

1 **A before and after study of integrated training sessions for children's health and**
2 **care services**

3
4 **ABSTRACT**

5 Recent UK policy drivers such as the National Collaboration for Integrated Care and
6 Support and Making Every Contact Count prioritise integrated care, an approach that
7 seeks to provide more coordinated and seamless health and social care. In children's
8 services, despite many partners, there are challenges around integrating care. A
9 deprived borough of London ran short training and networking sessions for services
10 supporting children and young people. This study examined whether intersectoral
11 training would improve participants' knowledge of local services and joint working
12 (including communication, navigation and confidence in collaboration). As part of a
13 service evaluation, the study utilised a pre-post Likert scale survey design for each
14 training session, a one month follow up survey, and telephone interviews with a sub
15 sample of participants. The educational intervention was three sets of 1.5 hour
16 educational workshops from December 2016 to February 2017. There were 302
17 attendances from 202 individuals from the health (n=99), education (n=145), social
18 care (n=39) and voluntary (n=19) sectors. The pre- and post-surveys found significant
19 increases in self-assessed knowledge of health/education/social care/voluntary
20 services and in some elements of joint working. However, these increases were not
21 sustained in any domain after one month of follow up. There was also no difference in
22 self-assessments amongst those who attended three sessions compared to those who
23 attended one or two. Telephone interviewees highlighted networking as being helpful
24 and suggested that informative tasks and diverse attendance would be beneficial in
25 future. To conclude, this study suggests that although short learning sessions may
26 seem to improve immediate knowledge and some elements of joint working in the
27 short term, any gains are not sustained in the long term. The cost effectiveness of such
28 schemes is in doubt but may be improved by a more targeted delivery of content.

29
30 **Key words:** education, networking, community, children, young people

31
32 **What is known about this topic**

- 33 • Many existing studies have evaluated integrated learning schemes, mainly
34 with a focus on the health sector

35 • These studies have found that such schemes can be beneficial for knowledge
36 or team working

37 • Cochrane systematic reviews have recommended that further evidence is
38 necessary to determine to what extent efficacy can be generalised

39

40 **What this paper adds**

41 • This educational training programme was not effective in improving
42 participants' knowledge of local services or joint working after one month of
43 follow up

44 • Attendees found the opportunity to network was helpful, and recommended
45 improvements included more information on services and a greater diversity
46 of attendance

47 **INTRODUCTION**

48 Integrated care is defined by the World Health Organisation as “a concept bringing
49 together inputs, delivery, management and organisation of services related to
50 diagnosis, treatment, care, rehabilitation and health promotion.”(Grone & Garcia-
51 Barbero, 2001) Integration has recently been prioritised in United Kingdom (UK)
52 national health policy - for example, the National Collaboration for Integrated Care
53 and Support was established in 2013 to promote integration across health and other
54 sectors. The collaboration defined integration as “the means to the end of achieving
55 high quality, compassionate care resulting in better health and wellbeing and a better
56 experience for patients and service users, their carers and families.”(Department of
57 Health, 2013) Similarly, the Making Every Contact Count initiative seeks to
58 standardise learning and training of health care professionals such that families
59 receive harmonious messages (Speller & Dewhurst, 2015).

60

61 These drives have occurred because it is perceived that integration produces better
62 outcomes in certain domains, and some studies have found this to be the case
63 (Bernabei et al., 1998; Janse, Huijsman, de Kuyper, & Fabbriotti, 2014; Titova,
64 Steinshamn, Indredavik, & Henriksen, 2015). A review of systematic reviews
65 concluded that integrated care programmes for the chronically ill seem to improve
66 quality of patient care (Ouwens & Wollersheim, 2005). Although most integrated care
67 projects focus on care for the elderly, many of whom have high health and social care
68 needs, integration has also been recommended to improve children’s services (Wolfe,
69 2016). In children’s services a litany of organisations may be involved across the
70 health, social care, education and voluntary sectors, and integrated care could be
71 beneficial by decreasing the amount families have to repeat themselves, increasing
72 efficiency, and encouraging coherent planning. However, little research has been
73 undertaken firstly about the efficacy of integration across the variety of services
74 working with children and young people, and secondly about ways in which to
75 encourage integration in practice.

76

77 There are various methods whereby integration can be promoted, such as through
78 formal integrated care pathways, new care models, and interdisciplinary approaches
79 (Campbell, Hotchkiss, Bradshaw, & Porteous, 1998; Janse et al., 2014; Moore et al.,
80 2017). One type of intervention is interprofessional education (IPE), whereby

81 practitioners from different services meet and are educated together, and ideally
82 would form connections for future collaboration, with increased knowledge about the
83 roles performed by other services. A 2013 Cochrane review of IPE reviewed 15
84 studies which compared the effectiveness of IPE versus no intervention (Reeves,
85 Perrier, Goldman, Freeth, & Zwarenstein, 2013). They found that, of the 15 studies,
86 seven studies reported positive outcomes from IPE, four mixed, and four no effect.
87 The authors commented that due to the largely heterogeneous approach taken by most
88 studies, it is difficult to underpin elements that make an IPE intervention successful or
89 not. It should be noted that this review is now five years old and does not cover more
90 recent research in the field.

91
92 In 2016, the London borough of Newham tested an IPE intervention which aimed to
93 support integrated working amongst services for children. Newham is one of the most
94 ethnically diverse and economically challenged boroughs in the UK (Centre on
95 Dynamics of Ethnicity, 2013). The programme aimed to provide integrated training
96 across the health, education, social care and voluntary sectors for professionals
97 working for children and young people's services. The programme was based on the
98 principle that learning together might engender integrated practice, and thus
99 integrated care. The programme was facilitated by the Early Help Partnership, an
100 organisation that advises schools on statutory responsibilities regarding safeguarding
101 and providing early support to children and families (Newham London, 2014). Whilst
102 research has examined integrated learning within health, especially medical education
103 (Briffa & Porter, 2013; Fatchett & Taylor, 2013), few studies have looked at the
104 impact across multiple sectors, such as health, education, voluntary and social care
105 sectors together. This approach was undertaken as it was hoped this would maximise
106 impact by covering all services working to care for an individual child, rather than a
107 select few solely within health.

108
109 The aim of this service evaluation study was therefore to assess the efficacy of an
110 intersectoral educational intervention across children's services for:

- 111 • improving participants' knowledge of local services
- 112 • improving participants' joint working (including communication, navigation
113 and confidence in collaboration).

114

115 **METHODS**

116 **The intervention**

117 The programme included three training workshops, with each workshop being
118 delivered in four different localities within Newham to make a total of 12 training
119 events. The first set of training workshops occurred in December 2016, the next set in
120 January 2017 and the final set in February 2017.

121

122 Each of the three workshops covered a different aspect of early help, communication,
123 resources and building capacity. Early help is defined as “the principle of providing at
124 an early point, support to children, young people and families to maximise their life
125 and prevent more complex problems emerging further down the line.”(Newham
126 London, 2014) The sessions involved a mixture of activities including group
127 discussions, presentations and team bonding tasks. Participants were placed on tables
128 with representatives from different sectors. Session facilitators were mostly Early
129 Help Partnership staff with some additional facilitators from local children’s
130 organisations. The third workshop included speakers from Children and Adolescent
131 Mental Health Services (CAMHS) and Health Visiting. The Health Visiting service
132 provides community-based nurses for health checks and health promotion services
133 either at local centres or through home visits to children aged 0-5 years.

134

135 Practitioners from 22 separate organisations or services, spread across the health,
136 education, social care and voluntary sectors were invited to attend by the Early Help
137 practitioners. These organisations were selected as they were identified as being
138 locally significant by the Early Help practitioners and involved in multidisciplinary
139 work within children’s services. There were no exclusion criteria for attendees and
140 any practitioner from the respective organisations could attend. Participants could
141 attend the whole series of workshops (all three in their locality) if desired, or only one
142 or two sessions.

143

144 **Data collection**

145 The two core outcomes of interest were whether the workshops a) improved self-
146 reported knowledge about local services, b) affected joint working between services.

147

148 The evaluation utilised mixed (quantitative and qualitative) methods. The quantitative
149 data comprised of surveys completed before and after each workshop. All attendees
150 were invited to complete a survey before each session and another survey after each
151 session. They were informed as to the purpose of the survey and that by completing
152 the survey they were giving consent for their responses to be used in the service
153 evaluation and study, and no separate formal consent was gained. The surveys were a
154 10-question Likert scale with questions designed in line with the objectives for the
155 workshops. Question responses were on a scale of 1-4, with 1 indicating Strongly
156 Disagree and 4 indicating Strongly Agree. Questionnaires were anonymised in order
157 to encourage candidness. All attendees were emailed an anonymous follow-up survey
158 after one month containing the same 10 Likert scale questions. The survey was
159 devised by the authors and revised in order to ensure a neutral wording focused on the
160 objectives. The same version was then used throughout the evaluation process.

161

162 To collect qualitative feedback, 30 attendees, 10 from each session, completed a
163 structured telephone interview, with questions devised by the authors, lasting
164 approximately 15 minutes. A sample of 30 is a standard number used when planning
165 for saturation across a small sample (Guest, Bunce, & Johnson, 2006; Morse, 2000).
166 Approximately two weeks after each session, attendees were numbered and then a
167 random number generator was used to invite individuals to participate by email until
168 the acceptance rate reached 10 after each session. Participants were informed by email
169 of the purpose of the interview, and confirmed consent by responding to schedule an
170 interview. Questions were standardised and the topics matched the aims of the
171 workshop, for example ‘*Did you learn more about local pathways and services from*
172 *the workshop*’? Full questions are available on request. Responses were recorded,
173 transcribed and then coded by a researcher independent of the scheme, using the
174 constant comparative method to derive common themes using a grounded theory
175 approach. The grounded theory approach was chosen because the aim was not to test
176 a pre-existing theory, but to deductively identify themes arising from the words of the
177 participants themselves (Foley & Timonen, 2015). The interviews were conducted in
178 order to identify elements of the programme that participants felt were most
179 efficacious as well as possible barriers to implementation of learning from the
180 workshops and/or retention of knowledge.

181

182 The study was undertaken in the context of routine service evaluation, and was
183 conducted in accordance with Health Research Authority guidance. In the UK, a
184 ‘service evaluation’ is an evaluation of the processes and/or impacts of a service or
185 programme. Under the rules of the National Health Service (NHS) Research Ethics
186 process, these evaluations do not require formal research ethics approval. The Health
187 Research Authority decision tool was used to confirm that Research Ethical
188 Committee approval was not required (Health Research Authority, 2017). The study
189 did not seek patients’ views or utilise individually attributable data.

190

191 **Data analysis**

192 Analysis of quantitative data used Mann Whitney U as questionnaires were
193 anonymised and non-normally distributed. All analyses were conducted using IBM
194 SPSS Version 24. Mann Whitney U tests were conducted to assess the significance of
195 any changes in agreement for each statement across all participants a) when
196 comparing pre- and post-session surveys; b) when comparing at one month follow up
197 to final session pre-session scores; c) when comparing those who attended all three
198 sessions versus one or two sessions. The Bonferroni correction was completed to
199 correct for multiple testing, and the level of significance was thus set at the 98.3%
200 level of confidence. Normal distribution of data was assessed using Shapiro-Wilk.
201 The change in percentage figures presented were adjusted given that 1 was the
202 minimum possible score.

203

204 **RESULTS**

205 **Participant characteristics**

206 Practitioners from 22 separate organisations or services, spread across the health,
207 education, social care and voluntary sectors, attended the training sessions.
208 Practitioner organisations included general practice, health visiting, school health (5-
209 19), community nursing, paediatric services, CAMHS, HeadStart (a preventative
210 Mental Health and resilience project), Family Nurse Partnership (a voluntary home
211 visiting programme for first time young mums, aged 19 years or under), local schools,
212 Best Start in Life staff, Families First (Troubled Families agenda), Early Help
213 Partnership, Children’s Social Care, 0-25 Special Educational Needs and Disabilities
214 (SEND), voluntary sector organisations, Safer Schools policing, youth offending
215 service, and community nursing neighbourhood teams. Fig. 1 graphically illustrates

216 the number of training places filled by each organisation, with each label being
217 proportional to number of training places. Health Visiting were the most represented
218 group, with n=61 training places; this compares to n=20 from Families First.

219

220 In total, there were 202 unique attendees across the three workshops; 126 of these
221 (62%) attended just one session, 52 (26%) attended two and 24 (12%) attended three.
222 This meant a total of 302 training places were filled. Within this total, 145 places
223 (48%) were taken by the education sector, 99 (33%) by the health sector, 39 (13%) by
224 social care/local authority professionals and 19 (6%) by the voluntary sector. The cost
225 for the whole scheme was £29,998.50 in 2017 for a cost of £71.08 per training place
226 filled and £107.51 per unique participant.

227

228 The pre- and post-questionnaires were collected and collated from all three
229 workshops, with a total of 254 pre-questionnaires completed (84% response rate
230 across 302 attendances) and 220 post-questionnaires (73% response rate). The one
231 month follow-up questionnaire was completed by 65 people (32% response rate).

232

233 For the phone interviews, a total of 84 invitations were sent to achieve the target
234 sample, a response rate of 36%. Other than the 30 participants, three individuals
235 declined to participate and the remainder did not respond. Of the 30 participants, 17
236 were from the Education sector, five from the Health sector, six from the Social Care
237 sector, and two from the voluntary sector.

238

239 **Impact on knowledge of local services**

240 The pre- and post-questionnaire scores shown in Table 1 and Fig. 2 suggest that
241 attending the workshops resulted in significant increases, in the short term, in mean
242 self-assessed knowledge of health (+13.3%), social care (+9.0), and voluntary
243 services (+11.0%). There was also a significant increase in self-assessed knowledge
244 of other professionals' roles (+13.3%). For each of these, the p-value was $p < 0.001$.
245 After the Bonferroni correction for multiple testing, there was no significant increase
246 in mean self-assessed knowledge of education services. There was no significant
247 difference in self-assessed knowledge when comparing those who attended one or two
248 workshops with those who attended all three, as shown in Table 1.

249

250 However, one month later, there was no significant difference relative to the scores
251 before the final session. This suggests that the immediate change in knowledge was
252 not sustained one month later.

253

254 Some telephone interviewees were positive about the impact of the workshops on
255 their knowledge. Three quarters said that they had learned more about local pathways
256 and services from the workshops (77%), and the remainder said they had not.

257

258 A Safeguarding lead said: *“Definitely about local pathways – it’s been quite a grey*
259 *area for us, the referral system and exactly how to do it, and that was clarified a lot*
260 *more through the training.”* A Voluntary sector worker said: *“It was good to hear*
261 *about the pathways and how you can move a client through the system (...) it’s given*
262 *me a better picture in terms of who to refer to.”* A Social Worker said: *“Yes, moreso*
263 *how the services work, especially with health and the school nurses – what we can*
264 *and can’t ask them to do.”*

265

266 Some who did not respond positively highlighted that the workshops did not cover
267 new material. A Family Support Worker said: *“I think I knew most of them that*
268 *existed anyway (...) I’ve attended so many previous workshops so I already knew a lot*
269 *of stuff that was delivered at the workshop.”* A Special Educational Needs
270 Coordinator said: *“No not really, because I’ve been attending different courses*
271 *already.”*

272 **Impact on joint working (communication, navigating local services, and**
273 **confidence in collaboration)**

274 Impact on navigating local services

275 There was a significant increase between the pre- and post-questionnaire scores in
276 participants who agreed that they knew how patients/clients can access most other
277 relevant services in Newham (+14.7%, $p < 0.001$). However, one month later, there
278 was no significant difference relative to the scores before the final session. This
279 suggests that the impact of the workshops in this domain was not sustained over time.
280 There was no significant difference in this domain amongst those who attended one or
281 two sessions compared to those who attended three sessions.

282

283 There was no significant difference in pre- and post-test scores regarding whether
284 participants were confident in calling or talking to someone from another service
285 when they had a question about a patient or client. Likewise there was no significant
286 difference after one month of follow-up, or between attendees who attended a greater
287 or lesser number of sessions.

288

289 Impact on communication

290 There was no significant difference in perceived inter-service communication after
291 workshops (see Table 2 and Figure 3). At one month follow-up, participants were not
292 more likely to say they had worked closely with other services to help patients/clients
293 or had met with professionals from other services in the last three and six months
294 respectively. There was no difference in average follow-up scores between
295 participants who attended all three sessions and those who attended one or two.

296

297 In telephone interviews, about half of participants said that their communication with
298 other professionals in the locality changed since attending the workshop (47%), with
299 some mentioning they had improved contacts. An Education Welfare Officer said: "*I*
300 *found it useful sitting on a table with someone from Families First who I had emailed*
301 *and not met, so when an issue came up for that service I had a very good contact, and*
302 *it made the whole process much smoother.*"

303

304 Conversely, a Families First practitioner said: "*I already have quite a good*
305 *professional network – my communication techniques haven't changed.*" A Learning

306 Mentor said: *“One of the things with integrated services – it’s good in principle, but*
307 *like we discovered in the workshop, not everyone buys into the same system. If there’s*
308 *one central database you can access all the information on, but another 10 schools*
309 *have bought into a different system, they’re not connected.”*

310

311 Impact on confidence in collaboration

312 There was a significant increase between the pre- and post-questionnaire scores in
313 participants who agreed that health, social care and education services in Newham
314 work well together (+12.7%, $p < 0.001$). However, there was no longer a significant
315 difference after one month of follow-up. There was no significant difference in trends
316 amongst those who had attended one or two compared to three sessions.

317

318 **Potential impact on practice**

319 When asked whether they had done anything differently since attending the
320 workshops, 40% of telephone interviewees said yes and 47% said no. A Family
321 Support Worker said: *“I’ve broadened my contacts, so I’ve been able to liaise with*
322 *different sectors - for example I didn’t have a linked health visitor before and I*
323 *managed to get one.”* Other examples of changes to practice reported after attending
324 workshops included using contacts gained during workshops, use of an Early Help
325 Record tool, improved awareness of resources, more appropriate use of resources, and
326 providing information to colleagues who had not attended. A Service Delivery
327 Manager said: *“I’ve spoken about it to my manager and other colleagues about how*
328 *we can work together.”* Conversely, an Education Welfare Officer said: *“Not*
329 *particularly, because we were kind of working in that framework anyway.”* A
330 Families First Practitioner said: *“Nothing different, it just cemented a few things.”*

331

332 About two fifths of telephone interviewees thought that the things they had learned at
333 workshops had impacted on people using services or helped them provide better
334 services (37%). One fifth did not think this was the case (20%) and the rest were
335 uncertain. A child psychologist said: *“Not as yet, it may have an impact indirectly due*
336 *to networking so there’s greater access and greater understanding of our services.”*

337

338

339

340 **Learning points**

341 When asked what was the most helpful part of the workshop, 70% of participants said
342 networking; 30% said knowledge of other organisations, and 17% said learning about
343 new developments in the area. A Sports Development Officer said: *“The networking
344 part was very good – an opportunity to understand what everyone else does in their
345 industry, we didn’t really work previously with mental health or understand what
346 social care does.”* A Family Support Worker said: *“Sharing good practice with the
347 rest of the people in the group.”*

348

349 When asked what could have improved the workshop, 16% asked for more
350 information on services; 11% asked for greater Social Care input; 11% asked for
351 exemplar referral plans. Other themes raised by a minority included housing
352 guidance, a greater diversity of attendees, dissemination of contact details, and more
353 new information. A Voluntary Sector worker said: *“I think if we had the opportunity
354 to have a slot where each individual service could give a brief overview of what they
355 deliver, referral pathways, contact details, that would have been really helpful.”* A
356 Families First practitioner said: *“I feel that it would have been helpful to have
357 someone from social services at the meeting because they are the bit at the middle
358 where everyone goes to.”* A Sports Development Officer said: *“There was not enough
359 time to network – it was like, rush rush rush, everything was quite quick.”*

360

361 **DISCUSSION**

362 **Main findings of this study**

363 This study found that a short series of workshops produced short-term increases in
364 self-reported knowledge of local services and some elements of joint working, but this
365 impact was not sustained after one month of follow up. Those who attended three
366 workshops were no more likely to have increases in self-reported knowledge or joint
367 working than those who attended one or two.

368

369 The implication of this study is that short workshops of this type are not sufficient to
370 create a sustained change to knowledge or practice. Feedback from the 30 telephone
371 interviews suggested that workshops helped participants learn more about local
372 pathways and services and that professionals particularly valued the opportunity for

373 networking with colleagues across sectors, and offered some suggestions for elements
374 that were more helpful than others.

375

376 **What is already known on this topic**

377 There is already a breadth of evidence investigating the value of integrated learning
378 schemes, although such evidence has mainly focused on the health sector (Fraser,
379 Symonds, & Cullen, 2005; Zanotti, Sartor, & Canova, 2015). Such schemes are rarely
380 intersectoral in addition to being interprofessional.

381

382 Regarding the impact on professional practice, individual studies have concluded that
383 such schemes can be beneficial for practitioner knowledge or team-working (J. C.
384 Campbell et al., 2001; Morey et al., 2002). However, a Cochrane systematic review
385 concluded that further evidence is necessary about the generalisability of the benefits
386 of such schemes (Reeves et al., 2013).

387

388 In the context of the increased drive towards integrated care, an Integrated Care
389 Pioneers Programme was established in 2013, with first results from pilot
390 programmes reported in 2014 (NHS England, 2015a). It was reported that many
391 pioneer programmes found that integration of care resulted in improved patient
392 satisfaction. Other studies have reported that integrated care results in improved
393 patient satisfaction, but this was not formally assessed in this study (Mastellos et al.,
394 2014; Siegel, Stöbel, & Wilhelm, 2016).

395

396 **What this study adds**

397 This study is notable due to its multisectoral nature, encompassing not only the health
398 sector but also the education, social care and voluntary sectors. New care models are
399 increasingly encouraging community-centred models that see the voluntary and
400 community sectors as key partners in care (NHS England, 2015b). However, despite
401 the broad and inclusive model of the programme, this study found that the workshops
402 did not produce any sustained benefits.

403

404 There has been an increased strategic drive for integrated care in health (Department
405 of Health, 2013). Monitor has a role in enabling integrated care following the reforms
406 of the Health and Social Care Act 2012 (Monitor, 2015). Many commissioned

407 schemes aiming to promote integration involve formal changes such as joint
408 assessments, joint services or budget pooling, rather than exploring integration that
409 may arise organically as a result of collaboration (National Audit Office, 2017). Our
410 study feeds into this policy debate by suggesting that this sort of short workshop
411 series does not help professionals to connect and integrate in the longer term.

412

413 Additionally, it can be expensive to bring people together in such a way. The
414 workshops in this study cost £108 per unique participant. Questions could be raised
415 about whether this is a cost-effective use of resources given the lack of long term
416 benefit detected by this study. This is an important consideration for others running
417 intersectoral or multiprofessional events, as without proper planning and follow-up
418 the events may not have a lasting impact on practice. The opportunity cost of the
419 event for participants' individual organisations should also be a financial
420 consideration. Schemes of this sort may frequently be approved without strong
421 evidence as to their efficacy, given the complexity and expense that comes with
422 evaluating them (Walsh, Reeves, & Maloney, 2014).

423

424 There is learning from this study about ways to increase the impact of future schemes.
425 Future schemes that prioritise particular elements, such as individual service
426 presentations and more time for networking, may produce greater benefits and be
427 more cost-effective, given that these are elements that were reported by interviewees
428 to be valued and useful to a greater degree. It may also be advisable to advertise
429 content in advance so training places are not wasted on those who are already familiar
430 with the content. Additionally, future schemes may benefit from more diverse
431 attendance, as raised in the phone interviews, as in this programme there was lower
432 proportional representation from the social care and voluntary sectors. Participants fed
433 back that greater social care involvement would have been useful.

434

435 **Limitations of this study**

436 There are a number of limitations to this study. A key limitation is that the Likert
437 questionnaires relied on participants' self-assessments, rather than any objective
438 measure, and so may be unrepresentative of the actual impact of the scheme. The
439 study is also liable to attrition bias, firstly due to attendees who did not complete pre-
440 and/or post-questionnaires, and also the one month follow-up survey. The high

441 proportion of non-responders to invitations to a phone interview, and the
442 disproportionate representation of the Education sector in this group, mean that these
443 responses may be subject to bias. Follow-up did not extend beyond one month after
444 the completion of the final workshop. We sought to combat these limitations through
445 triangulation and mixed methods, but we recognise generalisability may be affected.
446 Another limitation comes from the choice of the Mann Whitney U test for assessment
447 of statistical significance, a test that is useful for ordinal data, such as a Likert scale,
448 and for non-normal data, which was confirmed in our data using Shapiro Wilk. It
449 normally assumes independence between groups, which was not the case in this study
450 due to the pre-post design, but as participants completed questionnaires anonymously,
451 it was not possible to match them. There was no control or comparator group. Finally,
452 this study also did not assess any impact of the scheme on service users, which ought
453 to be a long-term aim of such schemes.

454

455 **Conclusion**

456 Within the context of the increased drive for integrated care, it seems theoretically
457 worthwhile to bring professionals from different sectors together to network and learn
458 together. However, we found that short integrated workshops alone were ineffective
459 in leading to improvements in knowledge and joint working, although they were well
460 received and served a networking function. They may thus act as a first step in
461 informing ways to build capacity for integrated training and interprofessional practice.

462

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570 **Tables and Figures**

571

572 Fig. 1: Word cloud of training places filled by organisation or service

573

574 Fig. 2: Mean self-assessed knowledge of services immediately before and after

575 sessions and after one month

576

577 Fig. 3: Mean joint working scores immediately before and after workshops and after

578 one month

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580 Table 1: Impact on knowledge of services

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582 Table 2: Impact on joint working

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Statement	Mean (Pre)	Mean (Post)	Change (%)	Mann Whitney U	Mean (1 or 2 Sessions)	Mean (3 Sessions)	Change (%)	95% Confidence Interval	Mean (Session 3 Pre)	Mean (One Month Follow Up)	Change (%)	95% Confidence Interval
I know a lot about health services in Newham	2.63	3.03	+0.40 (13.3%)	p<0.001	2.71	2.83	+0.12 (4.0%)	p=0.397	2.84	2.75	-0.09 (-3.0%)	p=0.212
I know a lot about education services in Newham	2.84	3.02	+0.18 (6.0%)	p=0.018	2.95	3.30	+0.35 (11.7%)	p=0.078	2.95	3.08	+0.13 (4.3%)	p=0.120
I know a lot about social care services in Newham	2.70	2.97	+0.27 (9.0%)	p<0.001	2.80	2.91	+0.11 (3.7%)	p=0.582	2.83	2.84	+0.01 (0.03%)	p=0.900
I know a lot about voluntary services in Newham	2.29	2.62	+0.33 (11.0%)	p<0.001	2.27	2.65	+0.38 (12.7%)	p=0.055	2.31	2.41	-0.09 (-3.0%)	p=0.130
I know what professionals in other services do	2.61	3.01	+0.40 (13.3%)	p<0.001	2.80	3.17	+0.37 (12.3%)	p=0.035	2.80	2.94	-0.09 (-3.0%)	p=0.047

586

Table 1

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588

Statement	Mean (Pre)	Mean (Post)	Change (%)	Mann Whitney U	Mean (1 or 2 Sessions)	Mean (3 Sessions)	Change (%)	Mann Whitney U	Mean (Session 3 Pre)	Mean at One Month Follow Up	Change (%)	Mann Whitney U
I am confident in calling or talking to someone from another service when I have a question about a patient or client	3.27	3.37	+0.10 (3.3%)	p=0.187	3.40	3.65	+0.25 (8.3%)	p=0.191	3.42	3.49	+0.07 (2.3%)	p=0.282
I know how patients/clients can access most other relevant services in Newham	2.65	3.08	+0.44 (14.7%)	p<0.001	2.88	3.09	+0.21 (7.0%)	p=0.289	2.88	2.95	+0.07 (2.3%)	p=0.291
In the last three months I have worked closely with other services to help patients/clients	3.09	3.22	+0.13 (4.3%)	p=0.122	3.32	3.59	+0.27 (9.0%)	p=0.208	3.32	3.41	+0.09 (3.0%)	p=0.192
In the last six months I have met with professionals from other services	3.25	3.29	+0.04 (1.3%)	p=0.887	3.41	3.68	+0.27 (9.0%)	p=0.136	3.37	3.51	+0.14 (4.7%)	p=0.105
I think the health, social care and education services in Newham work well together	2.55	2.93	+0.38 (12.7%)	p<0.001	2.63	2.68	+0.06 (2.0%)	p=0.584	2.65	2.65	0.00 (0.0%)	p=0.969

Table 2

