

1 **The Effectiveness of Psychodynamic Therapy in an NHS Psychotherapy Service: Outcomes for**
2 **Service-users with Complex Presentations**

3

4 Dr Rachel Hirschfeld^{a*}, Dr Scott Steen^b, E.L. Dunn^c, A. Hanif^d, L. Clarke^{ef}

5 *^aSpecialist Psychotherapies Service, Birmingham and Solihull Mental Health NHS Foundation Trust,*
6 *Birmingham, UK*

7 *^b The University of Hertfordshire, Hertfordshire, UK*

8 *^c Specialist Psychotherapies Service, Birmingham and Solihull Mental Health NHS Foundation Trust,*
9 *Birmingham, UK*

10 *^d Specialist Psychotherapies Service, Birmingham and Solihull Mental Health NHS Foundation Trust,*
11 *Birmingham, UK*

12 *^e Warwick Medical School, University of Warwick, Coventry, CV4 7AL*

13 *^f University of Birmingham, Edgbaston, Birmingham, B15 2TT*

14

15

16 *Rachel.hirschfeld@nhs.net

17 Specialist Psychotherapy Service, Callum Lodge, 242 Lodge Road, Winson Green, Birmingham, B18
18 5SJ, UK

19

20

21

22 Abstract

23

24 **Introduction:** Complex and enduring mental health problems require greater treatment resources,
25 usually in the form of multidisciplinary support, including providing psychological therapies. This paper
26 reports on an NHS, tertiary-level specialist psychotherapy service offering Psychodynamic therapies
27 with longer-term, exploratory transdiagnostic approaches to support complexity and sustained
28 personality functioning.

29 **Method:** This paper adopts a naturalistic study design evaluating the effectiveness of Psychodynamic
30 therapy using pre- and post-outcomes across a 10-year period. A total of n=474 participants self-report
31 pre- and post-outcome measures were used as the marker of effectiveness along with therapist
32 assessments during intake and engagement.

33 **Results:** The findings showed that Psychodynamic therapy was effective in reducing psychological
34 distress based on service-user self-report and therapist assessments. While intake scores varied by
35 socio-demographic factors, the rate of change across most groups was similar. There were several
36 limitations relating to data quality and completeness which reflect the naturalistic design.

37 **Discussion:** Despite the limits of a naturalistic design, this study provides evidence of support for the
38 place of Psychodynamic therapies within NHS mental health care, catering to those with complex and
39 enduring mental health problems.

40

41 **Keywords:** Psychodynamic therapy, Practice-based evidence, Naturalistic study design, Clinical
42 practice, Complex mental health problems

43

44 Introduction

45

46 Mental health problems exist along a continuum, ranging from common to complex conditions
47 which need different treatments to accommodate symptom severities, service-user choice, and
48 available resources. Individuals may experience brief episodic issues while others experience longer,
49 multiple, and compounding problems that require ongoing engagement and intensive interventions.

50

51 Research shows around 4-15% of the population in England meets the diagnostic criteria for a
52 personality disorder (McManus et al., 2016). Studies find that approximately 30-50% of those with
53 severe mental health problems report co-occurring substance use (EMCDDA, 2015; Lai et al., 2015)
54 and approximately 50% of those diagnosed with psychosis or schizophrenia will require substantial
55 and ongoing support, with around 15% experiencing a chronic course with limited improvement, and
56 10% dying by suicide (Santesteban-Echarri et al., 2017). Other statistics estimate severe mental health
57 problems have increased from 7.9% in 2000 to 9.3% in 2014 (Stansfeld et al., 2014). Chronic conditions
58 require high resources over an individual's lifetime including hospitalisation, medication use, and
59 managing maladaptive behaviours (Jin & Mosweu, 2017; Naylor et al., 2012). Frequent service
60 utilisation risks further distress by repeating past traumas and lost autonomy (NHS England, 2019).
61 Socioeconomically disadvantaged groups are at increased risk of poor mental health which can worsen
62 social conditions and thus produce an ongoing cycle (Kivimäki et al., 2020). Severe and chronic
63 problems are exacerbated by other issues including family difficulties, stress, physical health problems,
64 medication compliance, and substance use (Jin & Mosweu, 2017; Naylor et al., 2012), presenting
65 further challenges for support. Accordingly, psychotherapeutic delivery requires a longer-term,
66 intensive focus, alongside multifaceted and multidisciplinary, preferably community-based,
67 approaches (NHS England, 2019; NICE, 2022).

68

69 Psychological therapies in the NHS

70

71 Within NHS England (2019), most adults with mental health problems (around 90%) are supported
72 in primary care. These include common mental health problems including mild-to-moderate
73 depression and anxiety disorders. Secondary care community mental health services play a role in
74 delivering care for adults and older adults for those with moderate-to-severe mental health needs,
75 including providing access to psychological therapies. Services use an over-arching stepped-care
76 approach where those with the most clinical need are stepped-up to longer-term, multidisciplinary,
77 and intense interventions. The NHS Long-Term Plan (NHS England, 2019) is committed to offering
78 individuals greater choice and control over their care, and offering specialist support for those with
79 complex, severe, and enduring conditions. NICE (2022) guidelines recommend a range of
80 psychotherapeutic interventions, including short-term psychodynamic therapy for depression in those
81 seeking insight-oriented and affect-focused interventions. Evidence suggests short-term therapies are
82 not sufficient for those with complex conditions, including those with personality functioning
83 difficulties, requiring longer-term approaches (Leichsenring et al., 2013; Lindfors et al., 2015). To
84 optimise a psychotherapy's potential, interventions ought to adapt and accommodate the unique
85 presentations of service-users including complexity, and long-standing and entrenched difficulties
86 (NHS England, 2019; NICE, 2022).

87

88 Longer-term therapies are recommended by NICE (2022) as an alternative for those who have not
89 responded to other interventions like CBT. The dose-effect literature suggests the longer a service-user
90 remains engaged in therapy, the higher their chances of improvement (Robinson et al., 2020). Those
91 with complex presentations may benefit from longer-term work to enact a larger dose-effect towards
92 stabilisation. Longer-term psychodynamic therapies appear a worthwhile choice for enabling sustained
93 personality functioning improvements (Lindfors et al., 2015), making them a viable option for those
94 with complex and enduring difficulties.

95

96 Psychodynamic therapy

97

98 Psychodynamic therapy is a specialist psychological intervention focused on relational factors,
99 childhood experiences, and attachment and defensive patterns relevant to psychological distress
100 (Waddell, 2002). The focus on relating patterns is interpreted through transference and
101 countertransference to inform and understand the potential redirection and impact of emotional
102 states. Through open and exploratory approaches, the model aims to enable service-users to become
103 aware of painful and disturbing feelings and the defences to manage them (e.g., splitting, dissociation,
104 projective identification). It encourages practitioners to allow themselves to be emotionally stirred to
105 attune to a service-user's emotional state and dynamically contain and process experiences through
106 which the service-user comes to know themselves fully and tolerate previously unbearable affects and
107 states of mind (Bion, 1963).

108

109 Psychodynamic therapies are positioned as a valuable framework for supporting those with
110 complex conditions based on the idea that traumatic relational patterns are founded on
111 developmentally organised psychic structures (Lindfors et al., 2015). Psychodynamic therapy focuses
112 on past experiences and how they can exist in the present, influencing interpersonal patterns and
113 psychological and emotional difficulties. There is evidence of severe adverse childhood experiences in
114 those with complex mental health problems (Bellis et al., 2014) showing a potentially valuable role for
115 psychodynamic approaches. Systematic reviews have demonstrated the effectiveness of
116 psychodynamic therapies for personality disorders (Haskayne et al., 2014; Leichsenring et al., 2013;
117 Lindfors et al., 2015). Ingrained personality difficulties can be more challenging to work with and show
118 worse outcomes than episodic presentations and appear to benefit from longer-term relationally-
119 focused approaches (Fonagy et al., 2015; Rost et al., 2019).

120

121 The service reported in this paper offers time-limited (up-to-two-years) psychodynamic therapy to
122 those with complex and enduring conditions. Service-users are informed at the outset that these
123 therapies can last between one-to-two years. This limit is determined by service resources, the need
124 to set a therapeutic frame, and ensuring individuals are fully informed. Given the long-term nature of
125 psychodynamic therapies, there are challenges for research and evaluation. The model's emphasis on
126 transdiagnostic presentations and general psychological functioning means focusing on single 'pure'
127 diagnostic groups, which is well-suited to controlled trial methodologies, is not clear cut. There are
128 ongoing debates about the appropriateness of how NICE reviews psychotherapeutic interventions and
129 the nature of psychodynamic therapies which may not lend themselves to Randomised Controlled Trial
130 (RCT) methodologies but to naturalistic approaches (Mollon, 2009). Service-users with complex
131 emotional needs may respond in challenging ways to the therapeutic process, including reassurance
132 seeking, criticising, and straining personal and professional boundaries, each of which can take an
133 emotional toll. Research indicates the presence of differential treatment effects based on personality
134 traits and interpersonal styles, including the need for validation, dependency, and managing self-
135 criticism (Rost et al., 2019).

136

137 The literature shows that long-term psychodynamic therapies are useful for improving treatment-
138 resistant depression (Fonagy et al., 2015) and may offer an alternative for those with complex
139 conditions for which primary NICE-recommended therapies decrease in effectiveness (Taylor et al.,
140 2012). Greater clinical complexity is associated with other research challenges including a greater
141 likelihood of premature disengagement and confounding factors including difficult social
142 circumstances (Swift & Greenberg, 2015). The remit of longer-term psychodynamic therapies to treat
143 these groups therefore creates a disadvantage when attempting to assess their effectiveness.

144

145 Practice-based evidence

146

147 Recent decades have seen a shift towards practice-based evidence to bridge the implementation
148 challenges in translating evidence-based treatments into routine clinical practice, and to acquire more
149 ecologically valid and clinically relevant findings (Barkham et al., 2010; Wakefield et al., 2021). Whereas
150 traditional questions of efficacy are suited to controlled methodologies, effectiveness and practice
151 research considers how and which interventions are provided to service-users within clinical systems.
152 These approaches for evaluating interventions are not considered opposing but complementary
153 (Barkham et al., 2010).

154

155 Practice research typically involves a bottom-up approach, involving a range of presentations from
156 routine practice that might otherwise be excluded from controlled trials. Such an approach is beneficial
157 for complex presentations and multiple conditions because it acknowledges a multifaceted profile as
158 opposed to focusing on primary diagnoses, therefore more closely reflecting the realities of complexity
159 in clinical practice. Practice research enhances the representation of participants for which controlled
160 studies of complex conditions are restricted. As outlined earlier, the debates around the best-suited
161 methods for evaluating psychotherapy effectiveness, especially longer forms and exploratory models,
162 necessitate the need for practice research. Accordingly, practice-based evidence of NHS
163 psychodynamic therapies represents an appropriate and valuable source of knowledge about a
164 model's effectiveness for routine clinical samples of complexity. Although such an approach reduces
165 internal validity due to the number of confounding factors, it does provide an account of therapeutic
166 activity within a particular service and setting, delivering other valuable insights.

167

168 A common practice research approach involves analysing service datasets from routine clinical
169 measurements. Obtaining routine clinical data has been enhanced in recent years through the

170 advancements and implementation of outcome systems which log psychometric data and produce
171 datasets about service quality and intervention effectiveness within a specific service context. This
172 paper aims to:

- 173 1. Assess the effectiveness of psychodynamic therapies within a West Midlands NHS mental
174 health service using routine clinical data.
- 175 2. Use these findings to develop an understanding of complex presentations within a routine
176 clinical frame of reference and assess the suitability of psychodynamic therapies.

177

178 Method

179

180 Service model

181

182 The service is an NHS specialist outpatient psychotherapeutic service providing psychodynamic-
183 based interventions, including individual and group formats. It offers assessment, interventions, and
184 consultation for adults aged 25 and over experiencing complex mental health problems who have
185 already tried other secondary care psychotherapeutic interventions. It accepts referrals from various
186 sources in community mental health, usually secondary care professionals, who deem those on their
187 caseload as benefitting from a longer-term, psychodynamic approach treating underlying trauma and
188 relational difficulties. Referrals remain under the remit of community mental health care teams for the
189 duration of their engagement and therapies with the service.

190

191 Referrals are screened by a team of specialists working for the service who review the case
192 materials and jointly decide whether to offer an assessment. The eligibility criteria considers whether
193 the service-user can commit and work collaboratively in therapy, if they have engaged in therapies
194 previously, and if there are support networks in place for the containment of therapy given the focus

195 on painful emotional material. The service is not diagnosis specific and is open to those with complex
196 conditions and previous difficulties with engagement, treatment-resistant disorders, complex trauma
197 and attachment issues, personality disorders, previous psychotic episodes that are in remission and
198 not active, and those with some alcohol and/or drug problems that are managed appropriately by their
199 wider healthcare service.

200

201 For those allocated an assessment, service-users undergo a three-to-four-session assessment
202 process to collaboratively explore the reasons for their referral and jointly agree with the service-user
203 and in collaboration with a supervising team an appropriate intervention. For those for whom the
204 interventions appear unsuitable, alternative options are discussed, and they are referred to their
205 supporting clinical team. Those deemed likely to benefit are placed on a waiting list to start therapy
206 subject to service-user preference and clinical need and availability. The waiting time from assessment
207 decision to starting therapy averages around 6-months. The practitioners delivering psychodynamic
208 therapies range from trainees to specialists with each supported with weekly supervision. Therapists
209 possess core mental health training with additional specialist psychodynamic training, and team
210 allocation, assessment, and supervision ensure model fidelity and workforce skill sharing.
211 Appointments occur weekly with lengths of therapy averaging from 12-to-24 months. During the
212 therapy, the service-user's progress is collaboratively monitored in session and endings are discussed
213 subject to clinical judgment and service-user request. As an open-ended exploratory approach, these
214 are managed flexibly to respond to a service-user's ongoing and developing needs.

215

216 **Measures**

217

218 CORE-OM

219

220 The CORE Outcome Measure (CORE-OM) is a transdiagnostic, pan-theoretical measure of
221 psychological distress covering a range of presenting problems (Barkham et al., 2010). It contains 34-
222 items about the last week using a 5-point Likert scale from 'Not at all' to 'Most or all of the time' across
223 four dimensions of Subjective well-being (4-items), Problems/symptoms (12-items), Functioning (12-
224 items), and Risk (6-items). Responses are averaged to produce a score of overall distress and by
225 subdomain, with higher scores indicating higher distress or symptom severity. Mean scores are
226 commonly multiplied by 10 to give a clinical score, with a threshold of above 10 indicating clinical
227 populations, and severity bandings of mild (10-14), moderate (15-20), moderate-to-severe (20-25),
228 and severe (25+). Reliable change, that is a score change exceeding what might be expected by chance
229 or measurement error, is defined as 5 or more (Barkham et al., 2010). Clinically significant change is
230 defined as scores moving from above 10 to below 10, and clinically reliable change are scores that
231 additionally change by more than 5. The measure is typically completed before and after therapy to
232 calculate pre- to post-therapeutic change. The CORE-OM has reported good internal consistencies
233 ($\alpha=.91-.95$) and test-retest reliabilities between 1 to 4-months ($r=.88-.80$) (see Barkham et al., 2010).
234 In the present sample, the internal consistency was $\alpha=.94$.

235

236 Therapist Assessment and End of Therapy forms

237

238 There are two practitioner-completed forms designed to complement the CORE-OM with
239 contextual information including the Therapy Assessment Form (TAF) which further profiles the
240 service-user about their problems and journey into therapy, along with the End of Therapy Form (EOT)
241 which records their problems and pathway through therapy. Both the TAF and EOT contain domain
242 measures of problems including Depression, Anxiety, Personality Problems, Trauma/Abuse, Self-
243 Esteem and Interpersonal relationships, rated on a 6-point Likert scale from 'Not at all' (0) to 'Causing
244 severe impairment in all areas' (5), along with Risk categories of Suicide, Self-Harm, and Harm to
245 others, rated 'None' (0), 'Mild' (1), 'Moderate' (2), and 'Severe' (3). The TAF provides information on

246 Assessment Outcome (Accepted, Unsuitable/Referred On, Assessment Only) and Waiting Times (from
247 the Date of Referral to the Date of First Assessment Session), while the EOT records information about
248 Therapy Engagement (Sessions Attended and Non-attended) and Ending Type (Planned, Unplanned,
249 or Unknown (for those without an ending recorded)). To review the missing data effects on Ending
250 Types, those marked 'Unplanned' endings were also combined with those missing endings data
251 ('Unknown'). While it's not possible to accurately know what proportion of those with missing data were
252 Unplanned, it offers a comparative estimate with reduced sampling bias.

253

254 Procedure

255

256 The service collects and collates routine CORE-OM data at assessment and then every 6-months
257 during treatment, with the first and last completed measures representing pre- and post-scores. Given
258 the delay between assessment and therapy starting, score changes were calculated as pre- and post-
259 therapy. The CORE-OM is completed independently by the service-user and is handed to clerical staff
260 who then enter the responses into an information management system (CORE IMS) where it is
261 available for practitioners to review. The supporting practitioner completes the TAF following the
262 assessment process and EOT upon completion of the intervention, recording whether the ending was
263 planned or unplanned (i.e., a premature disengagement not jointly agreed upon by the service-user
264 and practitioner). A service dataset extracted cases assessed, accepted into therapy, and completed
265 interventions (planned/unplanned).

266

267 Data analysis

268

269 Descriptive statistics for each variable and the proportions of cases reaching the thresholds for
270 clinical and/or reliable improvement as defined by the CORE-OM will be reported. Pre- and post-
271 treatment data, including change in CORE-OM scores, TAF to EOT number of problems, and risk ratings,

272 were analysed statistically using non-parametric Wilcoxon and Mann-Whitney U tests to assess the
273 magnitude of change.

274

275 Participant complexity is calculated using the baseline CORE-OM scores and TAF problem ratings.
276 A series of non-parametric Wilcoxon and Mann-Whitney U tests assessed the profiles accessing
277 therapy versus those declining as well as those with planned versus unplanned endings. Non-
278 parametric tests were used based on the psychometric data and parametric analytic requirements not
279 being satisfied. All statistical analyses were performed using SPSS v.28.

280

281 Ethical considerations

282

283 Data collection complied with data protection and information governance protocols and service-users
284 gave consent for their data to be used for this research. This study obtained ethical approval from the
285 NHS Research Ethics Committee (Ref: 17/WM/01202).

286 Results

287

288 Participants

289

290 Over 10 years, the service received n=2,042 referrals, of which n=1,349 were offered an
291 assessment, n=1,049 were assessed, and n=729 was Accepted for Therapy. Of those assessed, n=1,022
292 had a valid pre-CORE, and n=474 had a valid pre- and post-CORE. The sample with a valid pre-CORE
293 had an average age of 37.7 years (SD=11.46), were mostly Female (71.3%), White (82.7%), either
294 Employed (25.8%) or not stated (26.9%), on Medication (at intake) (69.0%), Not living with a Partner
295 (61.7%), and were not Caring for Children (74.6%) (see Table 1 for Sample Characteristics).

296

297 Engagement

298

299 The average Waiting Time was 49.25 days (SD=55.95) and there were no significant differences
300 between subgroup characteristics. The average Attendance was 31.7 (SD=30.14) sessions and
301 nonattendance was 26.0% (SD=22.60%) with no significant differences in characteristics except for
302 Gender and Living Situation. Although there were no differences in Nonattended rate between
303 Genders ($p=.617$) or Living with a Partner ($p=.165$), Females ($M=36.7$; Mean Rank (MR)=180.10)
304 reported significantly higher sessions attended than Males ($M=26.1$; $MR=149.88$) ($Z=2.64$, $p=.008$), as
305 did those Living with a Partner ($M=35.3$; $MR=184.20$) than without ($M=29.7$; $MR=159.57$) ($Z=2.26$,
306 $p=.024$).

307

308 Assessment outcomes

309

310 The majority were Accepted for Therapy (69.5%), followed by those deemed Unsuitable/Referred
311 on (15.6%), offered an Assessment Only/Long Consultation (13.1%), and No Data (1.9%). Kruskal-Wallis
312 and Chi-squared tests analysing Assessment Outcomes of all assessed ($n=1,030$; excluding No Data
313 ($n=19$)) showed no significant differences in sample and engagement characteristics apart from
314 Employment status ($X(8)=0.191$, $p<.001$) and pre-CORE scores ($H(2)=10.03$, $p=.007$). Post-hoc
315 comparisons using Bonferroni adjustments and adjusted residuals showed those Employed (78.4%)
316 had higher proportions of Accepted ($Z=3.44$, $p<.001$), and those on Long Term Sick, Disabled or
317 Benefits (54.2%) had lower proportions of Accepted ($Z=-5.06$, $p<.001$) and higher proportions of
318 Unsuitable/Referred on (24.3%) ($Z=3.84$, $p<.001$). Those Accepted ($M=22.2$; $MR=485.89$) had
319 significantly lower pre-CORE scores than Assessment only ($M=24.0$) $MR=570.43$) ($p=.006$) but no
320 differences for either with Unsuitable/Referred on ($p>.340$).

321

322 CORE-OM

323

324 Table 1 details overall and subgroup pre- and post-CORE scores. The overall pre-CORE score
325 (n=1,022) was in the 'moderate-to-severe' range (M=22.7, SD=7.15) and post-CORE score (n=474) in
326 the 'moderate' range (M=17.8, SD=8.47). These scores are higher than an NHS benchmarking study of
327 primary, secondary, and tertiary care services (n=1,309), with pre-CORE scores of 17.41 and post-
328 scores of 8.50 (Stiles et al., 2006).

329

330 Pre-CORE (intake) scores

331

332 Spearman's rank correlation tests found no significant associations between pre-CORE scores and
333 waiting times or sessions attended. The analysis did find a significant, small, and positive correlation
334 with nonattendance rate ($r=.147$, $p=.009$), indicating those with higher intake scores were more likely
335 to not attend sessions. Mann-Whitney U tests showed significantly higher scores for Females (M=23.0;
336 MR=524.10) to Males (M=21.9; MR=480.15) ($Z=-2.15$, $p=.031$), those on Medication (at intake)
337 (M=23.6; MR=539.51) to not (M=20.5; MR=415.24), ($Z=-6.21$, $p<.001$), and those not Living with a
338 Partner (M=22.9; MR=532.31) to those that were (M=21.5; MR=463.93) ($Z=-3.62$, $p<.001$), but no
339 differences in Caring for Children ($p=.202$). Although a Kruskal-Wallis test reported significant
340 differences in Ethnic Origin ($H(4)=14.80$, $p=.005$), when post-hoc comparisons were adjusted using
341 Bonferroni corrections, the differences between specific groups were non-significant ($p>.054$)
342 suggesting that subgroup comparisons were underpowered due to their relative sizes. There were
343 significant differences in Employment ($H(4)=72.65$, $p<.001$) with post-hoc comparisons using
344 Bonferroni adjustments showing those Unemployed (M=24.4; MR=582.06) had higher scores than
345 Employed (M=20.7; MR=431.17) ($p<.001$), or Other (M=21.2; MR=455.25) ($p=.002$) and those on Long
346 Term Sick, Disabled or Benefits (M=25.9; MR=645.91) showing higher scores than Employed ($p<.001$),
347 or Other ($p<.001$).

348

349 *Table 1: Overall and subgroup pre- and post-CORE scores*

	Pre-CORE Score		Post-CORE Score	
	N (% of Total)	M (SD)	N (% of Total)	M (SD)
Total	1,022	22.7 (7.15)	474	17.8 (8.47)
Age (Years)¹	37.7 (11.46)		38.7 (11.5)	
Gender				
Male	293 (28.7%)	21.9 (7.03)	128 (27.0%)	17.2 (8.31)
Female	729 (71.3%)	23.0 (7.15)	346 (73.0%)	18.0 (8.48)
Ethnic Origin				
White/Caucasian	845 (82.7%)	22.5 (7.08)	399 (84.2%)	17.6 (8.43)
Asian/Asian British	70 (6.8%)	21.4 (7.83)	34 (7.2%)	16.3 (8.52)
Black, Black British, Caribbean or African	36 (3.5%)	24.1 (7.26)	18 (3.8%)	21.6 (6.95)
Other/Mixed/Multiple	39 (3.8%)	24.7 (6.42)	8 (1.7%)	19.2 (8.01)
Not Stated	32 (3.1%)	26.1 (6.16)	15 (3.2%)	21.2 (9.26)
Employment				
Employed	264 (25.8%)	20.7 (6.87)	141 (29.7%)	15.5 (7.70)
Unemployed	167 (16.3%)	24.4 (6.53)	78 (16.5%)	20.6 (7.70)
Long Term Sick, Disabled or Benefits	177 (17.3%)	25.9 (6.24)	67 (14.1%)	21.2 (8.39)
Other ²	139 (13.6%)	21.2 (6.74)	59 (12.4%)	17.3 (8.38)
Not Stated	275 (26.9%)	22.1 (7.50)	129 (27.2%)	17.2 (8.80)
Medication (at intake)				
Yes	705 (69.0%)	23.6 (6.86)	326 (69.8%)	18.3 (8.30)
No	299 (29.3%)	20.5 (7.29)	141 (30.2%)	16.6 (8.66)
No Data	18 (1.8%)	24.6 (8.50)		
Living Situation				
Living with a Partner	389 (38.5%)	21.5 (6.78)	191 (40.7%)	17.3 (8.43)
Not Living with a Partner	622 (61.5%)	22.9 (6.85)	278 (59.3%)	18.2 (8.44)
Caring for Children				
Yes	257 (25.4%)	21.8 (6.64)	128 (27.0%)	17.6 (8.00)
No	754 (74.6%)	22.5 (6.91)	346 (73.0%)	17.9 (8.67)
Assessment Outcome				
Accepted for Therapy	710 (69.5%)	22.2 (6.87)	-	-
Assessment Only/Long Consultation	133 (13.0%)	24.0 (7.78)	-	-

Unsuitable/Referred on	160 (15.7%)	22.8 (7.53)	-	-
No Data	19 (1.9%)	28.1 (5.34)	-	-
Ending type³				
Planned	284 (40.0%)	21.4 (6.87)	238 (52.0%)	15.9 (8.66)
Unplanned	122 (17.2%)	23.8 (6.92)	62 (13.5%)	20.3 (8.77)
Unplanned & Unknown?	429 (60.0%)	22.6 (6.71)	221 (48.0%)	19.8 (7.21)

¹ N=1,019

² Other=Student, Homemaker not working or actively seeking work, Unpaid voluntary work, not working or actively seeking work, Retired

³ Of Accepted for therapy (n=729) with valid pre/post CORE measures

**p<.001

350

351 Pre-to-Post Change

352

353 For those with both valid pre-and-post CORE forms, the average score change was M=4.3 (SD=7.32).

354 A Wilcoxon signed rank test found significant differences in pre-to-post CORE scores (Z=-10.99, p<.001)

355 with a moderate effect size of r=-.50. There were no significant differences in CORE scores for all sample

356 and engagement characteristics.

357

358 *CORE subdomain scores*

359

360 The sample reported significant reductions and moderate effect sizes in each of the CORE

361 subdomains including Subjective Wellbeing (Z=-10.81, p<.001, r=-.50), Problems/Symptoms (Z=-11.21,

362 p<.001, r=-.51), Functioning (Z=-9.26, p<.001, r=-.43), and Risk (Z=-7.72, p<.001, r=-.35). The effect

363 sizes were lower than the NHS Benchmark figure of 1.36 (Stiles et al., 2006).

364

365 *Table 2: Comparisons of CORE Total and Domain Scores for those with valid pre-and-post CORE scores (n=474)*

	Pre-Score	Post-Score	Z	Effect Size (r)
	M (SD)	M (SD)		
CORE Total	22.1 (6.77)	17.8 (8.47)	-10.99**	-0.50
Subjective Wellbeing	27.1 (8.17)	21.7 (10.49)	-10.81**	-0.50

Problems/Symptoms	26.2 (7.51)	21.2 (9.72)	-11.201**	-0.51
Functioning	22.5 (7.20)	18.7 (8.90)	-9.26**	-0.43
Risk	9.4 (8.56)	6.6 (7.66)	-7.72**	-0.35

** $p < .001$

366

367 Ending types

368

369 The ending types of those Accepted for Therapy (n=729) were 44.0% Unknown, 39.2% Planned,
 370 and 16.7% Unplanned. There were no significant differences in Age between Planned (M= ;
 371 MR=394.83) and Unplanned (M= ; MR=352.50) ($p > .182$), unless Unplanned was combined with
 372 Unknown (M= ; MR=) ($Z = -3.074$, $p = .002$). Chi-Squared tests showed no significant findings in other
 373 sample characteristics or Waiting times. Due to the source of data for engagement (e.g., EOT form),
 374 those with Unplanned and Unknown endings were combined. There were significantly higher sessions
 375 attended ($Z = -7.96$, $p < .001$) for Planned (M=38.8; MR=200.03) than Unplanned and Unknown (M= ;
 376 MR=109.58), and lower Nonattendance rates ($Z = -9.83$, $P < .001$) for Planned (M=17.2%; MR=121.73)
 377 than Unplanned and Unknown (M= ; MR=229.65). There were significantly higher pre-CORE scores
 378 between Planned (M=21.4; MR=327.72) and Unplanned (M=23.8; MR=401.13) ($p = .003$) endings but
 379 no significant differences between Planned to Unplanned and Unknown (M= ; MR=363.14) ($p > .109$)
 380 ($H(2) = 11.67$, $p = .003$). There were also statistically significant differences in CORE score changes
 381 between Ending Type ($H(2) = 18.95$, $p < .001$). Post-hoc comparisons using Bonferroni corrections
 382 revealed no significant differences between Planned (M=5.7; MR=254.74) and Unplanned (M=3.5;
 383 MR=222.28) ($p > .258$) though did so when Planned was compared with Unplanned and Unknown (M=
 384 ; MR=203.36) ($Z = -4.147$, $p < .001$).

385

386 Therapist ratings

387

388 *Problem severity*

389

390 There were significant reductions in therapist assessments of problem severity from pre-to-post-
 391 treatment, with the highest changes recorded for Depression (M=0.85, SD=1.15) (Z=-10.70, p<.001)
 392 and Anxiety (Z=-9.66, p<.001) (M=0.73, SD=1.10) and least Personality problems (M=0.49, SD=1.10)
 393 (Z=-5.81, p<.001). The effect sizes ranged from moderate-to-large (r=-0.58 to -0.41) with severity
 394 classifications moving from around 'Moderate' (3) to 'Mild' (2) (see Table 4). These effect sizes are
 395 slightly higher but equivalent to the overall CORE effect sizes detailed in a previous section.

396

397 *Table 3: Therapist problem severity ratings pre-and post-treatment*

	Pre-Treatment		Post-Treatment		Pre-to-Post Problem Severity		
	Severity Rating		Severity Rating		Rating Change		
	N (% of assessed (n=1049))	M (SD)	N (% of EOT (n=464))	M (SD)	M (SD)	Test Statistic	Effect size (r)
Depression	918 (87.5%)	2.79 (0.90)	357 (76.9%)	2.00 (1.00)	0.85 (1.15)	Z=-10.70**	-0.58
Anxiety	851 (81.1%)	2.88 (0.87)	347 (74.8%)	2.17 (0.98)	0.73 (1.10)	Z=-9.66**	-0.55
Personality Problems	671 (64.0%)	2.97 (0.87)	252 (54.3%)	2.39 (0.95)	0.49 (1.10)	Z=-5.81**	-0.41
Trauma Abuse	583 (55.6%)	3.01 (0.92)	226 (48.7%)	2.34 (1.02)	0.70 (0.99)	Z=-7.79**	-0.57
Self Esteem	754 (71.9%)	3.02 (0.86)	314 (67.7%)	2.25 (0.99)	0.72 (1.12)	Z=-8.90**	-0.54
Interpersonal relationships	909 (86.7%)	3.08 (0.86)	379 (81.7%)	2.40 (0.99)	0.58 (1.17)	Z=-8.38**	-0.47

**p<.001

398

399

400 *Risk*

401

402 There were significant reductions in therapist assessments of risk from pre-to-post-treatment, with
 403 the largest change observed in Self-Harm (M=0.20, SD=0.70) (Z=-5.67, p<.001), followed by Suicide
 404 (M=0.14, SD=0.68) (Z=-4.07, p<.001), and then Harm to Others (M=0.09, SD=0.42) (Z=-4.12, p<.001)
 405 (see Table 5). Risk ratings shifted from around 'Mild' (1) to 'None' (0), with the effect sizes in the low
 406 range, and lower than the CORE Risk score effect sizes detailed in a previous section.

407

408 *Table 4: Therapist risk ratings pre-and-post-treatment*

	Pre-Treatment		Post-Treatment		Pre-to-Post Risk Rating Change		
	Risk Rating		Risk Rating				
	N (% of Assessed (n=1049))	M (SD)	N (% of EOT (n=464))	M (SD)	M (SD)	Test Statistic	Effect size (r)
Suicide	1,016 (96.9%)	0.75 (0.75)	417 (89.9%)	0.51 (0.66)	0.14 (0.68)	Z=-4.07**	-0.20
Self-Harm	1,006 (95.9%)	0.98 (0.86)	412 (88.8%)	0.66 (0.76)	0.20 (0.70)	Z=-5.67**	-0.28
Harm to Others	963 (91.8%)	0.28 (0.55)	400 (86.2%)	0.14 (0.36)	0.09 (0.42)	Z=-4.12**	-0.21

** $p < .001$

409

410

411

412 Discussion

413

414 The effectiveness of psychodynamic therapies within an NHS mental health service

415

416 In a naturalistic study of retrospective clinical data, psychodynamic therapy provided within this
417 NHS service appeared to be effective. The analysis uncovered moderate-to-large effect sizes, including
418 overall and within subdomains, and around half moving towards reliable improvement. These findings
419 were observed in a complex caseload, as evidenced by intake scores and problem severity ratings.
420 Improvement in problems/symptoms and subjective wellbeing showed higher effect sizes than
421 functioning and risk. Functional items contain complex relational components and may reflect
422 entrenched and difficult-to-address aspects of psychological distress (e.g., *"I have felt humiliated or
423 shamed by other people"*). It aligns with the psychodynamic approach of exploring and processing
424 underlying object relations to alleviate distress (Lindfors et al., 2015). The therapist's problem severity
425 ratings showed greater changes in depression and anxiety than personality and interpersonal
426 difficulties. This observation strengthens the idea of entrenched aspects of distress being more
427 challenging to address. That said, the results do demonstrate meaningful change across multiple
428 components of measured psychological distress. Accordingly, psychodynamic therapy provided within
429 this service seems to be a valuable option for addressing ingrained, complex, and long-standing mental
430 health problems, producing changes in symptoms, wellbeing, functioning, and interpersonal relating.
431 This is particularly fitting for complex presentations and enacting long-lasting change demanded of
432 NHS therapy provision at a tertiary level.

433

434 Understanding the suitability of Psychodynamic Therapies for Complex Presentations 435 within an NHS mental health service

436

437 Regarding this paper's second objective, certain characteristics of the sample displayed varying
438 levels of severity and engagement styles that are informative for service provision. The sample

439 consisted mainly of middle-aged, White/Caucasian, or those Unemployed or on Long-term sick,
440 Disabled, or Benefits, which corresponds with data from NHS England (NHS Digital, 2022). Participants
441 who were employed and had lower intake scores were more likely to be accepted for therapy than
442 referred on, in comparison to those who were on long-term sick, disabled, or benefits or had higher
443 intake scores. As the overall intake scores were classified as "moderate-to-severe," it is possible those
444 in the "severe" category along with being more likely to experience social adversities, may not be
445 suitable for therapy at that time. It is worth noting the decision to accept or signpost elsewhere is a
446 collaborative process with the service-user and based on priority interests.

447

448 Female participants, those with partners, or those with lower scores recorded higher session
449 attendance and engagement than males, those without partners, or those with higher intake scores.
450 Notably, individuals without partners, unemployed, on medication, or female reported higher intake
451 scores, which could indicate a marginalised or disenfranchised group more likely to face social
452 adversity or have longer standing contact with services (Jin & Mosweu, 2017; Naylor et al., 2012). Once
453 engaged, those attending more sessions more consistently were likely to have a planned ending,
454 perhaps reflecting a positive therapeutic relationship to produce an agreed ending. It is worth
455 mentioning there were associations between the ending type and intake scores or age, but no
456 apparent link with other engagement factors such as waiting times. This suggests that service-user
457 characteristics more than waiting to access was more informative at determining eventual
458 engagement.

459

460

461 Implications

462

463 Within the psychodynamic therapy field, the range of study methodologies is diverse (Fonagy et al.,
464 2015) and there is growing appreciation for methodological pluralism and practice-based evidence

465 (Barkham et al., 2010; Wakefield et al., 2021). Studies using controlled methodologies support the use
466 of psychodynamic therapies (Leichsenring et al., 2013) and the findings from this study support its use
467 in clinical settings by extending its ecological validity. This research examined routine clinical data to
468 observe psychodynamic therapies in action and within an NHS specialist service context. Aside from
469 the confounding factors common to practice-based research, particularly in supporting those with
470 multiple, complex, and enduring mental health problems, the findings support the role of this
471 specialist model. This value is further supported by evidence suggesting other therapeutic models
472 reduce in effectiveness within secondary and tertiary care settings (Taylor et al., 2012).

473

474 Specialist therapy services provide support for those with complex and enduring mental health
475 problems who have not responded to other interventions or require longer and more exploratory
476 approaches. The findings support the use of psychodynamic therapies within this service context and,
477 as shown by the equitable changes across subgroups, likely reflects the value of a responsive, flexible,
478 and relational dynamic approach for those with complex and changing needs. Psychodynamic therapy
479 tends to be longer-term than comparators such as CBT but as argued by Shedler (2010), there is greater
480 emphasis on sustaining underlying psychological change as opposed to symptom management which
481 seems relevant for targeting underlying personality functioning. The Tavistock group champion
482 interventions that adapt to personality features when treating resistant depression (Rost et al., 2019),
483 demonstrating the value of this specialist service delivering dynamic approaches.

484

485 The study supports the use of psychodynamic therapies within a specialist NHS service treating
486 complex mental health problem which is in keeping with other findings (Fonagy et al., 2015;
487 Leichsenring et al., 2013). It is possible the relational approach of psychodynamic therapy which
488 attempts to uncover unconscious and unexpressed emotional states enables symptom reduction and
489 increased daily functioning. These changes can be experienced in therapeutic relationships as an

490 emotional struggle between the service-user and therapist (Haskayne et al., 2014). The therapeutic
491 couple contract to engage in trying to understand the personal meanings of the stories, enactments,
492 and feelings the individual brings to the therapeutic relationship, which in turn reduces psychological
493 distress. This way of working facilitates integrated thinking about clinical containment of risk, which is
494 particularly important when working with a high-risk population.

495

496 The analyses reveal several important clinical characteristics that appear to influence
497 psychodynamic therapy engagement and outcome within this service context. While the acceptance
498 rate was moderately high, those with higher intake scores and Unemployed/Long Term Sick, Disabled
499 or on Benefits appeared less likely to be accepted although no more likely to have an unplanned ending
500 once accepted. There were also indications that younger service-users were more likely to have an
501 unknown than planned ending which as whole reported lower session attendance and CORE score
502 change. While unknown does not infer unplanned, its suggestive of younger individuals losing contact
503 with services without notification. Comparisons between therapist and self-report recordings of
504 problem severity suggest a slight level of discrepancy in how each perceives the difficulties, prompting
505 a need for greater dialogue regarding shared understandings of a service-user's problems. Accordingly,
506 this supports initial and ongoing assessments of a person's responses to psychodynamic therapy in
507 clinical settings while being mindful of the factors reducing acceptance and engagement rates. The
508 limited difference in observed CORE score changes across other socio-demographic factors and
509 variable intake scores indicate a responsive approach towards diverse presentations.

510

511 Limitations

512

513 Many of this study's limitations are common to naturalistic, practice-based studies, including the
514 lack of control groups, non-measured treatment fidelity, variable data quality, and cross-sectional

515 design. Learning from the dose-effect and common factors literature suggests the length of therapy
516 may be beneficial in and of itself, regardless of modality, thereby challenging the role of intervention-
517 specific techniques from simply delivering higher sessions (Robinson et al., 2020). As part of the service
518 pathway, the service-user's referring care team is responsible for reviewing and supporting ongoing
519 care plans. While consultation and joint appraisal occur, it is unclear to what extent additional
520 interventions, including psychotropic medication, are provided. While service-users must not receive
521 parallel psychotherapy as stipulated by the service's criteria, it is not possible to attribute the observed
522 effects to the intervention alone versus other concurrent medication or psychosocial programmes
523 including occupational and nursing support. That said, as the service operates along tertiary levels and
524 acts as an alternative for referrers, it's typical that service-users will have received other psychosocial
525 interventions previously as shown by their longer-standing issues. Such is the nature of complex and
526 enduring mental health problems that the provision of psychotherapies in isolation is not in keeping
527 with the clinical realities of treating difficulties requiring multidisciplinary support. Finally, as well as
528 the low to variable data quality of post-treatment CORE scores, these measures represent a narrow
529 perspective of improvement and are limited in conveying the level of inner change, characterised by
530 increased emotional resilience, insight, and sense of meaning (Shedler, 2010; Waddell, 2002). While
531 this study attempted to address these limitations by triangulating service-user and therapist measures,
532 future work would benefit from qualitative assessments of inner change as recommended by the
533 Operationalised Psychodynamic Diagnosis Manual (OPD Force, 2008). The service has also began
534 implementing 6-to-12-month follow-up psychometric assessments to evaluate change beyond the end
535 of therapy.

536

537 Conclusions

538

539 This paper analysed 10-years of retrospective clinical data to assess the effectiveness of
540 psychodynamic therapies within an NHS mental health service. The results showed that

541 psychodynamic therapy delivered within a naturalistic context was effective based on self and
542 therapist-reported psychometrics. Analyses of intake presentations indicated a characteristically
543 complex population, supporting the service's role in treating entrenched difficulties. Certain subgroup
544 characteristics appeared less likely to engage and were interpreted as a potentially marginalised and
545 disenfranchised group requiring greater attention and input from services. Limited score changes
546 between subgroups suggest that despite the variable intake profiles, the therapy was responsive and
547 flexible according to individual needs. Overall, the data reported a mostly consistent effectiveness rate
548 and moderate-to-large effect sizes at broader and subdomain levels relevant to mental health care.

549

550 References

551

552 Barkham, Michael., Hardy, G. E., & Mellor-Clark, John. (2010). *Developing and delivering practice-*
553 *based evidence: A guide for the psychological therapies*. Wiley-Blackwell.

554

555 Bellis, M. A., Hughes, K., Leckenby, N., Perkins, C., & Lowey, H. (2014). National household survey
556 of adverse childhood experiences and their relationship with resilience to health-harming behaviors
in England. *BMC Medicine*, 12(1), 72.

557

558 Bion, W. R. (1963). *Elements of Psycho-Analysis*. London: William Heinemann Medical Books Ltd.

559

560 EMCDDA. (2015). *Comorbidity of substance use and mental disorders in Europe*. European
Monitoring Centre for Drugs and Drug Addiction.

561

562 Fonagy, P., Rost, F., Carlyle, J., McPherson, S., Thomas, R., Pasco Fearon, R. M., Goldberg, D., &
Taylor, D. (2015). Pragmatic randomized controlled trial of long-term psychoanalytic psychotherapy

563

564 for treatment-resistant depression: The Tavistock Adult Depression Study (TADS). *World Psychiatry*,
14(3), 312–321.

565

566 Force, O. T. (2008). *Operationalized Psychodynamic Diagnosis OPD-2: Manual for Diagnosis and
Treatment Planning* (2nd Ed.). Hogrefe & Huber.

- 567 Haskayne, D., Larkin, M., & Hirschfeld, R. (2014). What are the Experiences of Therapeutic
568 Rupture and Repair for Service-users and Therapists within Long-Term Psychodynamic Therapy?
569 *British Journal of Psychotherapy*, 30(1), 68–86.
- 570 Jin, H., & Mosweu, I. (2017). The Societal Cost of Schizophrenia: A Systematic Review.
571 *PharmacoEconomics*, 35(1), 25–42.
- 572 Kivimäki, M., Batty, G. D., Pentti, J., Shipley, M. J., Sipilä, P. N., Nyberg, S. T., Suominen, S. B.,
573 Oksanen, T., Stenholm, S., Virtanen, M., Marmot, M. G., Singh-Manoux, A., Brunner, E. J., Lindbohm,
574 J. V., Ferrie, J. E., & Vahtera, J. (2020). Association between socioeconomic status and the
575 development of mental and physical health conditions in adulthood: A multi-cohort study. *The Lancet*
576 *Public Health*, 5(3), e140–e149.
- 577 Lai, H. M. X., Cleary, M., Sitharthan, T., & Hunt, G. E. (2015). Prevalence of comorbid substance
578 use, anxiety and mood disorders in epidemiological surveys, 1990-2014: A systematic review and
579 meta-analysis. *Drug and Alcohol Dependence*, 154, 1–13.
- 580 Leichsenring, F., Abbass, A., Luyten, P., Hilsenroth, M., & Rabung, S. (2013). The emerging
581 evidence for long-term psychodynamic therapy. *Psychodynamic Psychiatry*, 41(3), 361–384.
- 582 Lindfors, O., Knekt, P., Heinonen, E., Härkänen, T., Virtala, E., & the Helsinki Psychotherapy Study
583 Group. (2015). The effectiveness of short- and long-term psychotherapy on personality functioning
584 during a 5-year follow-up. *Journal of Affective Disorders*, 173, 31–38.
- 585 McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (2016). *Health and Social Care Information*
586 *Centre: Adult Psychiatric Morbidity Survey 2014*.
- 587 Mollon, P. (2009). The NICE guidelines are misleading, unscientific, and potentially impede good
588 psychological care and help. *Psychodynamic Practice*, 15(1), 9–24.
- 589 Naylor, C., Parsonage, M., McDaid, D., Knapp, M., Fossey, M., & Galea, A. (2012). *Long-term*
590 *conditions and mental health. The cost of co-morbidities*. The King's Fund: Centre for Mental Health.

- 591 NHS England. (2019). *The NHS Long Term Plan*. NHS England.
- 592 NHS Digital (2022). *Mental Health Bulletin, 2021-22 Annual report*. NHS Digital.
- 593 NICE. (2022). *Depression in adults: Treatment and management*. National Institute for Health and
594 Care Excellence.
- 595 Robinson, L., Delgadillo, J., & Kellett, S. (2020). The dose-response effect in routinely delivered
596 psychological therapies: A systematic review. *Psychotherapy Research, 30*(1), 79–96.
- 597 Rost, F., Luyten, P., Fearon, P., & Fonagy, P. (2019). Personality and outcome in individuals with
598 treatment-resistant depression-Exploring differential treatment effects in the Tavistock Adult
599 Depression Study (TADS). *Journal of Consulting and Clinical Psychology, 87*(5), 433–445.
- 600 Santesteban-Echarri, O., Paino, M., Rice, S., González-Blanch, C., McGorry, P., Gleeson, J., &
601 Alvarez-Jimenez, M. (2017). Predictors of functional recovery in first-episode psychosis: A systematic
602 review and meta-analysis of longitudinal studies. *Clinical Psychology Review, 58*, 59–75.
- 603 Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. *The American Psychologist,*
604 *65*(2), 98–109.
- 605 Stiles, W. B., Barkham, M., Twigg, E., Mellor-Clark, J., & Cooper, M. (2006). Effectiveness of
606 cognitive-behavioural, person-centred and psychodynamic therapies as practised in UK National
607 Health Service settings. *Psychological Medicine, 36*(4), 555–566.
- 608 Swift, K. J., & Greenberg, P. R. (2015). *Premature Terminations in Psychotherapy Strategies for*
609 *Engaging Service-users and Improving Outcome*. American Psychological Association.
- 610 Taylor, D., Carlyle, J., McPherson, S., Rost, F., Thomas, R., & Fonagy, P. (2012). Tavistock Adult
611 Depression Study (TADS): A randomised controlled trial of psychoanalytic psychotherapy for
612 treatment-resistant/treatment-refractory forms of depression. *BMC Psychiatry, 12*, 60.

613 Waddell, M. (2002). *Inside Lives: Psychoanalysis and the Growth of the Personality* (1st edition).

614 Routledge.

615 Wakefield, S., Kellett, S., Simmonds-Buckley, M., Stockton, D., Bradbury, A., & Delgadillo, J. (2021).

616 Improving Access to Psychological Therapies (IAPT) in the United Kingdom: A systematic review and

617 meta-analysis of 10-years of practice-based evidence. *British Journal of Clinical Psychology*, 60(1),

618 e12259.

619