There are three main ways in which people developed an interest in genomics – education (school or university), work, or for family/personal reasons (e.g. their own illness). Some mention multiple ways, and there are some that don't really fit in a clear category so have been classified as "others", for example, "Just hearing about the development of knowledge in this area has made me interested."

- Nurses (n=32)
  - 4 through education
  - 18 through work
  - 4 through family/personal reasons
  - 5 others
  - 1 through education and work
- Midwives (n=6)
  - 2 through education
  - 2 through work
  - 2 others
- HCA (n=2)
  - 1 through education and family/personal reasons
  - 1 through work
- Medics (n=3)
  - 1 through education
  - 1 through work
  - 1 through work and education
- Pharmacy (n=3)
  - 2 through work
  - 1 through family/personal reasons
- AHP (n=3)
  - 1 through work
  - 2 others
- Scientist (n=7)
  - 2 through education
  - 2 through work
  - 2 through family/personal reasons
  - 1 through education and work
- Admin (n=5)
  - 1 through education
  - 3 through work
  - 1 other
- Management (n=1)
  - 1 through work
- Research (n=2)
  - 2 through education
- Others (n=2)
  - 1 through education
  - 1 through work
- Blank (n=21)
  - 6 through education
  - 8 through work
  - 1 through family/personal reasons
  - 3 others
  - 2 through education and work
  - 1 through education and family/personal reasons.

### What would help you develop your knowledge further?

- Nurses
  - Webinars – 10 (2 specified interactive)
  - Online courses – 12 (1 specified mid-level, 1 "if pertinent to my current work")
  - Short courses – 7 (not specified if online or face-to-face)

- Taught courses – 5 (1 specified mid-level, 1 at “conference for research”, 1 “accessing masters modules”)
- CPPD – 2
- Any/all of above (online courses/ CPPD modules, shorter taught courses, expert webinars.....) – 5
- “international conferences”
- “Bite size videos excellent resource on YouTube”
- “The future learn module - 'Demystifying targeted cancer treatments' is particularly useful, and should be made more accessible to staff.”
- “More postgraduate opportunities for research nurses to pursue research related to genomics medicine”
- “more 'every day' discussion about genomics, part of regular conversations, regular bite size updates”
- “Materials to use when teaching junior colleagues would be helpful, as would signposting to websites. Regular updates about progress in this field, such as a news letter.”
- “Only interested in what is directly relevant to my role. know enough to understand what I have encountered professionally so far”
- Midwives
  - Online courses – 4
  - Taught courses – 1 (we already have online courses and webinars up to our eyeballs)
  - Videos – 1
  - Seminars and workshops – 1
  - Any/all of above (online courses/ CPPD modules, shorter taught courses, expert webinars.....) – 1
- HCA
  - “CPPD modules, online courses and shorter taught courses all will help”
  - Shorter taught courses
- Medics
  - Formal teaching – 1
  - All of the above – 2 (1 previously found face-to-face courses beneficial)
- Pharmacy
  - “As many different types of teaching methods as possible- for ease of access.”
  - “Webinars and short taught courses”
  - “talks and online courses”
- AHP
  - Online courses – 2
  - CPPD modules/expert webinars – 1
  - “Research opportunities tied in with clinical practice”
- Scientist
  - Online courses – 5
  - Webinars – 3
  - Taught courses – 3
- Admin
  - Online courses – 4
  - Webinars – 2
- Management
  - “Online resources including videos and webinars.”
- Research



- All of the above
  - “seminars, shorter taught courses and online courses”
- Others
  - All of the above
  - “Online courses and taught sessions”
- Blank
  - Webinars – 4
  - Online courses – 11
  - Short courses – 1 (not specified if online or face-to-face)
  - Taught courses – 2
  - CPPD – 3
  - Any/all of above (online courses/ CPPD modules, shorter taught courses, expert webinars.....) – 4
  - “More interaction with geneticists?”
  - “videos with the most common Q&As, interesting articles/reading materials”

### **Have you come across genomics in your current role?**

Across all respondents who feel they have a good understanding of genomics, 55 (63.2%) responded Yes and 32 (36.8%) responded No.

Within the Nurses, midwives and associated roles group, this is broadly similar with 27 (67.5%) responding Yes and 13 (32.5%) responding No.

### **Do you see genomics as part of your future career plans?**

Across all respondents who feel they have a good understanding of genomics, 35 (63.6%) responded Yes, 5 (9.1%) responded No, and 15 (27.3%) responded Don't know.

Of those who said No, the reasons were:

- “I'm quite old now and my career is unlikely to change” (no workforce group identified)
- “Past retirement age...” (Nurse)
- “It is a minor part of the role, one gene is involved in an allergic reaction to one drug we use regularly” (nurse)
- “I'm not a scientist” (midwife)
- “Genomics is one of many service areas I support in planning and delivery.” (management)

Within the Nurses, midwives and associated roles group, this is broadly similar with 15 (55.6%) responding Yes, 3 (11.1%) responding No, and 9 (33.3%) responding Don't know.

**Do you think your colleagues could benefit from a better understanding of genomics?**

Across all respondents who feel they have a good understanding of genomics, 46 (52.9%) responded Yes all of them, 33 (37.9%) responded Yes but only some of them, and 8 (9.2%) responded No.

Within the Nurses, midwives and associated roles group, this is broadly similar with 24 (60.0%) responded Yes all of them, 12 (30.0%) responded Yes but only some of them, and 4 (10.0%) responded No.

**4. Those who feel they do not have a good understanding of genomics**

**What is the reason that you feel you do not have a good understanding of genomics?**

(Options: "I feel that it is too challenging a subject to learn about", "I don't have enough time to learn anything new", "It is not something that is of interest to me", "It is not relevant to my role", "It is not relevant to my role", "Other")

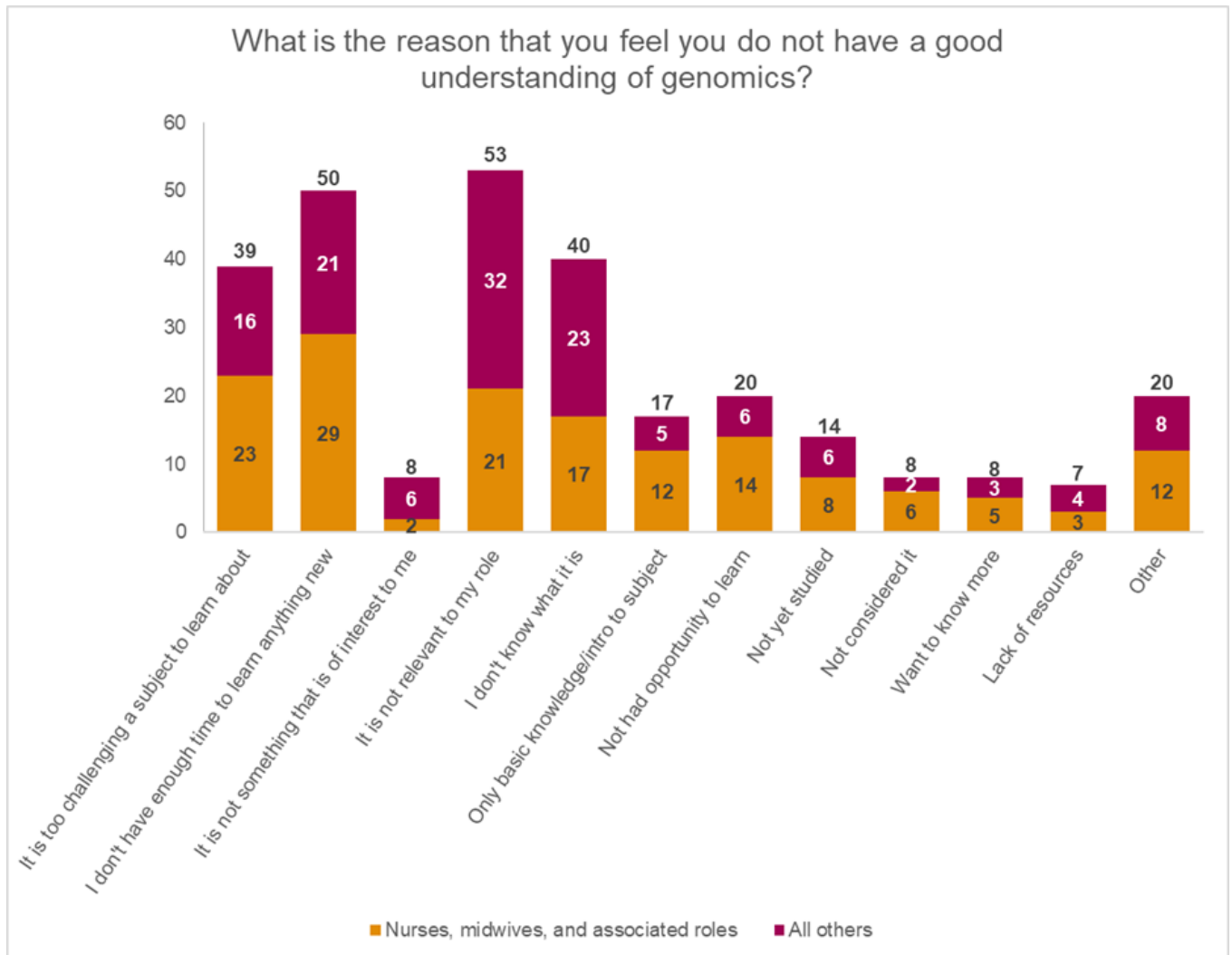


Figure 3. Bar chart showing the reasons that respondents do not feel that they have a good understanding of genomics.

Across all respondents who feel they do not have a good understanding of genomics, the most common reason for not having a good understanding of genomics is that it is not seen as relevant to their role (n=53), closely followed by lack of time to learn something new (n=50) (Figure 3). Respondents could select multiple options, there were some overlaps not captured in the figure. The most common (n=7) pair of responses selected by respondents was that of “I feel that it is too challenging a subject to learn about” and “I don’t have enough time to learn anything new”.

Other pairs of responses selected by more than one respondent were:

- “It is not relevant to my role” and “It is not something that is of interest to me” n=4
- “It is not relevant to my role” and “I don’t know what it is” n=3
- “It is not relevant to my role” and “I feel that it is too challenging a subject to learn about” n=2
- “It is not relevant to my role” and “I don’t have enough time to learn anything new” n=2
- “I don’t have enough time to learn anything new” and “Not had opportunity to learn” n=2
- “Only basic knowledge/intro to subject” and “Want to know more” n=2

The responses from the Nurses, midwives and associated roles group were slightly different from the respondents overall, with the most common reason is a lack of time to learn something new (n=29), followed by feeling that it is too challenging a subject to learn about (n=23), and then that it is not seen as relevant to their role (n=21).

### **Which of the below would you class as a barrier to learning more about genomics?**

(Options: “I don’t have time”, “It’s not relevant to me and my role”, “It looks too difficult for me”, “Other”)

Across all respondents who feel they do not have a good understanding of genomics, easily the biggest barrier to learning more about genomics is time (n=109), followed by a perceived lack of relevance (n=55) and it seeming too difficult (n=50) (Figure 4). Respondents could select multiple options, there were some overlaps not captured in the figure below. The most common (n=16) pair of responses selected by respondents was that of “I don’t have time” and “It’s not relevant to me and my role”. Other pairs of responses selected by more than one respondent were:

- “It looks too difficult for me” and “I don’t have time” n=14
- “It looks too difficult for me” and “It’s not relevant to me and my role” n=6
- “Availability of learning/courses” and “I don’t have time” n=2
- “Availability of learning/courses” and “It looks too difficult for me” n=2
- “I don’t have time” and “Not sure of relevance” n=2

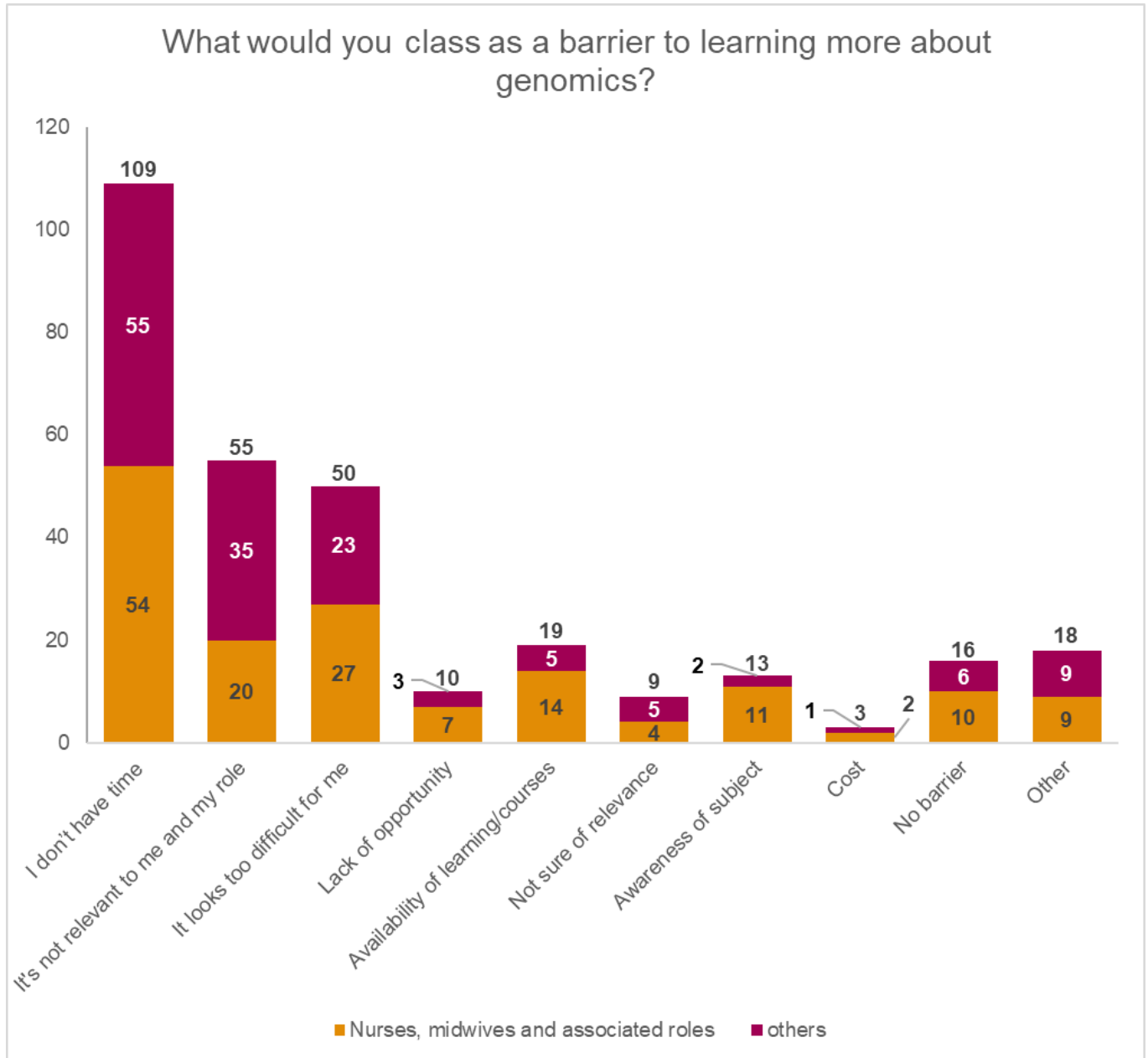


Figure 4. Bar chart showing perceived barriers to respondents learning more about genomics.

The responses from the Nurses, midwives and associated roles group were slightly different from the respondents overall: the biggest barrier is still time (n=54), followed by it seeming too difficult to learn about (n=27), and then that it is not seen as relevant to them or their role (n=20).

**What would encourage you to find out more about genomics?**

(Options: “My line manager asked me to/part of my CPD”, “If it became part of my role”, “If I had more study/CPD time”, “Recommendation from a friend or colleague”, “Other”)

Across all respondents who feel they do not have a good understanding of genomics, the most common response to this question is “If I had more study/CPD time” (n=131), followed by “If it

became part of my role” (n=119) and “My line manager asked me to/part of my CPD” (n=97) (Figure 5).

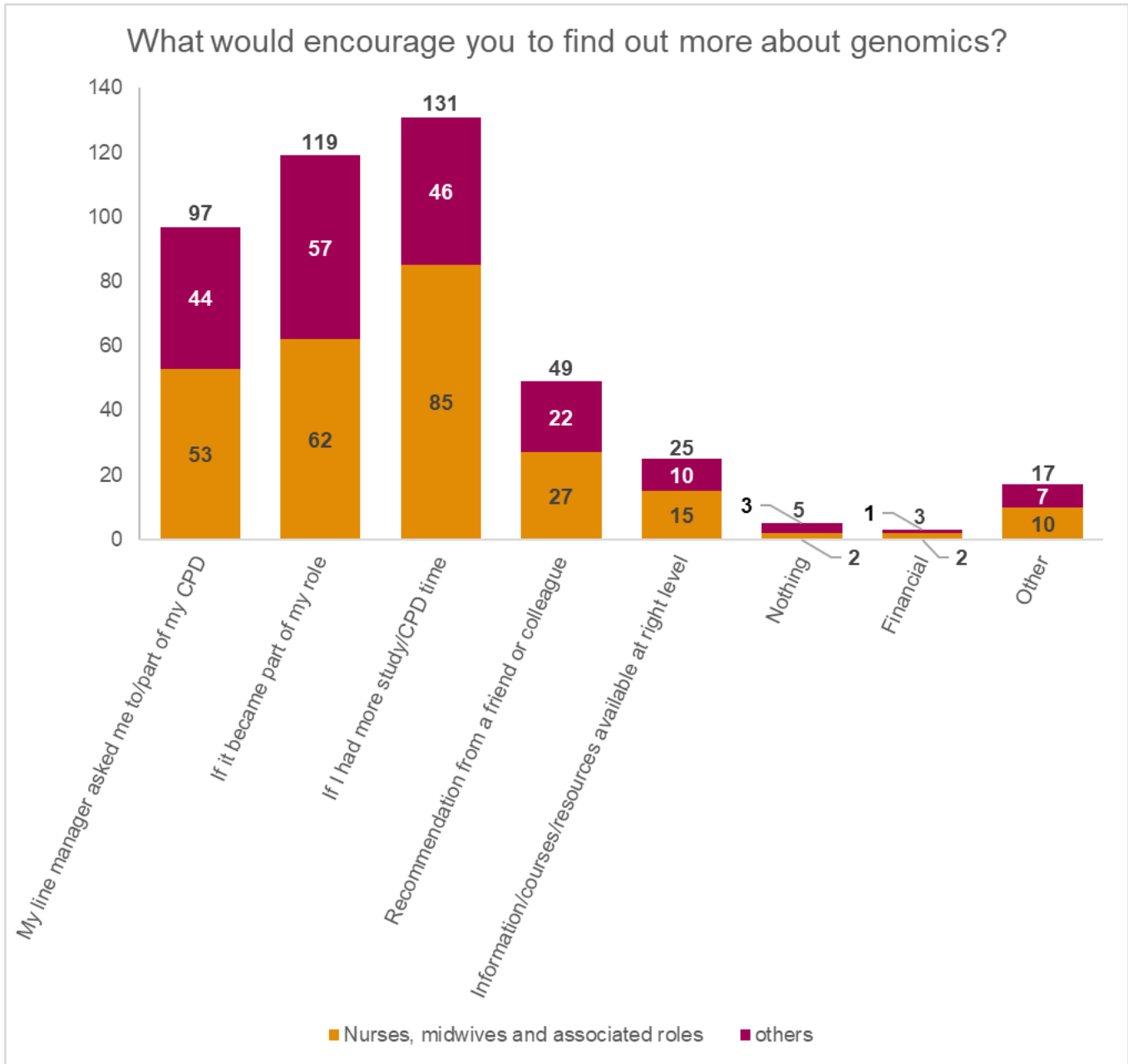


Figure 5. Bar chart showing what would encourage respondents to find out more about genomics.

The responses from the nurses, midwives and associated roles group follow the same pattern, with the most common response to this question being “If I had more study/CPD time” (n=85), followed by “If it became part of my role” (n=62) and “My line manager asked me to/part of my CPD” (n=53).

It was possible for respondents to select multiple options and give a free text answer so there is some overlap between responses, see venn diagram (Figure 6) below.

Notably one Head of Nurse Education said: “if it was in the pre reg curriculum”.

Additionally, it could help to show how GEP resources can be used as CPPD. For example, “Online courses can be completed in your own time, and university modules make the teaching more formal and could possibly be assessed and count towards CPD” indicates that learners don’t know that this is possible.

What would encourage you to find out more about genomics?



Figure 6. Venn diagram showing overlap where respondents selected multiple options to the question “What would encourage you to find out more about genomics?”.

If all the barriers above were removed, how would you prefer to learn more about genomics?

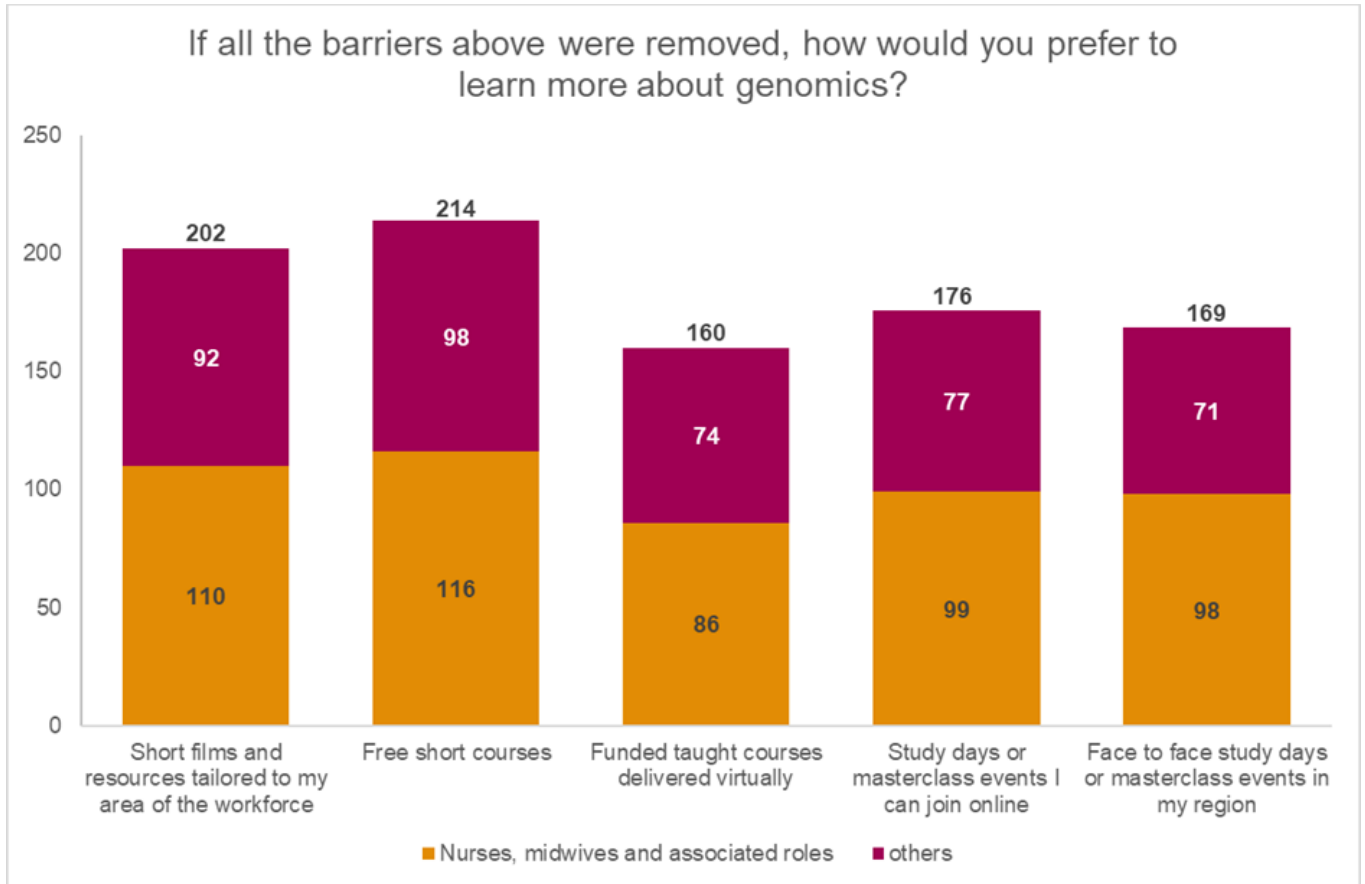


Figure 7. Bar chart showing how respondents would prefer to learn about genomics if all barriers were removed.

There is a lot of overlap between preferences (see Venn diagram, Figure 8, below), with many respondents selecting multiple options. There is no clear option that is preferred, either across all respondents who feel they do not have a good understanding of genomics, or by the nurses, midwives and associated roles group (Figure 7).

If all the barriers above were removed, how would you prefer to learn more about genomics?

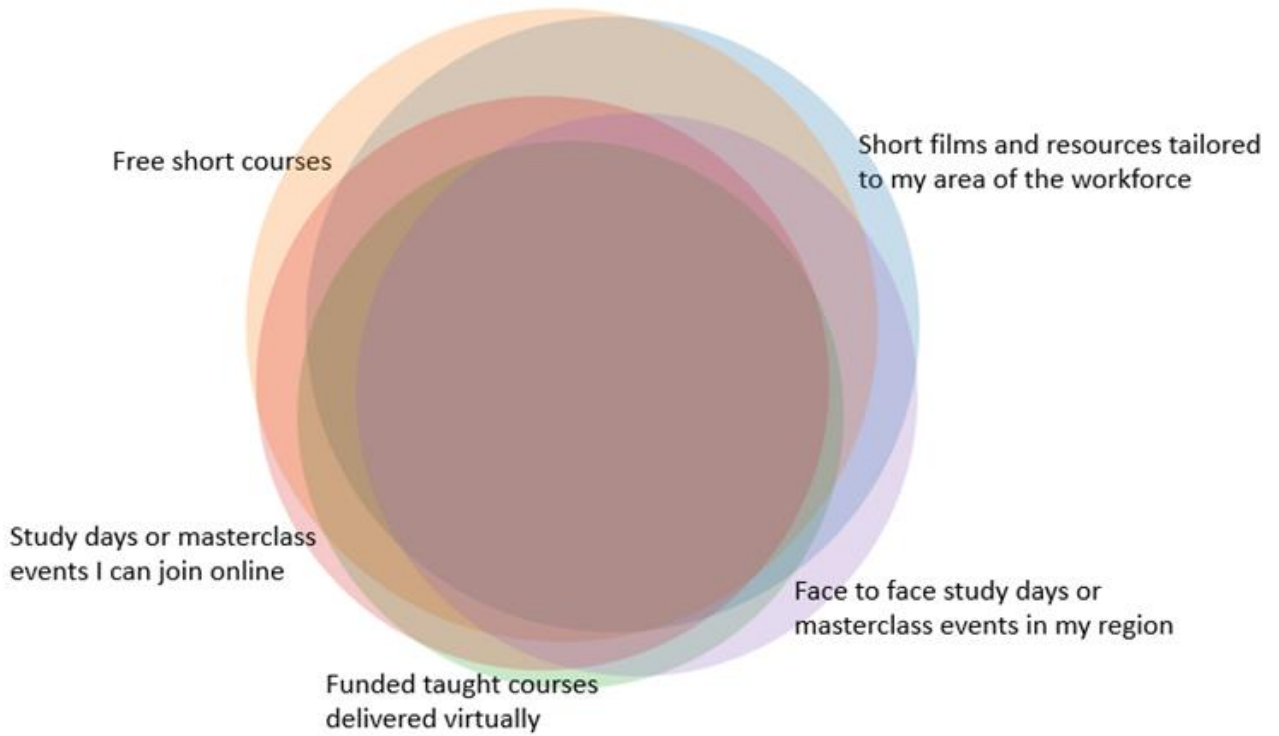


Figure 8. Venn diagram showing large overlap where respondents indicated multiple ways to how they would prefer to learn about genomics.



**For you, which are the most effective channels if you were to look for information about genomics?**

Across all respondents who feel they do not have a good understanding of genomics, the most common response to this question is “Education/training lead in my hospital/trust/practice” (n=174), followed by “Email/newsletters” (n=141), “Word of mouth recommendation from colleague or friends” (n=122) and “Conferences and specialist events” (n=121) (Figure 9).

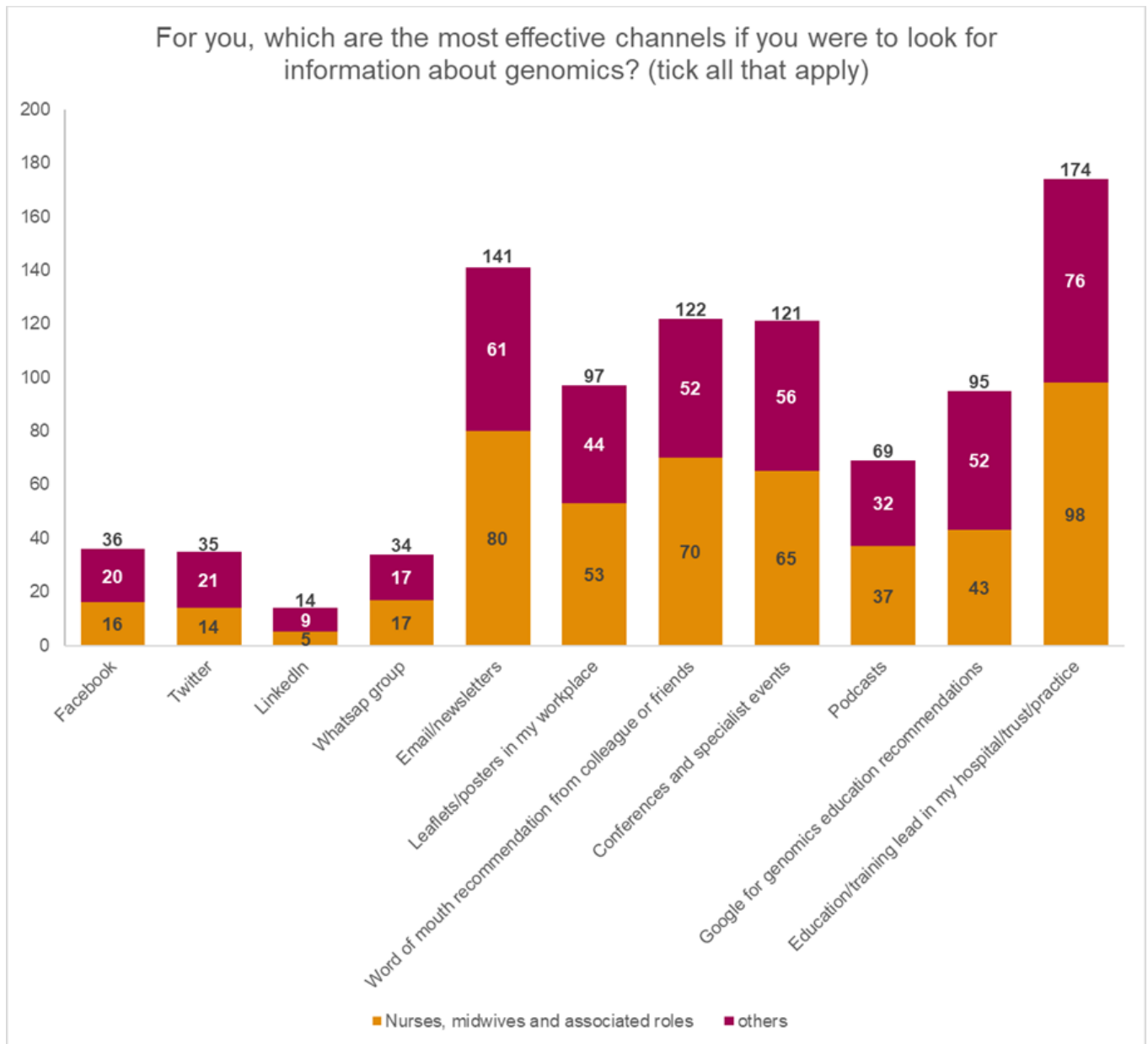


Figure 9. Bar chart showing which are the most effective channels by which to provide information about genomics.

The responses from the nurses, midwives and associated roles group follow the same pattern, with the most common response to this question being “Education/training lead in my hospital/trust/practice” (n=98), followed by “Email/newsletters” (n=80), “Word of mouth

recommendation from colleague or friends” (n=70) and “Conferences and specialist events” (n=65).

Social media channels were the least likely to be selected by respondents (Figure 9).

### How did your interest in genomics develop?

There are four main ways in which people developed an interest in genomics: education (school or university), work, for family/personal reasons (e.g. their own illness), or via this survey. However, many respondents (n=83) in this group do not have an interest in genomics. Some mention multiple ways, and there are some that don't really fit in a clear category so have been classified as “others”.

- Nurses (n=108)
  - 6 through education
  - 39 through work
  - 6 through family/personal reasons
  - 20 others
  - 8 via this survey
- Midwives (n=17)
  - 5 through work
  - 1 through family/personal reasons
  - 3 others
  - 3 via this survey
- HCA (n=8)
  - 4 through work
  - 1 other
- Health visitor (n=1)
  - 1 through work
- Nurse/midwife (n=1)
  - 1 through work
- Medics (n=6)
  - 1 through education
  - 1 through work
  - 2 others
  - 1 through work and education
- Pharmacy (n=4)
  - 2 through work
  - 1 through education
- AHP (n=6)
  - 3 through work
  - 1 through education
  - 2 others
- Scientist (n=7)
  - 3 through work
  - 3 through family/personal reasons
  - 1 other
- Admin (n=8)
  - 3 through work
  - 1 through work, education, and family/personal reasons
- Others (n=2)
  - 1 through education
  - 1 through work
- Blank (n=84)
  - 2 through education
  - 17 through work
  - 3 through family/personal reasons
  - 12 others
  - 3 via this survey
  - 2 through work and family/personal reasons

“Being in a hospital laboratory we are aware it is supposed to be the emerging field, yet we get zero information through work” Lead technical specialist

“I have no interest in it. I'm a senior nurse in an acute cancer setting. It's beyond my comprehension why HEE thinks this is worth looking at this in the context it states.”

## What would help you develop your knowledge further?

- Nurses
  - Webinars – 33
  - Online courses – 66
  - Short courses – 36 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 22
  - University level courses – 1
  - CPPD – 32
  - Short films/videos/animations - 11
  - Anything (different to “all of the above”) – 2
  - “short info sessions dropped into my inbox - either email or Facebook, so I didn't have to go looking for it. (Totally appreciate the difficulty of pitching this at the right level)”
  - “Action learning sets”
  - “secondment or a day shadowing genomics team”
  - “free conferences and seminars”
  - “Brief concise information”
  - “professionals or practice educator doing a teaching session during clinical governance”
  - “Posters are good for general awareness information.”
  - “inclusion in conferences I attend, presentation from SMEs who have a passion for the topic (i.e. good knowledgeable presenters)”
- Midwives
  - Webinars – 4
  - Online courses – 8
  - Short courses – 5 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 5
  - CPPD – 5
  - Anything (different to “all of the above”) – 1
  - “Any learning I am encouraged to do as part of my role”
  - “Education and exposure and understanding its significance within maternity care.”
- Health visitor
  - Online courses – 1
- HCA
  - Webinars – 2
  - Online courses – 8
  - Short courses – 1 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 1
  - CPPD – 1
  - Short films/videos/animations - 1
- Medics
  - Webinars – 3
  - Online courses – 2
  - Short courses – 2 (not specified if online or face-to-face)
  - CPPD – 1
  - Short films/videos/animations - 1
  - Anything (different to “all of the above”) – 1

- “I find recorded talks one of the best ways as they can be watched when time and space allows. They are also made more attractive as they boost external CPD points - which are hard to get in the current pandemic climate.”
- “Online conferences, meetings, seminars with my peers”
- Pharmacy
  - Webinars – 1
  - Online courses – 3
  - Short courses – 2 (not specified if online or face-to-face)
  - University level courses – 1
  - CPPD – 1
  - “As many different types of teaching methods as possible- for ease of access.”
  - “Webinars and short taught courses”
  - “talks and online courses”
- AHP
  - Online courses – 4
  - Short courses – 1 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 1
  - Short films/videos/animations - 1
  - “Reading online articles”
- Scientist
  - Webinars – 1
  - Online courses – 4
  - Short courses – 2 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 1
  - CPPD – 2
  - Short films/videos/animations - 2
  - “A short summary for starters”
  - “Clear entry level information, progressing as you learn more”
  - “virtual talks, documentaries anything online, a mixture of live and recorded events. Which allow questions to be asked and answered.”
- Admin
  - Webinars – 3
  - Online courses – 5
  - Short courses – 3 (not specified if online or face-to-face)
  - Face-to-face courses/teaching – 1
  - CPPD – 1
  - Short films/videos/animations - 1
  - “depends what is available”
- Research
  - Anything (different to “all of the above”) – 1
  - All of the above
  - “seminars, shorter taught courses and online courses”
- Others
  - Webinars – 2
  - Online courses – 1
  - Short films/videos/animations - 1
  - All of the above
  - “Online courses and taught sessions”
- Blank
  - Webinars – 13

- Online courses – 37
- Short courses – 23 (not specified if online or face-to-face)
- Face-to-face courses/teaching – 13
- CPPD – 12
- Short films/videos/animations - 8
- Anything (different to “all of the above”) – 4
- “Audit day”
- “maybe a mentorship system, opportunities to see the roles of others working in genomics for a more rounded understanding.”
- “more patient stories and examples related to my line of work”
- “taught seminars”
- “Relevant information to my current role”
- “Posters”
- “An introduction as to what the department does and the technology they rely on”
- “posters case studies”
- “Information being given via webinars, leaflets, training, online learning - zoom, MSTeams”
- “more information via a wide spectrum of learning opportunities”
- “very short modules that are basic to understand”
- “conferences”

“I find recorded talks one of the best ways as they can be watched when time and space allows. They are also made more attractive as they boost external CPD points - which are hard to get in the current pandemic climate.” Medic (stroke physician).

“expert webinars, online courses but they need to be clearly advertised through trust information - emailed out to staff” Nurse.

### **Have you come across genomics in your current role?**

Overall respondents 85 (33.5%) responded Yes and 169 (66.5%) responded No.

Within the nurses, midwives and associated roles group this is broadly similar with 44 (40.7%) responding Yes and 64 (59.3%) responding No.

### **Do you see genomics as part of your future career plans?**

Overall respondents 29 (34.1%) responded Yes, 17 (20.0%) responded No, and 39 (45.9%) responded Don't know.

Of those who said No, the reasons were:

- “I do not feel it has at present a large enough impact in my clinical role” (nurse)
- “i am retiring” “I am retiring shortly” (nurse x2)
- “time” (nurse)
- “It would only be relevant if it related directly in my role” (nurse)
- “Don't want it to be except peripherally” (nurse)

- “dont undersand it enough, to be interested enough for future careers” (nurse)
- “Not directly relevant to job role” (nurse)
- “I like intensive care” (nurse)
- “Not directly relevant as a physiotherapist”
- “nearly at the end of my career now” (Admin)
- “too specialised” (no workforce group identified)
- “Had you asked if I see genomics as having a role in my work, I would say yes, although not a major one. But your question seems to imagine that genomics might have something to do with my career plans. I doubt that's true for more than a handful of people.” (no workforce group identified)
- “Not there yet.” (no workforce group identified)
- “I'm not medically or scientifically trained” (no workforce group identified) “I'm not particularly interested”
- “changing roles” (no workforce group identified)

Within the nurses, midwives and associated roles group this is broadly similar with 14 (31.8%) responding Yes, 9 (20.5%) responding No, and 21 (47.7%) responding Don't know.

### **Do you think your colleagues could benefit from a better understanding of genomics?**

Across all respondents who feel they do not have a good understanding of genomics, 108 (42.5%) responded Yes all of them, 93 (36.6%) responded Yes but only some of them, and 53 (20.9%) responded No.

Within the nurses, midwives and associated roles group, this is broadly similar with 57 (52.8%) responded Yes all of them, 43 (39.8%) responded Yes but only some of them, and 8 (7.4%) responded No.

### 5. Best ways of reaching colleagues

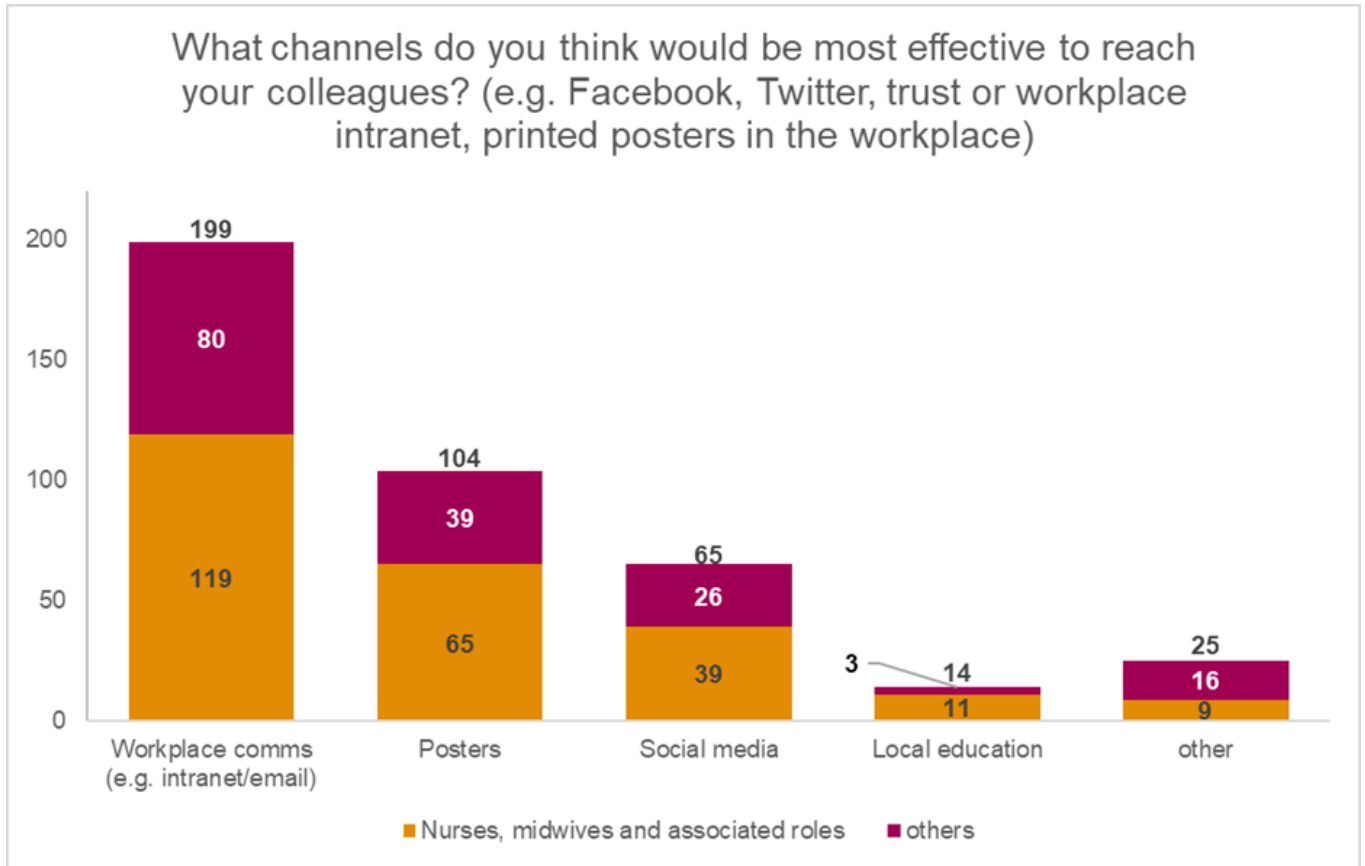


Figure 10. Bar chart showing the most effective channels to reach respondents' colleagues. These responses are from all respondents whether they feel they have a good understanding of genomics or not.

### 6. How many respondents left their email addresses?

Across all the respondents 108 gave their email address. Of these, there are 65 nurses, 7 midwives, 5 HCAs, 1 health visitor (total of 78 from the nurses, midwives and associated roles group), 4 medics, 5 pharmacy, 5 AHPs, 6 scientists, 4 admin, 1 management, 1 research, 4 others.