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7

8 **Availability of breastfeeding peer-support in the UK: a cross-sectional survey**

9

10 **Abstract**

11

12 Peer-support is recommended by the World Health Organisation for the initiation and

13 continuation of breastfeeding, and this recommendation is included in UK guidance. There

14 is a lack of information about how, when and where breastfeeding peer-support is provided

15 in the UK. We aimed to generate an overview of how peer-support is delivered in the UK

16 and to gain an understanding of challenges for implementation. We surveyed all UK Infant

17 Feeding Coordinators (n=696) who were part of UK based national Infant Feeding Networks,

18 covering 177 NHS organisations. We received 136 responses (individual response rate

19 19.5%), covering 102 UK NHS organisations (organisational response rate 58%). We also

20 searched NHS organisation websites to obtain data on the presence of breastfeeding peer-

21 support. Breastfeeding peer-support was available in 56% of areas. However, coverage

22 *within* areas was variable. The provision of training and ongoing supervision, and peer-

23 supporter roles, varied significantly between services. Around one third of respondents felt

24 that breastfeeding peer-support services were not well integrated with NHS health services.
25 Financial issues were commonly reported to have a negative impact on service provision.
26 One quarter of respondents stated that breastfeeding peer-support was not accessed by
27 mothers from poorer social backgrounds. Overall, there was marked variation in the
28 provision of peer-support services for breastfeeding in the UK. A more robust evidence-
29 base is urgently needed to inform guidance on the structure and provision of breastfeeding
30 peer-support services.

31

32 **Introduction**

33

34 The World Health Organization recommends that infants should be exclusively breastfed for
35 the first six months of life, with breastfeeding continuing alongside complementary foods
36 until at least two years of age (World Health Organization, 2014). One way in which it is
37 recommended that breastfeeding is supported is through the use of peer-counsellors in the
38 community (World Health Organization, 2015). A systematic review and meta-analysis of
39 randomised controlled trials of breastfeeding peer-support has highlighted heterogeneity
40 within peer-support models (Jolly, Ingram, Khan, et al., 2012). To date, there is a dearth of
41 peer reviewed literature reporting how peer-support is provided in routine practice. Within
42 the USA Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
43 programme, available to mothers on a low income, a standardised training programme,
44 Loving Support©, was provided. However, there was variation in service delivery including
45 the availability of peer-support, ongoing support provided and intended schedule of

46 contacts with mothers (United States Department of Agriculture Food and Nutrition Service,
47 2015). The authors, however, note that programmes delivered across the United States of
48 America have become more homogenous over time, showing the potential for
49 breastfeeding peer-support to become more standardised.

50

51 Within the UK, breastfeeding rates are particularly low: less than 1% of mothers exclusively
52 breastfeed for six months, and this is lower among mothers who are younger, less affluent,
53 and of white British ethnicity (McAndrew et al., 2012). The UK body which recommends
54 health treatments to commissioners in England, the National Institute for Health and Clinical
55 Excellence (NICE), recommends the provision of a peer-support service as part of the
56 strategy to increase breastfeeding rates in the UK. However, it does not specify a model of
57 service provision (NICE, 2008). Little is currently known about how peer-support is
58 provided, or the content and reach of such services in the UK. An understanding of current
59 practice is required to assess what can feasibly be delivered, the challenges for
60 implementation, and to inform service development.

61

62 The UK is divided into four nations (England, Scotland, Wales and Northern Ireland), each of
63 whom has devolved power to deliver health care. To date, there have been three studies
64 that investigated how peer-support was provided in the UK (Britten, Hoddinott, & McInnes,
65 2006; Dykes, 2005) [self citation, 2013]. These were (i) a synthesis of evaluations of process
66 and acceptability from a range of heterogeneous projects in England which had received
67 government funding in order to increase breastfeeding, including 26 breastfeeding peer-

68 support projects (Dykes, 2005), (ii) a “multiple case study” comprising all nine breastfeeding
69 peer-support projects operating in Scotland in 2002 (Britten et al., 2006), and (iii) a survey of
70 all NHS Health Boards focusing on breastfeeding peer-support and breastfeeding groups in
71 Wales in 2013 [self citation, 2013]. These reports highlighted heterogeneity within and
72 between UK nations, including the approaches to recruiting peer-supporters, marketing and
73 delivering services and that there was a lack of standardised record keeping. There was
74 significant variation in how peer-support was provided, to whom and in what
75 circumstances, and in the relationship between peer-supporters and health professionals.
76 Reductions in funding as a result of public health being moved outside of the NHS in England
77 and austerity measures (Iacobucci, 2016) may have affected English and Scottish services
78 since these evaluations over a decade ago. Currently, only Welsh and Scottish services have
79 been comprehensively mapped, and there has been no comparable mapping of services
80 provided in England or Northern Ireland.

81 Research aims:

- 82 (i) To describe the coverage of breastfeeding peer-support services and
83 breastfeeding support groups and how these were provided across the UK
- 84 (ii) to gain an understanding of facilitators and barriers to implementation

85

86 **Methods**

87

88 *Participants*

89

90 Our sample comprised infant feeding co-ordinators who were members of one of four
91 national infant feeding co-ordinator networks: (i) the National Infant Feeding Network
92 (serving England); (ii) the Scottish Infant Feeding Adviser Network; (iii) the All Wales Infant
93 Feeding Coordinators Forum; (iv) the Northern Ireland Breastfeeding Coordinators Forum
94 (total n= 696 individuals) within 177 NHS organisations which provided maternity or
95 community maternity services¹. We believe that the Networks included all individuals who
96 undertook an Infant Feeding Coordinator role in the UK, but also included some other
97 health professionals and academics with an interest in infant feeding.

98

99 We raised awareness of this survey to potential respondents at a plenary address at the
100 annual UNICEF UK Baby Friendly Initiative conference (27th November 2014), which was
101 attended by the majority of UK infant feeding coordinators. An invitation, which asked
102 infant-feeding coordinators to complete the survey or to pass the link to a colleague if they
103 did not have the appropriate knowledge to answer, was sent to members of the sample via
104 the four Network email distribution lists in December 2014. Follow up emails, thanking
105 those who had already responded and reminding non-responders to take part, were sent to
106 all of those originally contacted one week and 12 days after the original invite.

107

108 *Design and instrument*

¹ ¹Within England NHS organisations are known as NHS Trusts. Within Wales, Northern Ireland and Scotland, NHS organisations are known as Health Boards. Within this paper, we use the term NHS organisations to mean both NHS Trusts and Health Boards.

109

110 A cross sectional online survey was supplemented by searches of all NHS organisation
111 websites. We adapted a pre-existing survey instrument that was developed for an
112 evaluation of breastfeeding peer-support in Wales [self citation, 2013]. We invited three
113 infant feeding coordinators from the UK to complete a pilot of the online questionnaire and
114 provide feedback to us on the process and content of questions, all three took part. In
115 response to the findings of this pilot we amended our participant information to clarify that
116 respondents may need access to service level data in order to complete the survey. As all
117 questions remained the same, data obtained in the pilot phase were included in the main
118 analysis.

119

120 Respondents completed a questionnaire consisting of a combination of closed and open text
121 questions. Questions examined how breastfeeding peer-support was organised in the
122 geographical area for which respondents had responsibility, with a focus on breastfeeding
123 peer-support and breastfeeding support groups (see Table 1). The chair of the Wales
124 Research Ethics Committee 3 stated that this survey constituted an audit of current service
125 provision and did not require ethical approval.

126

127 **[insert table 1 about here]**

128

129 *Data collection*

130

131 Survey data were collected online only, using a purpose built survey hosted on a secure
132 server at the **[name]** Trials Unit, **[name]** University. Respondents viewed an information
133 sheet and consented to take part in the survey via the online platform prior to taking part in
134 the study. In addition, we searched all 177 NHS organisation websites during July 2016 to
135 obtain data on the presence of breastfeeding support groups and breastfeeding peer-
136 supporters to provide data where we did not receive a response to the survey, and to
137 validate survey data.

138

139 *Data analysis*

140

141 Descriptive statistics summarising responses were generated from closed questions using
142 IBM SPSS 20. Open text responses were coded by one researcher thematically facilitated by
143 NVivo 10. Themes were deductively and inductively generated, and included key areas of
144 interest already identified by questions (e.g.: training peer-supporters) and new themes,
145 such as staffing levels and financial issues.

146

147 *Spatial data*

148

149 The map of the UK health service providers was derived from multiple sources. The data for
150 Wales (Local Health Boards 2015) and England (Primary Care Trusts, 2013) were

151 downloaded from the Office for National Statistics geoportal (Office for National Statistics,
152 2017). Data for Scotland (Health boards) were downloaded from the Scottish Spatial Data
153 Infrastructure Metadata Catalogue. Data for Northern Ireland (Health and Social Care
154 Boards) created from boundary data downloaded from the Ordnance Survey Northern
155 Ireland. Data were downloaded as shapefiles and combined using QGIS Essen 2.14.3 (QGIS
156 Development Team, 2016).

157

158 **Results**

159

160 The findings are structured in four sections: 1.) a description of respondents; 2.) the
161 management and delivery of breastfeeding peer-support services; 3.) management and
162 delivery of breastfeeding support groups; 4.) the impact of resources on service delivery.

163

164 *Respondents*

165

166 A total of 136 responses with usable data were received (response rate 19.5%), representing
167 58% of NHS organisations (see table 2). 47 respondents stated that they were Infant
168 Feeding Coordinators, and a further 10 were breastfeeding coordinators, the majority of
169 other respondents had job titles which focused on infant feeding; no responses were
170 received from those reporting to be academics. Within the 136 responses, there were 34
171 multiple responses within areas, affecting 21 NHS organisations. Seven instances of this

172 were within England where provision was split between the NHS organisation and another
173 provider, such as the local authority. These multiple responses were retained in the dataset
174 as they provided different perspectives in response to open text questions. Accordingly, all
175 data presented (counts and percentages) are at individual, rather than NHS organisation
176 area, level unless specified.

177

178 **[insert table 2 about here]**

179

180 The combined findings of the survey and NHS organisation online search showed that
181 breastfeeding peer-support was reported to be available in 99 (56%) NHS organisation areas
182 and breastfeeding support groups in 157 (89%) NHS organisation areas. Neither
183 breastfeeding peer-support nor breastfeeding support groups were available in 5 areas
184 (3%), although informal provision not recorded on NHS organisation websites may have
185 been offered in these areas. There was a high degree of overlap, with 86 (87%) areas which
186 had breastfeeding peer-support also providing breastfeeding support groups. Figure 1
187 illustrates what breastfeeding support (groups, peer-support, both groups and peer-support
188 or neither groups or peer-support) was provided throughout the UK, with Figure 2 providing
189 a detailed map of London.

190

191 **[Insert figure 1 about here]**

192

193 **[Insert figure 2 about here]**

194

195 Throughout the rest of this paper, the findings are reported only in relation to survey data,
196 and do not include information from the online searches.

197

198 *Breastfeeding peer-support services*

199

200 Infant feeding co-ordinators were most often involved in managing peer-supporters,
201 although thirty respondents highlighted that responsibility was shared by more than one
202 individual, and sometimes voluntary groups were part of a team delivering the service:
203 “(voluntary organisation 1) and (voluntary organisation 2) are commissioned to deliver peer-
204 support alongside direction from IFC's” (PID 242). A multi-strategy approach, involving a
205 range of health and social care professionals and peer-supporters across various locations,
206 was reported in recruiting new peer-supporters in 89% of responses. Breastfeeding groups
207 and breastfeeding peer-supporters were most often involved in recruiting new peer-
208 supporters. The median number of peer-supporters who had been trained in each area
209 since the service began was 50 (range 1-250), with a median of 15 provided with initial
210 training over the previous 12 month period (range 0-64).

211

212 Respondents were asked to describe who provided training in an open text box. The third
213 sector was the most popular provider for initial training of peer-supporters (including the

214 Breastfeeding Network and the National Childbirth Trust), with Infant Feeding Coordinators,
215 NHS and community centre staff also playing a leading role. Some respondents (n=45; 33%)
216 provided further details regarding initial training. Initial training appeared to vary in relation
217 to content and duration; a minority of respondents stated that their course had been
218 accredited:

219

220 (name of awarding body) accredited training provided by (children's centre) staff.

221 This is divided into 3 units covering promoting and supporting breastfeeding and
222 following the principles of the Baby Friendly Initiative². This is Level 1, but peer-
223 supporters can they continue to Level 2. (PID 387)

224

225 However, some respondents noted that training was not currently being provided: "No
226 training provided currently but this was the role of a Specialist Health Visitor who has since
227 left." (PID: 258)

228

229 In addition to initial training, ongoing training or support was reported to be provided by 70
230 respondents (65%), although 8 respondents (7%) did not know if additional training was
231 provided. In two thirds of responses where ongoing support was provided (44, 63%) more
232 than one type of support, such as regular one-to-one meetings with a manager or regular
233 local training updates, was provided. Some participants described the contents of ongoing
234 support or training, including: "Regular supervision and ongoing training to maintain the

² Where participants have used abbreviations in their responses, these have been reported in full for clarity.

235 quality of their work. They also undertake a breastfeeding practical skills assessment and
236 complete additional such as safeguarding.” (PID 387).

237

238 However, many respondents provided more vague response including: “ongoing training”
239 (PID 270), “monthly updates” (PID 389), “additional courses” (PID 185) and “mandatory
240 training” (PID 315). Although joint training with health professionals was reported to be
241 available in some areas, it appeared to be more accessible in some organisations than
242 others. There were practices of mandatory joint training in some areas, for example relating
243 to safeguarding, joint seminars with an aim of encouraging shared working in others, “We
244 aim to provide 1 joint seminar (per year) that PSs & HCP's are invited to attend to promote
245 cooperative working” (PID 396) and permission to attend joint training in other areas: “can
246 attend joint training with midwives if they want to come” (PID 343).

247

248 **[insert table 3 about here]**

249

250 Attending, which was distinct to organising, breastfeeding groups was the main activity
251 peer-supporters were involved in, followed by working on the postnatal ward. In general,
252 delivery seemed to be more focused on group support with one-to-one forms of delivery
253 less common. The majority (n=129, 95%) of respondents reported that more than one
254 activity was undertaken by peer-supporters in their area. In some areas peer-supporters
255 saw mothers both antenatally and postnatally (n=68, 50%), but some saw mothers just
256 postnatally (n=39, 29%), and one respondent reported only antenatal contact. The

257 comprehensiveness of services was described throughout open text responses, with some
258 areas viewed as having a complete model of service delivery:

259

260 The Peer-support Service is a 7 days service 356 days of the year. Team of 10
261 members, total 7.5 WTE from 9-5 man a 24 telephone support line. The Service is
262 integrated into (child health care), works alongside Health Visitors, School Nurses,
263 and support staff. The service delivers Health Promotion sessions within Primary
264 schools, They provide bedside support within the three feeder hospitals, Provide
265 support groups with Children's Centre Groups. It is an excellent service provided by
266 a dedicated team. (PID 348)

267

268 In contrast, some services were not able to provide a comprehensive service, which was
269 attributed to funding: "I have one breastfeeding support worker who is employed by (the
270 NHS), this isn't enough for a birth rate of 2500. We are currently writing a business case for
271 10 x paid peer-support workers..." (PID, 275)

272

273 Although participants were not asked about mothers' views of breastfeeding peer-support,
274 twelve respondents noted that the service was valued by mothers:

275

276 those mothers who come into contact with the volunteers have nothing but praise
277 for them and they are wonderful ladies who give a lot of their own time , for free,
278 with no reward, but the joy of helping a new mother breastfeed her baby, they are

279 wonderful, I only wish we could give them something back. (PID 312)

280

281 The majority of respondents (n=67, 63%) felt that peer-support was well integrated with
282 other NHS services, such as midwifery and health visiting services. Where respondents
283 provided an explanation for this, the successful integration was most often attributed to
284 clear guidance on roles and responsibilities (n=15, 11%), shared working practices or
285 locations (n=14, 10%) and a high degree of trust between health professionals and peers
286 (n=9, 7%):

287

288 we have information sharing protocol and robust pathways in place , peer-support
289 has become valued due to the length of time it has been in place, staff and mothers
290 value the service case studies etc and evaluation. (PID 267)

291

292 The absence of these factors was felt to result in low integration:

293

294 Despite countless attempts to explain to (health visiting) staff the roles and
295 responsibilities and limitations of a peer-supporter and inform them of the groups
296 available in each area, there is still a reluctance to advertise and recommend the
297 service. I think as the peer-supporters are not health professionals working as (NHS)
298 employees the Health Visitors do not feel confident of their role in the community
299 and understand what peer-support is about. (PID 231)

300

301 Peer-support was felt to be accessed by mothers from poorer social backgrounds by
302 (n=105), 77% of respondents. The majority of these provided an open text response as to
303 why they felt their service was accessible, including elements such as: support on post-natal
304 wards, location of groups (including links with children’s centres and other community
305 organisations), one-to-one home visits: “Groups held in in the more hard to reach areas,
306 mothers from poorer backgrounds receive tailored support and home visits work closely
307 with Family Nurse Partnership³. We have an excellent breastpump loan scheme” (PID 267)

308

309 However, the open text responses to this question made it clear that respondents
310 considered very different levels of accessibility in their responses. Some participants noted
311 that breastfeeding groups were provided in areas of deprivation and rated this at the
312 highest level of accessibility regardless of numbers attending: “We have made sure the BFPS
313 programmes have been commissioned in the area of greatest need” (PID 289). By contrast,
314 other respondents noted that peer-support was offered to all on postnatal wards, or that
315 groups were held in areas of deprivation but offered a lower score:

316

317 I think it is difficult for mums from poorer social backgrounds to access any support
318 groups. Maybe due to preconceived ideas of what a breastfeeding support group
319 would be like. I think it also that breastfeeding is less common in poorer social
320 groups so unlikely they would know anyone or have someone to attend the group
321 with. (PID 229)

322

³ specialist midwives and nurses for young mothers from deprived areas

323 Barriers to accessibility included lack of attractiveness to women from deprived areas,
324 inadequate numbers of peer-supporters, being reactive as opposed to proactive, and not
325 being able to provide home visits. However, elements of good practice in relation to
326 accessibility were often informal, and thus difficult to evaluate:

327

328 The volunteer peer-support service is targeted , the volunteers are active in areas of
329 the borough with low initiation and continuation of breastfeeding, from talking to
330 the volunteers the majority of women access them informally particular women
331 from poorer social backgrounds , this may be through , social networking,
332 conversations at the school gate , at the supermarket , at the hairdressers , whilst
333 the volunteers are attending other groups at the local children's centre with their
334 children. This information is difficult to capture. (PID 253)

335

336 ***Breastfeeding support groups***

337

338 There was variation in the number of groups occurring within each NHS organisation which
339 did not appear to be associated with the number of births in the area. Respondents stated
340 that NHS, children's centre staff, and trained peer-supporters most commonly organised
341 breastfeeding support groups. Breastfeeding support groups reportedly took place in a
342 broad range of settings including, community venues (café, garden centre café), children's
343 centres and alongside health visitor (weighing) clinics. It was reported 22 times that some
344 groups ran as 'baby cafes', 'first friends' or generic 'parenting support groups' with a focus
345 on breastfeeding, rather than explicitly as breastfeeding support groups. The

346 comprehensiveness of record keeping at breastfeeding groups varied, and this included
347 reports of variations *within* NHS organisations, as well as *between* organisations.

348

349 ***Financial issues***

350

351 The main theme interwoven throughout the open text responses, was the importance of
352 financial support for community breastfeeding services. This was often referred to as
353 problematic, with some services continuing to face a reduction in available funding:

354

355 Funding has been restricted the next course that will be provided is being joint
356 funded by the local authority and NHS Trust charitable funds. Funding for the future
357 is not clear and the breastfeeding supporters are looking at running money raising
358 events to fund future courses. (PID 274)

359

360 Some respondents from England noted that their services had previously been funded
361 through NHS community budgets and that NHS hospital budgets were not continuing to
362 fund peer-support services following the move of public health from the NHS to local
363 government in England:

364

365 (County) has had an extensive programme of Peer-support over the last 8+ years.

366 This was facilitated by (voluntary sector organisation) who received core funding

367 from Public Health from 2008 - 2013... (County) also had a programme of proactive
368 contact from a Peer-supporter within 72 hours of giving birth in certain localities,
369 funded by DoH. However, this project was discontinued and funding for (voluntary
370 sector organisation) withdrawn, leading to a situation in 2014 where Peer-support
371 numbers are dwindling. Enthusiasm remains high with over 50 PS attending a
372 (voluntary sector organisation) conference in October 2014. (PID 185)

373

374 The reported shortfall affected finances to train peer-supporters, to pay them travel
375 expenses, and the resources available to allow health professionals to supervise peer-
376 supporters. In a small number of instances, it was reported that services had been
377 decommissioned. In a minority of areas respondents reported that peer-supporters were
378 paid for their time, but in most services funds were not available to pay peer-supporters.
379 This impacted on the quality of service provision: "It would be wonderful to actually have
380 paid supporters. We have quite a high turnover because they need to get back to paid
381 employment." (PID 283)

382

383 Several respondents noted that they were attempting to secure funding from charitable
384 trusts or their own employers by writing business cases, and this was often to provide a
385 basic service (supervisor time, travel expenses for peer-supporters), rather than to pay for
386 peer-supporters' time. Some respondents noted that peer-support services were
387 performing highly when compared against the small financial inputs they received:

388

389 We have been re-commissioned by Public Health to train more peer-supporters early

390 next year and hope to get our training accredited. We work on a VERY small budget
391 (£10K) for each cohort including training, materials and resources and ongoing
392 support. (PID 233)

393

394 However, feelings of frustration regarding lack of investment were also apparent:

395

396 my feeling is that the peer-support service could be better funded...the acute trust
397 has paid infant feeding support workers working on the wards. The children's centre
398 champions provide this service to some degree however with local efficiency savings
399 their time is stretched with competing priorities. We are basically doing the best that
400 we can with the resources that we have. (PID 253)

401

402

403 By contrast, in a minority of areas it was reported that investment was being made, or
404 remade, in peer-supporter co-ordinator roles in areas with no service.

405

406 **Discussion**

407

408 Peer-support for breastfeeding is recommended as part of strategies to increase
409 breastfeeding by the World Health Organization (World Health Organization & UNICEF,
410 2003), and in the UK by NICE (NICE, 2008). However, the guidance is not clear as to what

411 'peer-support for breastfeeding' should entail. To date, a model of peer-support which is
412 effective in improving breastfeeding rates has not been established within the UK (Jolly, et
413 al., 2012). Unsurprisingly within this context, our UK-wide survey of 136 UK-based infant
414 feeding coordinators supplemented with searching of NHS organisation websites, found
415 wide variation in service provision, consistent with previous audits of UK service provision
416 (Britten et al., 2006; Dykes, 2005) [self citation, 2013]. We identified that peer-supporters
417 were available in 56% of NHS areas, showing that there is a foundation for further
418 development of breastfeeding peer-support in over half of UK NHS organisation areas.
419 However, our survey was aimed at respondents with knowledge of large NHS organisation
420 areas, and respondents noted variation in service *within* those areas. As such, it would be
421 inappropriate to define the presence of some peer-supporter services or breastfeeding
422 groups in an area as the presence of services *throughout* each locality in that area.

423

424 Respondents reported variability in training peer-supporters, including the content of
425 courses and the use of joint training with health professionals in some areas and external
426 training provided by the third sector in others. There did not appear to be a uniform
427 standards for training of peer-supporters, or competencies they should attain, across the
428 UK. This is in contrast to provision across WIC agencies in the United States, where a single
429 model of training has been developed, as part of the Loving Support © programme (United
430 States Department of Agriculture Food and Nutrition Service, 2015), including minimum
431 competencies for peer-supporters. However, despite similarities in training package,
432 provision was still variable across the fifty States involved in the WIC programme, showing
433 that further guidance is needed to provide equitable services. Ongoing training and

434 supervision for peer-supporters appeared highly variable, and this is likely to have an impact
435 on service quality and delivery.

436

437 Our survey provides insight into areas of perceived best practice and also where practice
438 may unhelpfully vary, both of which can therefore inform the development of best practice.

439 First, regarding integration between peer-support services and NHS health professionals,
440 clear roles and responsibilities, and visibility to health professionals, including through
441 shared working, were found to enhance cohesion. These factors are generally found to
442 increase compliance to local guidelines in healthcare, through the generation of shared
443 understandings regarding roles and boundaries (Lipsky, 2010), and thus clear guidance
444 should be considered in the development of peer-support services. Second, it was clear that
445 whilst the majority of health professionals reported on a likert-like scale that their service
446 was accessible to poorer mothers, there was variation in what that meant in practice, with
447 many services aiming to meet the needs of poorer mothers not attracting them as service
448 users. Further work should be undertaken by breastfeeding services to reach out to
449 mothers from deprived areas, to prevent a further increase in health inequalities (Marmot
450 et al., 2010). Third, breastfeeding support groups and peer-support services were not
451 routinely keeping records of service use. Whilst it may appear at odds with the ethos of
452 mother-to-mother support to keep records, the use of standardised records across the UK
453 would enable effective monitoring of service usage. If this is evidenced, services may be in a
454 stronger position to argue for financial investment in the future.

455

456 The most common theme found in open text responses was the challenge of running
457 services with limited financial support, although this was not experienced equally by all
458 services and a minority of services reported recent investment. Linked to this financial
459 shortfall, some services reported challenges of recruiting, training and ongoing supervision
460 for peer-supporters. If the UK is to see an increase in breastfeeding duration, and
461 accordingly to save on health care costs (Renfrew et al., 2012), further investment in
462 establishing the evidence base for effective breastfeeding support services must be made.
463 To date there is no peer-support model that has been found to be effective at increasing
464 breastfeeding within a UK context. However, it may be that the models of peer-support
465 contained within trials that failed to establish efficacy did not provide an adequate dose of
466 peer-support (Jolly et al., 2012). Further research should be undertaken to investigate new
467 models of breastfeeding support, which are theoretically robust and have been developed
468 in conjunction with mothers and health professionals, to ensure acceptability and feasibility
469 of delivery (Craig et al., 2008).

470

471 This study is the first attempt to map and describe the provision of peer-support for
472 breastfeeding throughout all four nations of the UK. We received responses from around
473 the UK and achieved a response rate which covered 58% of NHS organisation areas. We
474 supplemented survey data with online searches to enable us to describe the current
475 provision of breastfeeding peer-support and breastfeeding support groups among non-
476 responders to provide a map of coverage across the UK. The survey questions varied
477 between asking for factual information, such as the numbers of groups, and subjective
478 views of provision occurred, such as how accessible services were to women from deprived

479 backgrounds, and the interpretation of meaning may have varied between respondents.
480 Furthermore, these questions are theoretically susceptible to bias. The survey was open for
481 a period of three weeks in December 2014. We acknowledge that we may have received
482 further responses if the online survey was open for a longer period. We were also made
483 aware that two respondents were unable to access our online survey from their NHS
484 computers. Whilst we provided support which enabled those respondents to take part, it
485 may be that other potential respondents did not contact us and were thus excluded from
486 the survey. Our data provide clear learning about best practice in terms of service design,
487 but these models of more comprehensive training and support for peer-supporters,
488 integration with health professionals and accessibility to poorer mothers have not been
489 tested for effectiveness, and there is thus a limited evidence base on which to guide service
490 development.

491 To conclude, there was no standardised provision of breastfeeding peer-support around the
492 UK, and services were regularly adapted in line with funding available, rather than number
493 of births or perceived need. Evidence-based guidance is urgently needed to inform the
494 provision of equitable breastfeeding peer-support services.

495

496 ***Key messages:***

- 497 1. Breastfeeding peer-supporters were available in 56% of NHS organisation areas and
498 breastfeeding support groups in 89% of NHS organisation areas. However, areas
499 were often large, and thus within these areas, women may still face issues accessing
500 peer-supporters or breastfeeding support groups.

- 501 2. There was considerable variation in the content and service delivery of peer-support
502 services for breastfeeding across the UK.
- 503 3. Infant feeding co-ordinators reported that integration between peer-support
504 services and NHS health professionals was increased by clear roles and
505 responsibilities, and visibility to health professionals, including through shared
506 working.
- 507 4. Many services aimed to meet the needs of poorer mothers, but did not attract them
508 as service users.
- 509 5. Breastfeeding support groups and peer-support services were not routinely keeping
510 records of service use.

511

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513 **Conflict of Interest:**

514 **Contributor statement:**

515

516 **References**

517 Britten, J., Hoddinott, P., & McInnes, R. (2006). Breastfeeding peer-support: Health service
518 programmes in Scotland. *British Journal of Midwifery*, 14(1), 12-19.

519 Craig, P., Dieppe, P., Macintyre, S., Michie, S., Naxareth, I., & Petticrew, I. (2008). *Developing
520 and evaluating complex interventions: new guidance*. London: Medical Research
521 Council.

522 Dykes, F. (2005). Government funded breastfeeding peer support projects: implications for
523 practice. *Maternal and Child Nutrition*, 1(1), 21-31. doi:10.1111/j.1740-
524 8709.2004.00006.x

525 Iacobucci, G. (2016). Public health—the frontline cuts begin. *BMJ*, 352, i272.
526 doi:10.1136/bmj.i272

527 Jolly, K., Ingram, L., Khan, K. S., Deeks, J. J., Freemantle, N., & MacArthur, C. (2012).
528 Systematic review of peer support for breastfeeding continuation: metaregression
529 analysis of the effect of setting, intensity, and timing. *British Medical Journal*, 344. Doi:
530 10.1136/bmj.d8287

531 Lipsky, M. (2010). *Street-level bureaucracy: dilemmas of the individual in public services*.
532 New York: Russell Sage Foundation.

533 Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M., & Geddes, I. (2010).
534 Fair society, healthy lives: Strategic review of health inequalities in England post-
535 2010.

536 McAndrew, F., Thompson, J., Fellows, L., Large, A., Speed, M., & Renfrew, M. J. (2012).
537 *Infant feeding survey 2010*. Retrieved from <http://www.hscic.gov.uk/> Accessed
538 01.013.17

539 NICE. (2008). *Maternal and Child Nutrition [PH 11]*. Retrieved from
540 <https://www.nice.org.uk/guidance/PH11>

541 Office for National Statistics (2011). Office for National Statistics Open Geography Portal.
542 Retrieved from <http://geoportal.statistics.gov.uk/> Accessed 01.03.17

543 QGIS Development Team (2016). Download QGIS Essen. Retrieved from
544 <http://www.qgis.org/en/site/forusers/download.html> Accessed 01.03.17

545 Renfrew, M. J., Pokhrel, S., Quigley, M., McCormick, F., Fox-Rushby, J., Dodds, R., . . .
546 Williams, A. (2012). *Preventing disease and saving resources: the potential*
547 *contribution of increasing breastfeeding rates in the UK*. Retrieved from London:
548 [http://www.unicef.org.uk/Documents/Baby_Friendly/Research/Preventing_disease](http://www.unicef.org.uk/Documents/Baby_Friendly/Research/Preventing_disease_saving_resources.pdf)
549 [saving_resources.pdf](http://www.unicef.org.uk/Documents/Baby_Friendly/Research/Preventing_disease_saving_resources.pdf) Accessed 01.03.17

550 United States Department of Agriculture Food and Nutrition Service. (2015). *WIC*
551 *Breastfeeding Peer Counselling Study: Phase II Follow Up Implementation Report*.
552 Washington. Retrieved from
553 [https://www.fns.usda.gov/sites/default/files/ops/WICPeerCounseling-PhaseII-](https://www.fns.usda.gov/sites/default/files/ops/WICPeerCounseling-PhaseII-Summary.pdf)
554 [Summary.pdf](https://www.fns.usda.gov/sites/default/files/ops/WICPeerCounseling-PhaseII-Summary.pdf) Accessed 01.03.17

555 World Health Organization. (2015). *Global Strategy for Infant and Young Child Feeding*.
556 Geneva: World Health Organization. Retrieved from
557 http://www.who.int/nutrition/topics/global_strategy_icyf/en/ Accessed 01.03.17

558 World Health Organization. (2014). Breastfeeding. Retrieved from
559 <http://www.who.int/topics/breastfeeding/en/> Accessed 01.03.17

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Table 1: Overview of survey questions.

Theme	Sub-question topics
Demographics	nation; NHS Trust; number of births in area; staff roles; respondent role description ^a
Breastfeeding support groups	number of groups; who organises groups; presence of records on: attendance, support provided, problems with feeding, referrals, other records ^a ; other thoughts on support groups ^a ; funding for non-NHS breastfeeding groups ^a
Training peer supporters	Number of trained peers; what training is provided; who delivers training ^a , additional training for peer supporters ^a
Peer support	Recruitment of new peers; supervision of peers; activities peer supporters are engaged in; integration of peer support with NHS services ^a ; accessibility of peer support for mothers from poorer backgrounds*; other thoughts on peer support ^a
Other non-NHS support for breastfeeding	Details of support available; provider of support; third sector activities; presence of active breastfeeding counsellors.

^a denotes an open text question was asked, either alongside a closed question or following a question on a related topic.

Table 2: Sample and response rate

	Nation	England	Scotland	Wales	Northern Ireland	Total
Individual level						
Individual invitations		617	40	19	20	696
Individual responses		113	11	8	4	136
NHS Trust level^a						
NHS Trusts in sample		151	14	7	5	177
NHS Trusts responses (% of Trusts invited)		68 (45%)	9 (64%)	7 (100%)	2 (40%)	86 (49%)
Number of additional Trusts covered by non-NHS responses		16 (11%)	-	-	-	16 (9%)
Total response within NHS Trust areas		84 (56%) ^a	9 (64%)	7 (100%)	2 (40%)	102 (58%)

^a Nine participants from England did not indicate which NHS Trust their response related to.

Table 3: descriptive statistics

Topic area Question	Closed text response options	Yes (%)
Breastfeeding peer support services		
Is there a breastfeeding peer support service in your area? (n=118)	-	109 (92%)
Who has responsibility for managing (or supporting) peer supporters? (tick all that apply) (n=109)	Infant feeding co-ordinator	48 (44%)
	Local health professional	36 (33%)
	Other	65 (60%)
How are new peer supporters recruited in your area? (tick all that apply) (n=103)	At breastfeeding groups	79 (77%)
	By local midwives	45 (44%)
	By local health visitors	69 (67%)
	By local children's centre staff	68 (66%)
	By local peer supporters	76 (74%)
	other	32 (31%)
Do you know who provides training for the peer-supporters? (n=109)	-	108 (99%)
Is there any additional training (beyond initial training) provided for peer-supporters? (n=107)	-	70 (65%)
What way are peer supporters supported? (tick all that apply) (n=106)	regular local training updates	69 (65%)
	other training updates	34 (32%)
	attending external conferences	40 (38%)
	regular one-to-one meetings with manager	45 (42%)
	regular group updates with manager	51 (48%)
	Other	0 (0%)
	None of these	4 (4%)

What activities are peer supporters in your area engaged in? (tick all that apply) (n=105)

Don't know	8 (8%)
attending breastfeeding groups	97 (92%)
organising breastfeeding groups	45 (43%)
home visits to support mothers	43 (41%)
hospital visits to support mothers	56 (53%)
Antenatal clinic visits	34 (32%)
attending 'preparation for parenthood sessions;	57 (54%)
work on the postnatal ward	71 (68%)
work in a community setting	60 (57%)
Other	15 (14%)

Do you think that breastfeeding peer support provided in your area is well integrated with the breastfeeding support work that health professionals do? (n=107)

Not at all well integrated	7 (6%)
not well integrated	12 (11%)
somewhat not	21 (20%)
somewhat well	22 (21%)
well integrated	29 (27%)
Very well integrated	16 (15%)

Is the breastfeeding peer support provided in your area accessible to breastfeeding mothers from poorer social backgrounds? (n=107)

Not accessed	2 (2%)
moderately not accessed	6 (6%)
somewhat not accessed	17 (16%)
somewhat accessed	22 (21%)
moderately accessed	17 (16%)
Readily accessed	43 (40%)

Breastfeeding peer support groups

Are there any breastfeeding groups in your area? (n=128)	-	124 (97%)
If you have peer support groups, how many groups are currently running? (n=121)	1-3	13 (11%)
	4-7	35 (29%)
	8-10	24 (20%)
	>10	49 (40%)
Are registers of attendees kept at breastfeeding groups in your area? (n=123)	-	92 (75%)
Are notes on individual mothers who have problems kept at breastfeeding groups in your area? (n=118)	-	34 (29%)
Are notes on individual mothers who receive support kept at breastfeeding groups in your area? (n=117)	-	31 (26%)
Are notes on individual mothers who are referred elsewhere for additional support kept at breastfeeding groups in your area? (n=117)	-	32 (27%)
Other		
Has there been a review, evaluation or report of the breastfeeding support service in your area in the past five years? (n=107)	-	66 (62%)
Are there lay/voluntary breastfeeding groups in your area which are not funded by the NHS or Local Authority? (n=115)	-	62 (54%)
Are there breastfeeding counsellors that regularly receive referrals from health professionals in your area? (n=68)	-	31 (46%)

Figure 1: The presence of breastfeeding support groups and breastfeeding peer supporters in the UK

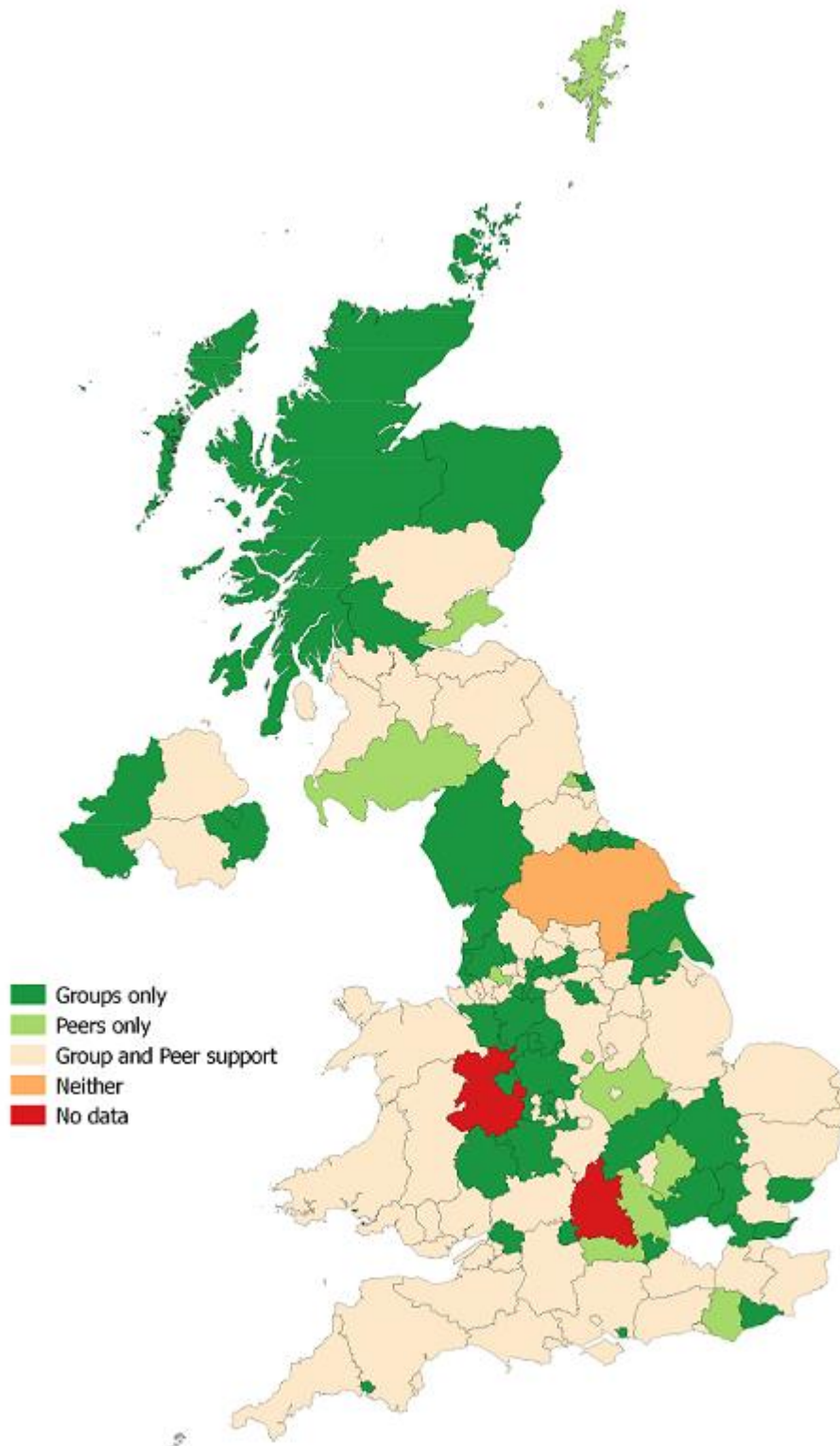


Figure 2: The presence of breastfeeding support groups and breastfeeding peer supporters in London, UK

