**Participant characteristics**

**Table 2: Country of residence of participants of Delphi survey and consensus meeting delegates**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Country | Registered and eligible  N=212 | Round 1  respondents  N=195 | Round 2  respondents  N=176 | Consensus meeting delegates  N=33 |
|  | n (%) | n (%) | n (%) | n (%) |
| Australia, | 8 (3.8) | 7 (3.6) | 5 (2.8) | 1 (3.0) |
| Austria | 1 (0.5) | 0 (0) | 0 (0) | 0 (0) |
| Belgium | 3 (1.4) | 3 (1.5) | 3 (1.7) | 0 (0) |
| Brazil | 2 (0.9) | 2 (1.0) | 1 (0.6) | 1 (3.0) |
| Canada | 14 (6.6) | 14 (7.2) | 12 (6.8) | 2 (6.1) |
| Chile | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) |
| Croatia | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) |
| Denmark | 6 (2.8) | 6 (3.1) | 6 (3.4) | 2 (6.1) |
| Finland | 1 (0.5 | 1 (0.5) | 1 (0.6) | 0 (0) |
| France | 5 (2.4) | 5 (2.6) | 5 (2.8) | 1 (3.0) |
| Germany | 6 (2.8) | 5 (2.6) | 5 (2.8) | 1 (3.0) |
| Greece | 2 (0.9) | 2 (1.0) | 2 (1.1) | 0 (0) |
| Hungary | 1 (0.9) | 0 (0) | 1 (0.6) | 0 (0) |
| India | 3 (1.4) | 2 (1.0) | 1 (0.6) | 0 (0) |
| Iran | 1 (0.9) | 1 (0.5) | 1 (0.6) | 1 (3.0) |
| Ireland | 5 (2.4) | 5 (2.6) | 5 (2.8) | 1 (3.0) |
| Israel | 1 (0.9) | 1 (0.5) | 1 (0.6) | 0 (0) |
| Italy | 20 (9.4) | 18 (9.2) | 18 (10.2) | 3 (6.1) |
| Malaysia | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) |
| Netherlands | 4 (1.9) | 4 (2.1) | 4 (2.3) | 0 (0) |
| New Zealand | 4 (1.9) | 3 (1.5) | 3 (2.3) | 0 (0) |
| Nigeria | 1 (0.5) | 1 (0.5) | 0 (0) | 0 (0) |
| Philippines | 3 (1.4) | 3 (1.5) | 3 (1.7) | 0 (0) |
| South Africa | 1 (0.5) | 0 (0) | 0 (0) | 0 (0) |
| Spain | 4 (1.9) | 4 (2.1) | 3 (1.7) | 0 (0) |
| Sweden | 2 (0.9) | 2 (1.0) | 2 (1.1) | 0 (0) |
| Switzerland | 6 (2.8) | 6 (3.1) | 6 (3.4) | 1 (3.0) |
| Tanzania | 1 (0.5) | 1 (0.5) | 0 (0) | 0 (0) |
| Thailand | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) |
| Turkey | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) |
| UK | 69 (32.5) | 65 (33.3) | 61 (34.7) | 13 (39.4) |
| USA | 33 (15.6) | 29 (14.9) | 22 (12.5) | 5 (15.2) |

**Table 3: Primary and secondary roles of Delphi, consensus meeting, and definition survey participants**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Role | Registered & eligible  N=212 | | Round 1 respondents  N=195 | | Round 2 respondents  N=176 | | Consensus meeting delegates  N=33 | | Definitions survey  N=80 |
| ***Primary role*** | ***Secondary role\**** | ***Primary role*** | ***Secondary role\**** | ***Primary role*** | ***Secondary role\**** | ***Primary role*** | ***Secondary role\**** | ***Primary role*** |
| Clinician/Health and allied health professional, n(%) | 38 (17.9) | 49 (23.1) | 32 (16.4) | 45 (23.1) | 31 (17.6) | 41 (23.3) | 6 (18.2) | 9 (27.3) | 18 (22.5) |
| Trial methodologist, n(%) | 33 (15.6) | 41 (19.3) | 32 (16.4) | 38 (19.5) | 30 (17.0) | 36 (20.5) | 7 (21.2) | 9 (27.3) | 10 (12.5) |
| Trial investigator, n(%) | 30 (14.2) | 42 (19.8) | 27 (13.8) | 39 (20.0) | 21 (11.9) | 38 (21.6) | 0 (0) | 14 (42.4) | 6 (7.5) |
| Statistician, n(%) | 29 (13.7) | 15 (7.1) | 27 (13.8) | 15 (7.7) | 26 (14.8) | 13 (7.4) | 6 (18.2) | 4 (12.1) | 14 (17.5) |
| Epidemiologist, n(%) | 12 (5.7) | 18 (8.5) | 12 (6.2) | 16 (8.2) | 12 (6.8) | 16 (9.1) | 2 (6.1) | 3 (9.1) | 7 (8.8) |
| HTA expert/Health economist, n(%) | 14 (6.6) | 8 (3.8) | 12 (6.2) | 8 (4.1) | 12 (6.8) | 8 (4.5) | 1 (3.0) | 4 (12.1) | 8 (10) |
| Journal editor/associate editor/editorial board member, n(%) | 8 (3.8) | 25 (11.8) | 8 (4.1) | 23 (11.8) | 7 (4.0) | 21 (11.9) | 5 (15.1) | 10 (30.3) | 4 (5) |
| PPI partner, n(%) | 15 (7.1) | 4 (1.9) | 15 (7.7) | 4 (2.1) | 12 (6.8) | 7 (4.0) | 4 (12.1) | 0 (0) | 2 (2.5) |
| Surrogate content expert , n(%) | 6 (2.8) | 8 (3.8) | 6 (3.1) | 7 (3.6) | 6 (3.4) | 8 (4.5) | 2 (6.1) | 3 (9.1) | 1 (1.3) |
| Regulatory assessor, n(%) | 4 (1.9) | 5 (2.4) | 4 (2.1) | 4 (2.1) | 3 (1.7) | 4 (2.3) | 0 (0) | 1 (3.0) | 2 (2.5) |
| Research ethics committee member, n(%) | 4 (1.9) | 10 (4.7) | 4 (2.1) | 7 (3.6) | 3 (1.7) | 6 (3.4) | 0 (0) | 0 (0) | 0 (0) |
| Clinical guideline/core outcome set developer, n(%) | 3 (1.4) | 19 (9.0) | 2 (1.0) | 19 (9.7) | 1 (0.6) | 19 (10.8) | 0 (0) | 5 (15.1) | 0 (0) |
| Trial manager, n(%) | 6 (2.8) | 8 (3.8) | 6 (3.1) | 7 (3.6) | 5 (2.8) | 7 (4.0) | 0 (0) | 2 (6.1) | 3 (3.8) |
| Research funding board/panel member, n(%) | 1 (0.5) | 19 (9.0) | 1 (0.5) | 16 (8.2) | 1 (0.6) | 18 (10.2) | 0 (0) | 5 (15.1) | 0 (0) |
| Other, n(%) | 9 (4.2) | 12 (5.7) | 7 (3.6) | 10 (5.1) | 6 (3.4) | 5 (28.4) | 0 (0) | 1 (3.0) | 5 (6.3) |
| Not applicable, n(%) |  | 19 (9.0) |  | 18 (9.2) |  | 16 (9.1) | 0 (0) | 3 (9.1) | 0 (0) |
| \*Overlapping  Definitions survey participants were only asked for their primary roles | | | | |  |  |  |  |  |

**Table 4: Research and disease areas of expertise of Delphi, consensus meeting, and definition survey participants**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Research/disease area | Registered & eligible  N=212 | Round 1 respondents  N=195 | Round 2 respondents  N=176 | Consensus meeting delegates  N=33 | Definitions survey  N=80 |
|  | n (%) | n (%) | n (%) | n (%) | n (%) |
| 1. Ageing, | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 1 (1.3) |
| 1. Anaesthesia, perioperative medicine and cricial care | 3 (1.4) | 3 (1.5) | 1 (0.6) | 1 (3.0) | 1 (1.3) |
| 1. Cancer | 43 (20.3) | 41 (21.0) | 35 (19.9) | 1 (3.0) | 20 (25) |
| 1. Cardiovascular diseases | 13 (6.1) | 13 (6.7) | 10 (5.7) | 5 (15.1) | 5 (6.3) |
| 1. Dermatology | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 1 (1.3) |
| 1. Ear, Nose and Throat | 4 (1.9) | 4 (2.1) | 4 (2.3) | 0 (0) | 0 (0) |
| 1. Gastroenterology | 3 (1.4) | 3 (1.5) | 3 (1.7) | 1 (3.0) | 1 (1.3) |
| 1. Global Health | 2 (0.9) | 2 (1.0) | 2 (1.1) | 0 (0) | 0 (0) |
| 1. Haematology | 2 (0.9) | 2 (1.0) | 2 (1.1) | 0 (0) | 1 (1.3) |
| 1. Hepatology | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 3 (3.8) |
| 1. Infectious diseases | 10 (4.7) | 10 (5.1) | 9 (5.1) | 4 (12.1) | 4 (5) |
| 1. Mental health | 4 (1.9) | 2 (1.0) | 3 (1.7) | 1 (3.0) | 2 (2.5) |
| 1. Metabolic and endocrine | 4 (1.9) | 3 (1.5) | 4 (2.3) | 0 (0) | 3 (3.8) |
| 1. Musculoskeletal | 18 (8.5) | 16 (8.2) | 14 (8.0) | 3 (9.1) | 8 (10) |
| 1. Neuroprogressive and Dementia | 4 (1.9) | 3 (1.5) | 3 (1.7) | 0 (0) | 0 (0) |
| 1. Opthamology | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 0 (0) |
| 1. Oral and dental | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 0 (0) |
| 1. Pediatrics | 5 (2.4) | 5 (2.6) | 5 (2.8) | 1 (3.0) | 1 (1.3) |
| 1. Pain | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 1 (1.3) |
| 1. Primary care | 4 (1.9) | 4 (2.1) | 4 (2.3) | 1 (3.0) | 3 (3.8) |
| 1. Public health/health promotion | 8 (3.8) | 6 (3.1) | 5 (2.8) | 1 (3.0) | 2 (2.5) |
| 1. Rehabilitaion and physical therapy | 6 (2.8) | 6 (3.1) | 5 (2.8) | 2 (6.1) | 2 (2.5) |
| 1. Renal medicine | 3 (1.4) | 3 (1.5) | 3 (1.7) | 0 (0) | 0 (0) |
| 1. Reproductive and childbirth | 3 (1.4) | 3 (1.5) | 2 (1.1) | 1 (3.0) | 1 (1.3) |
| 1. Respiratory | 5 (2.4) | 4 (2.1) | 4 (2.3) | 0 (0) | 0 (0) |
| 1. Trauma and Emergencies | 1 (0.5) | 1 (0.5) | 1 (0.6) | 0 (0) | 0 (0) |
| 1. Other | 15 (7.1) | 12 (6.2) | 12 (6.8) | 2 (6.1) | 6 (7.5) |
| 1. Not applicable | 24 (11.3) | 24 (12.3) | 22 (12.5) | 5 (15.1) | 10 (12.5) |
| 1. Did not answer | 22 (10.4) | 19 (9.7) | 17 (9.7) | 4 (12.1) | 4 (5) |

**Table 5: Employment sector and experience characteristics of Delphi and consensus meeting participants**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characterisitic | Registered & eligible  N=212 | Round 1 respondents  N=195 | Round 2 respondents  N=176 | Consensus meeting delegates  N=33 |
| Employment sector\*, n (%) | | |  |  |
| Academia | 139 (65.6) | 126 (64.6) | 113 (64.2) | 26 (78.8) |
| Healthcare facility/hospital | 65 (30.7) | 59 (30.3) | 54 (30.7) | 10 (30.3) |
| Healthcare industry/Consultancy | 26 (12.3) | 22 (11.3) | 20 (11.4) | 3 (9.1) |
| Regulatory or payer agency | 9 (4.2) | 9 (4.6) | 7 (4.0) | 2 (6.1) |
| Other | 16 (7.5) | 16 (8.2) | 16 (9.1) | 0 (0) |
| Not employed | 12 (5.7) | 12 (6.2) | 24 (13.6) | 2 (6.1) |
| Surrogate endpoint trials related experience or expertise\*, n (%) | | |  |  |
| Design, conduct, and reporting of trials | 145 (68.4) | 135 (69.2) | 121 (68.8) | 24 (72.3) |
| Publishing methodological research outputs or surrogate endpoint content | 110 (51.9) | 104 (53.3) | 95 (54.0) | 14 (42.4) |
| Review/synthesis of evidence from trials | 108 (50.9) | 99 (50.8) | 92 (52.3) | 21 (63.7) |
| Peer review of trials | 95 (44.8) | 90 (46.2) | 89 (50.6) | 24 (72.7) |
| Peer review or commissioning of grants or funding applications | 62 (29.2) | 59 (30.3) | 52 (29.5) | 17 (51.5) |
| Ethical review of trials | 27 (12.7) | 24 (12.3) | 21 (11.9) | 1 (3.0) |
| Regulatory assessment or cost evaluation | 32 (15.1) | 29 (14.9) | 27 (15.3) | 7 (21.2) |
| End-user of intervention(s) approved based on surrogacy evidence | 17 (8.0) | 16 (8.2) | 15 (8.5) | 3 (9.1) |
| Implementer of intervention(s) approved based on surrogacy evidence | 13 (6.1) | 10 (5.1) | 10 (5.7) | 1 (3.0) |
| Other | 12 (5.7) | 10 (5.1) | 5 (3.1) | 0 (0) |
| Not applicable | 12 (5.7) | 10 (5.1) | 10 (5.7) | 1 (3.0) |
| Years of experience – Median (IQR) | 15 (8, 20) | 15 (8, 20) | 15 (8, 20) | 17 (10, 20) |
| \*Overlapping |  |  |  |  |