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Effects of a statutory reform on waiting times for outpatient psychotherapy: A multicentre cohort study

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Abstract

Aims: Social inequality in access to mental health care is a current concern across the world. The authors determined whether differences in waiting times for outpatient psychotherapy changed after a statutory reform of the German psychotherapy law.

Methods: The dates of first contact, first visit and treatment start, along with socio-demographic and clinical data, were extracted from patient records in community-based psychotherapy practices. Predictors of waiting times for first visit and treatment start were investigated using multilevel Cox regression models to estimate adjusted hazard ratios (HR_{adj}).

Results: Data from 1548 patient records from nine practices were extracted. Before the reform, the time span between first contact and first visit was longer for patients with compulsory education than for patients with a college degree (HR_{adj} 0.8, 95% CI 0.6–1.0), whereas this was no longer the case after the law changed (HR_{adj} 1.0, 95% CI 0.8–1.3). Patients whose treatment was covered by the state were at higher risk of a long waiting time from last visit to treatment start compared with patients with statutory health insurance after the law changed (HR_{adj} 0.4, 95% CI 0.3–0.7), which had not been the case before the law changed (HR_{adj} 1.3, 95% CI 0.8–2.2).

Conclusions: Social inequality in access to psychotherapy was reduced in part by the updated psychotherapy law in terms of educational groups; however, it increased in other aspects. This shows how political decisions can powerfully impact clinical practice, ultimately helping one group of patients while disadvantaging another.

KEYWORDS
delivery of health care, health policy, health services accessibility, healthcare reform, psychotherapy, time-to-treatment

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1 | BACKGROUND

It is well established that not all patients with mental disorders receive specialised treatment (Alonso et al., 2018; Arean et al., 2021; Nikendei et al., 2020; Olfson & Marcus, 2010; Puyat et al., 2016; Ruffieux et al., 2021; Wei et al., 2005) and waiting times can be very long (Almeida, 2021; Bridler et al., 2013). In Canada, for example, only 13% of all patients with major depression receive at least minimal treatment (Puyat et al., 2016).

Certain vulnerable patient groups may find it particularly difficult to access mental health care, as they lack the agency to fight for their rights and needs (Lawrence et al., 2021). Across countries and cultures, individuals with poorer education (Epping et al., 2017; Fischer-Kern et al., 2006; Lorant et al., 2003; Packness et al., 2021; Uhlmann et al., 2017b) and/or lower income (Epping et al., 2017; Lorant et al., 2003) are less likely to receive specialised mental health care. Similarly, the time needed until first contact with a specialist was shorter among people with higher educational attainment and higher income in a large registry-based study in Denmark (Packness et al., 2021). This is unfortunate as these aspects are also risk factors for developing a mental health disease in the first place (Arango et al., 2021), thereby increasing social inequality.

Social inequality in health describes situations where differences in health-related variables (e.g., disease-free survival, access to health care, morbidity and incidence rates) are associated with characteristics of social strata such as gender, education or wealth, also called the "social gradient in health" (Marmot, 2006; Rachet et al., 2008; Singer et al., 2017; Victora et al., 2000). Such inequalities are often avoidable and unfair, and it is a moral obligation of societies to reduce them as far as possible. Therefore, one of the major goals of the United Nations is to reduce inequality and to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status (Target 10.2 of the United Nations Sustainable Development Goals). Target 3.4 specifically affirms the goal of mental health promotion. But how can we reduce inequality in access to mental health care?

First, we must understand the underlying selection mechanisms. There are certain "knots" in the patient journey where decisions are taken that influence this process. At each "knot," patients need specific abilities in order to find and engage in health care: the ability to perceive, to seek, to reach, to pay and to engage (Levesque et al., 2013).

If patients with lower education are informed less often about psychotherapy and are less often recommended to use it (Schaefer et al., 2003; Uhlmann et al., 2017a), their ability to perceive and to seek will be reduced. In a German study, for example, only 10% of patients discharged from a psychiatry hospital had been recommended to use psychotherapy, with differences related to gender, employment status and diagnosis. Hence, the selection already starts at the level of the primary clinicians.

Moreover, people with a lower socioeconomic position may feel intimidated in the presence of highly educated doctors and psychologists, making it difficult for them to express their needs, which can reduce their ability to reach. Their experiences of helplessness and frustration may be internalised (Katsakou & Pistrang, 2018), and this may induce the patient to more easily abandon their search for a therapist or to not begin searching at all (Fischer-Kern et al., 2006; Uhlmann et al., 2017b). Once patients manage to gain contact with a therapist and have a first visit, mental healthcare specialists may tend to offer better treatment to people they feel familiar with (Perez-Rojas et al., 2021).

Implications for Practice and Policy

- Often, patients with certain characteristics (such as male gender and fewer years in school) have more problems in obtaining access to mental health care.
- This leads to disparity in treatment, especially in the outpatient sector.
- A statutory reform levelled out differences in waiting times for psychotherapy between different patient groups, especially for people with lower educational levels. However, other groups of patients were disadvantaged after the reform.
- Unless more psychotherapy is offered in general, redistributing resources alone cannot improve access to mental health care considerably.

The ability to pay of course depends very much on the healthcare system in place. For example, in Canada, the receipt of psychotherapy/counselling in people with major depression was not related to income (Puyat et al., 2016). In Germany, which has universal health care, access to psychotherapy was not found to be related to education (Ernstmann et al., 2021; von Eitzen et al., 2021). In Denmark, by contrast, but also a country with universal health care, individuals with depression more often described concerns regarding expenses as the major barrier to using mental health care when they had lower educational attainment than those with higher education (Packness et al., 2019).

Dropout from therapy is higher in countries where the mental healthcare system as a whole lacks financial support (Fernandez et al., 2021). This is related to the patients' ability to engage in mental health care, which depends on interactive, dynamic and often system-related processes; it is not only a result of individual characteristics of the patient and/or clinician. In summary, even in countries with comprehensive, universal healthcare coverage, social inequality in mental health care is an ongoing concern.

In Germany, a major change to the psychotherapy law was introduced in April 2017 with the intent to ease access to psychotherapy (Bundesausschuss, 2016). In this country, health insurance is mandatory for all residents, and psychotherapeutic treatment has been covered by statutory health insurance since 1967 (Vangermain & Brauchle, 2010). Since the introduction of the psychotherapy law in 1999, patients do not need a referral from a general practitioner or a psychiatrist; they can access a psychotherapist directly and still obtain free services.

As about 90% of German residents have *statutory health insurance*, they experience no financial barriers for psychotherapeutic treatment.

The patient flow is as follows: the patients contact the psychotherapist(s) and ask for a first appointment. They can contact all therapists who are certified by the government and licensed by the regional healthcare authorities to be reimbursed by statutory health insurances. The regional health authorities have publically available lists of licensed therapists in their area, usually online. The patients can contact and visit as many therapists as needed until they find a suitable person. These visits are paid for by the health insurance.

Before the reform, the regulations were as follows: patient and therapist could meet up to five times (or eight times if analytic psychotherapy was intended) to find out whether outpatient psychotherapy was indicated and whether the two individuals could work together (so-called "probationary sessions"). The patient then applied to their health insurance for reimbursement of psychotherapy by submitting a simple one-page form as well as a short consultative report from a general practitioner or a psychiatrist. The application was supported by a written report and forms completed by the therapists, which outlined why psychotherapy was needed. Then, the application underwent a blinded review by an expert reviewer; the health insurer was informed only about the outcome of the review. The reviewer recommended funding or advised against it, and the health insurance company then made a final decision based on the reviewer's recommendation. The number of reimbursed sessions had an upper limit per application. If the patient needed further therapy after these sessions were done, a new application had to be sent to the health insurance with new forms and a new report in which the course of the previous sessions was described.

Therapists also have the possibility to offer "conversations." For patients, this is no different to normal psychotherapy, but for therapists, there is a considerable difference in income, because the pay for conversations is very low. However, it is an option, for example, if therapists want to offer quick help during the waiting time until the health insurance company decides about treatment reimbursement or if they want to avoid the effort of writing a report.

The new law introduced novel elements of care and changed existing ones; for example, therapists who practice full time are now required to be available 2h per week for consultations with new patients (even if their current patient load means they cannot take on new patients at the moment) and 200 min on the phone for arranging appointments. They have to inform the regional healthcare authorities regularly about their availability.

Another change is that only four probationary sessions are allowed now and at least one consultation session is necessary at the beginning, unless the patient is being discharged from a hospital (then no consultation is necessary). In children and youth up to 21 years, two more probationary sessions can be reimbursed. The consultations are better paid than probationary sessions.

Another novel element is that up to 12 therapy sessions (of 50 min each) are reimbursed without prior approval by the health insurance.

For applications for psychotherapy, only one report is now obligatory (at the time of first approval) but the forms still have to be completed at all times.

For persons with *private health insurance*, costs for psychotherapy are usually covered, depending on the healthcare plan negotiated between the companies and the clients. The procedures for starting psychotherapy are similar to the ones described for the statutory health insurances. An advantage for patients with private insurance is that they can visit therapists who are certified but not licensed. The licences are restricted per area, so it might be easier to find a therapist who is not licensed but equally qualified. Earlier, private insurances paid more for a therapy session than statutory insurances; however, this has changed in recent years.

A third possibility of reimbursement for psychotherapy is direct coverage *by the state*, for example, if a person is a civil servant. The state usually pays 50% of the healthcare costs, so patients need to set up a private health insurance contract in addition to that. In some circumstances, the state or the communities pay 100% of the costs, for example, for members of the police, the armed forces or refugees.

Finally, patients can choose to pay for therapy themselves, without reimbursement by a third party. Some prefer this because they do not want to let their health insurance or their employer know that they are receiving mental health treatment. Others decide to pay out-of-pocket because they are afraid they would otherwise have to wait too long for therapy. This can happen, for example, with patients with statutory insurance when no licensed therapist can offer treatment at the moment because of caseload. In theory, their health insurance then should pay a nonlicensed therapist; in practice, however, this is not always done (Singer et al., 2021).

Overall, the reform did not result in reduced waiting times for psychotherapy (Singer, Maier, et al., 2022). However, we wondered whether it changed the predictors of waiting times and perhaps even reduced social inequality.

2 | METHODS

2.1 | Study design and data collection

In a multicentre retrospective cohort study, we collected data on waiting times for psychotherapy before and after the statutory reform in community-based psychotherapy practices in Germany. A "community-based" practice works independently from a hospital or a clinic. The therapists need to be certified but not necessarily licensed.

As psychotherapists are not required to keep their patient data for longer than three years, random sampling was not possible. Instead, we contacted psychotherapists via a Research Association

Network and asked whether they would be able and willing to provide data from before and after the reform. By doing so, nine practices could be sampled.

In each practice, the following data were extracted from the patient records: date of first contact (either date of phone call or date of email with the request for an appointment), date of first visit, date of last consultation (for patients after the reform only because consultations were a novel element of care after the reform), date of last probationary visit, date of treatment start and characteristics of the patient (age, gender, education, type of insurance and F-diagnoses according to the International Classification of Diseases [ICD-10]). Around 100 consecutive records from before the index date (1 April 2017) and 100 from thereafter were aimed for, per practice. A sample size of $n = 1600$ had been defined a priori to detect a difference in waiting times before and after the law changed in three weeks, based on published data (Bundespsychotherapeutenkammer, 2018) and considering the clustered data structure. Patients who had been treated in the same practice before were excluded. There were no restrictions in terms of the patients' socio-demographic or clinical characteristics.

2.2 | Statistical analysis

The following three outcomes were calculated:

- Waiting time until first visit in weeks (date of first visit minus date of first contact, divided by 7).
- Time between first contact to treatment start in weeks (date of treatment start minus date of first contact, divided by 7).
- Time between last preliminary visit to treatment start in weeks (date of treatment start minus date of last visit before treatment start, divided by 7; last visit could be either last consultation, last probationary session or last conversation).

These three waiting times were described in terms of mean, median, minimum and maximum separately for before and after the law changed. The waiting times were not normally distributed. We therefore used the medians as a primary point of interest for descriptive purposes; however, we also report means and standard deviations for information of the total sample. We present Kaplan–Meier plots for each category of gender, education and F-diagnosis.

To investigate the predictors of waiting times, we used multilevel Cox regression models to estimate hazard ratios (HR) with 95% confidence intervals (CI), with the practices as random effect and law change as effect modifier (first contact before versus after 1 April 2017). We employed an unstructured covariance structure. Censoring was noted at the date of the last visit if no treatment was started in that practice, date of referral to a hospital or date of death, whichever came first. The predictors tested were age, gender, severity of disease (severe vs. nonsevere, see below for details of definition), source of cost coverage (statutory health insurance, private health insurance, the state plus/minus private insurance and out-of-pocket) and highest educational degree (college, postcompulsory, compulsory or below, and too young to be in school or unknown). For students who were still in school, the current school type was used to define the highest educational degree.

A disease was considered to be severe when the patient had at least one of the following diagnoses: personality disorders; obsessive-compulsory disorders; dissociative disorders; schizophrenia, schizotypal or delusional disorders; bipolar disorders; or major depression (F32.2, F32.3, F33.2 or F33.3). This classification was based on suggestions from clinician experts involved in this project because dimensional data on severity were not available (Krueger et al., 2018).

The proportionality of hazards was checked using log–log plots of survival and comparisons between Kaplan–Meier and predicted survival plots. Effect modification was investigated with likelihood ratio tests. All analyses were performed using STATA, Version 15.1 (StataCorp).

3 | RESULTS

3.1 | Sample characteristics

A total of 1548 patient records were included, 755 from before and 793 from after the law changed. The number of records per practice ranged from 79 to 250. The majority of the patients were female (75%), with an age range of 3–85 years; 12% were younger than 20 years (Table 1). There was no evidence for differences in patient characteristics before and after the law changed regarding gender, age, education and insurance type.

Of the nine practices, seven were individual ones (with only one therapist); five offered cognitive behavioural therapy, two psychodynamic therapy and two analytic therapy. Two were board-certified to offer therapy for children and adolescents, and all nine were certified for the treatment of adults. Seven had a special interest in the treatment of cancer patients. The practices were situated across seven different federal states: Baden-Württemberg, Bavaria, Lower Saxony, Rhineland-Palatinate, Saxony, Schleswig-Holstein and Thuringia. In five practices, the therapists said that before the reform they did not meet patients for a consultation unless they had open slots for therapy.

3.2 | Waiting times for first visit and for start of treatment

The median time between first contact and the first visit was two weeks both before and after the law changed, while the time between first contact and start of treatment was 15 weeks before and 19 weeks thereafter (Table 2). After the patients had had their last visit before the treatment start, they had to wait three weeks

TABLE 1 Patient characteristics

	Total		Before law changed		After law changed		
	N = 1548		*N* = 755		*N* = 793		
	n	%	*n*	%	*n*	%	*p*
Gender							
Male	385	25	182	24	203	26	.49
Female	1162	75	573	76	589	74	
Diverse	1	0.1	0	0.0	1	0.1	
Age							
<20 years	184	12	86	11	98	12	.75
20–29 years	129	8	68	9	61	8	
30–39 years	239	15	117	16	122	15	
40–49 years	283	18	135	18	148	19	
50–59 years	391	25	198	26	193	24	
60–69 years	225	15	110	15	115	15	
70+ years	97	6	41	5	56	7	
Education							
College	640	41	314	42	326	41	.85
Postcompulsory	384	25	191	25	193	24	
Compulsory or none	200	13	99	13	101	13	
No information or too young to be in school	324	21	151	20	173	22	
F-Diagnosis[a]							
F0x—Organic mental disorders	4	0.3	0	0	4	1	.05
F1x—Disorders due to psychoactive substance use	25	2	12	2	13	2	.94
F2x—Schizophrenia and schizotypal delusional disorders	8	1	5	1	3	0.4	.44
F3x—Mood [affective] disorders	354	23	184	24	170	21	.17
F4x—Neurotic, stress-related and somatoform disorders	1198	77	584	77	614	77	.97
F5x—Behavioural syndromes associated with physiological disturbances and physical factors	80	5	40	5	40	5	.82
F6x—Disorders of adult personality and behaviour	89	6	47	6	42	5	.43
F7x—Mental retardation	3	0.2	2	0.3	1	0.1	.54
F8x—Disorders of psychological development	3	0.2	1	0.1	2	0.3	.59
F9x—Behavioural and emotional disorders with onset in childhood and adolescence	97	6	39	5	58	7	.08
Patients with severe disease	153	10	83	11	70	9	.15
Coverage of costs for psychotherapy							
Statutory health insurance	1343	86	653	86	690	87	.16
Private health insurance	125	8	70	9	55	7	
State (with or without private health insurance)	73	4	29	4	44	6	
Patient	7	1	3	0.4	4	1	

[a] Multiple diagnoses per patient possible.

TABLE 2 Waiting times in weeks before and after the law changed

	Mean	SD	Median	Min	Max
Before law changed					
Weeks from…					
First contact to first visit	3.2	3.9	2.0	0.0	48.7
First contact to treatment start or censoring	12.0	11.2	9.1	0.0	76.1
First contact to treatment start	17.9	12.6	14.7	1.6	76.1
First contact to censoring	7.9	8.0	5.9	0.0	58.4
Last visit to treatment start	5.0	7.0	3.0	0.0	58.3
After law changed					
Weeks from…					
First contact to first visit	3.2	3.9	2.0	0.0	37.1
First contact to treatment start or censoring	13.7	12.2	11.0	0.0	108.4
First contact to treatment start	20.2	11.3	18.7	0.6	101.3
First contact to censoring	8.3	10.2	5.0	0.0	108.4
Last visit to treatment start	3.9	3.5	3.0	0.0	32.1

Abbreviations: Max, maximum; Min, minimum, SD, standard deviation.

before the law changed and three weeks after the change before the actual treatment could start.

The number of visits before the treatment started was, on average, 3.0 (*SD* 1.9, median 3, range 1–15) before the reform and 3.6 (*SD* 2.6, median 3, range 1–17) after the reform.

3.3 | Predictors of waiting times before and after the law changed

There was evidence for effect modification by the reform for the association between various predictors (education, gender and type of cost coverage) and waiting times. We therefore report the stratum-specific effect estimates.

Before the reform, the *time between first contact and first visit* (Table 3, Figure 1) in the practice was longer for patients with only compulsory education than for patients with a college degree (HR_{adj} 0.8, 95% CI 0.6–1.0), whereas this was no longer the case after the reform (HR_{adj} 1.0, 95% CI 0.8–1.3). Similarly, the previous (statistically nonsignificant) difference seen between patients whose therapy was paid for by the state and those with statutory health insurance (HR_{adj} 0.7, 95% CI 0.5–1.1) levelled out after the reform (HR_{adj} 1.0, 95% CI 0.7–1.3). Children and adolescents had a higher probability of longer waiting times compared with older patients both before and after the law changed (see Table 3 for details). There were no indications for an effect of gender or severity of disease on waiting time for first visits, neither before nor after the law changed.

Before the reform, the *time between first contact and treatment start* (Table 4) was more likely to be longer for young children before school entry and those with unknown educational levels compared with patients with a college education (HR_{adj} 0.6, 95% CI 0.4–1.0). However, this pattern was not observed to the same degree after the reform (HR_{adj} 0.8, 95% CI 0.5–1.3). The increased probability for longer waiting times in patients with private insurance before the reform, though statistically nonsignificant (HR_{adj} 0.7, 95% CI 0.4–1.2), levelled out thereafter (HR_{adj} 1.1, 95% CI 0.6–1.7). When patients paid for therapy themselves, the median waiting times for treatment start were lowest both before and after the reform, but as there were only very few events in that group, the effect estimates have high statistical uncertainty. Women had numerically (though not statistically) a higher probability of shorter waiting times than men before the reform (HR_{adj} 1.2, 95% CI 0.9–1.7), but this pattern was no longer found after the law changed (HR_{adj} 1.1, 95% CI 0.9–1.7). Adults aged 30–39 years were at higher risk of waiting longer for treatment start after the reform (HR_{adj} 0.6, 95% CI 0.4–1.0) but not before (HR_{adj} 0.9, 95% CI 0.6–1.3). There was no indication that patients with severe disease had longer or shorter waiting times than the other patients, neither before nor after the reform, although we observed that the median waiting time between last visit and treatment start decreased from four weeks before the reform to two weeks thereafter in patients with severe disease, whereas it remained at three weeks for the other patients.

For the *time between last visit and treatment start* (Table 5), there was no evidence of differences in patients with different educational levels or genders both before and after the reform. Patients whose treatment was paid for by the state were at higher risk of waiting longer than patients with statutory health insurance after the reform (HR_{adj} 0.4, 95% CI 0.3–0.7), which had not been the case before (HR_{adj} 1.3, 95% CI 0.8–2.2). The difference by age group levelled out slightly after the reform. Patients with

TABLE 3 Time between first contact and first visit by patient characteristics in weeks

	Before ($n = 755$)							After ($n = 793$)						
	Median	D	Y	Rate	HR_{adj}	CI	*p*	Median	D	Y	Rate	HR_{adj}	CI	*p*
Age														
<20 years	2.0	86	2.8	30.2	0.7	0.5; 1.1	.16	3.9	98	4.0	24.2	0.7	0.4; 1.2	.21
20–29 years	1.7	68	1.7	39.3	1.2	0.9; 1.6	.18	1.9	61	1.4	42.6	1.4	1.1; 2.0	.02
30–39 years	2.1	117	3.4	34.6	1.0	0.8; 1.3	.87	1.9	122	3.7	33.3	1.1	0.9; 1.4	.46
40–49 years	2.3	135	4.5	29.7	0.9	0.8; 1.2	.59	1.9	148	4.8	31.1	1.1	0.8; 1.3	.61
50–59 years	2.0	198	7.4	26.8	Ref			1.9	193	6.2	31.4	Ref		
60–69 years	1.5	110	3.1	36.0	1.2	1.0; 1.6	.09	2.0	115	4.1	28.2	0.9	0.7; 1.1	.19
70+ years	2.3	41	1.4	30.2	1.1	0.7; 1.5	.78	1.1	56	1.0	53.6	1.3	1.0; 1.8	.08
Gender														
Nonfemale	2.1	182	6.2	29.5	Ref			1.8	204	6.2	32.9	Ref		
Female	2.0	573	18.1	31.6	1.1	0.9; 1.3	.37	2.0	589	19.0	31.1	0.9	0.7; 1.0	.13
Education														
College	2.0	314	9.6	32.8	Ref			1.9	326	10.5	31.2	Ref		
Postcompulsory	2.0	191	5.8	33.1	1.1	0.9; 1.3	.51	2.8	193	6.9	28.0	0.9	0.7; 1.1	.15
Compulsory	2.3	111	4.3	26.1	0.8	0.6; 1.0	.02	1.7	114	3.3	34.5	1.0	0.8; 1.3	.86
No information/too young	2.0	139	4.7	29.7	1.0	0.8; 1.2	.94	1.6	160	4.5	35.4	1.0	0.8; 1.3	.93
Costs														
Statutory HI	2.0	653	20.8	31.4	Ref			2.0	690	22.2	31.1	Ref		
Private HI	2.0	70	2.1	32.9	1.1	0.9; 1.4	.44	2.0	55	1.6	34.6	1.0	0.7; 1.4	.96
State (with or without private HI)	2.4	29	1.3	22.9	0.7	0.5; 1.1	.11	1.8	44	1.3	33.4	1.0	0.7; 1.3	.77
Patient	4.3	3	0.2	19.6	0.6	0.2; 2.0	.43	1.7	4	0.1	46.7	0.8	0.3; 2.2	.64
F-Diagnosis														
Not severe	2.0	672	21.6	31.1	Ref			1.9	723	23.0	31.4	Ref		
Severe	2.1	83	2.7	30.7	1.0	0.8; 1.3	.95	2.0	70	2.1	32.7	0.9	0.7; 1.2	.45

Note: HR <1.0 indicates higher probability of longer waiting time.

Abbreviations: CI, 95% confidence interval; D, number of events; HI, health insurance; HR_{adj}, hazard ratio (adjusted for the other variables, accounting for clustering within practices); *p*, *p*-value; Rate, rate per 100; Ref, reference category; Y, persontime (weeks per 100).

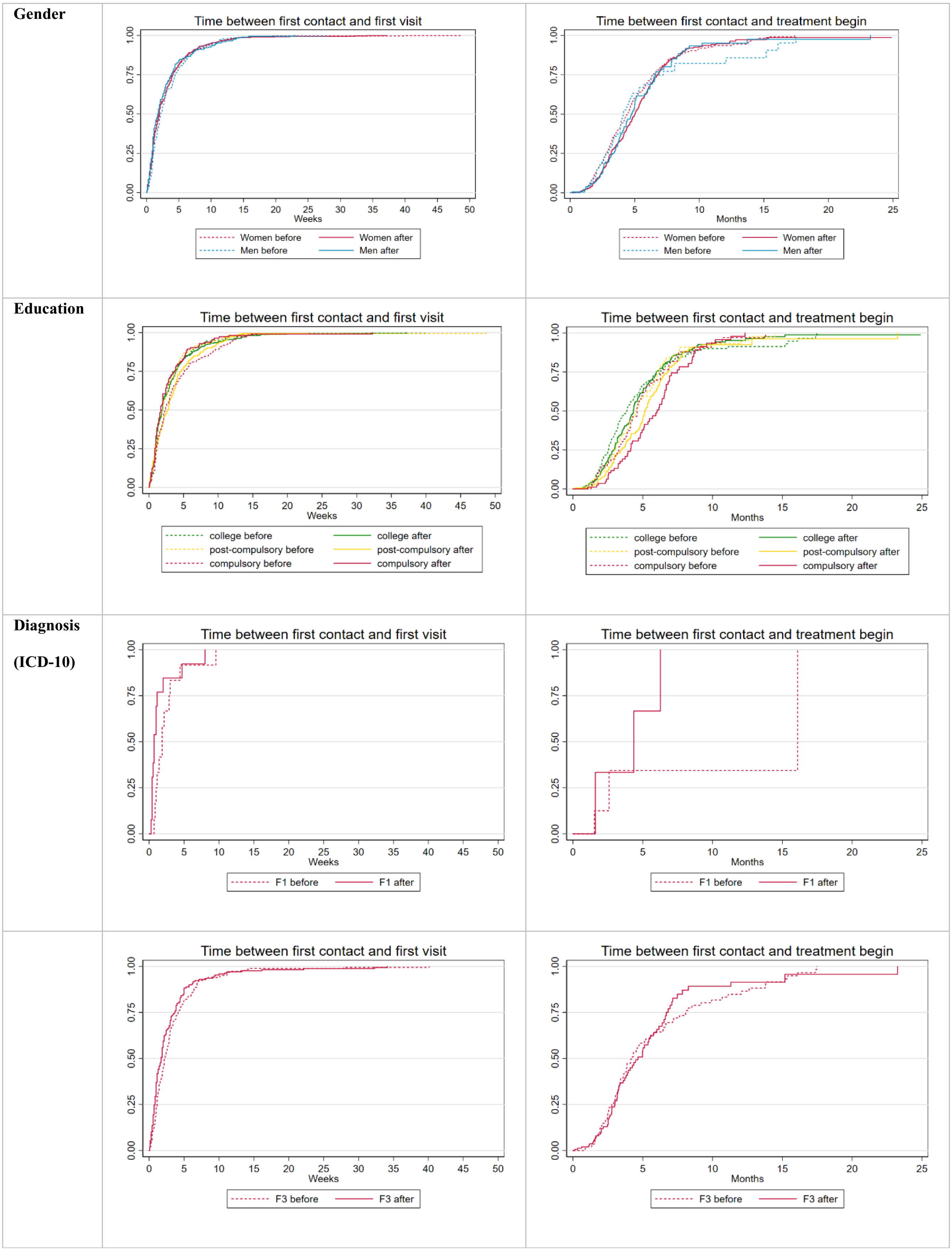

FIGURE 1 Waiting times for first visit and treatment start before and after the change in the psychotherapy law in different groups of patients. *Note*: Before and after refers to the date when the law changed. HI, health insurance.

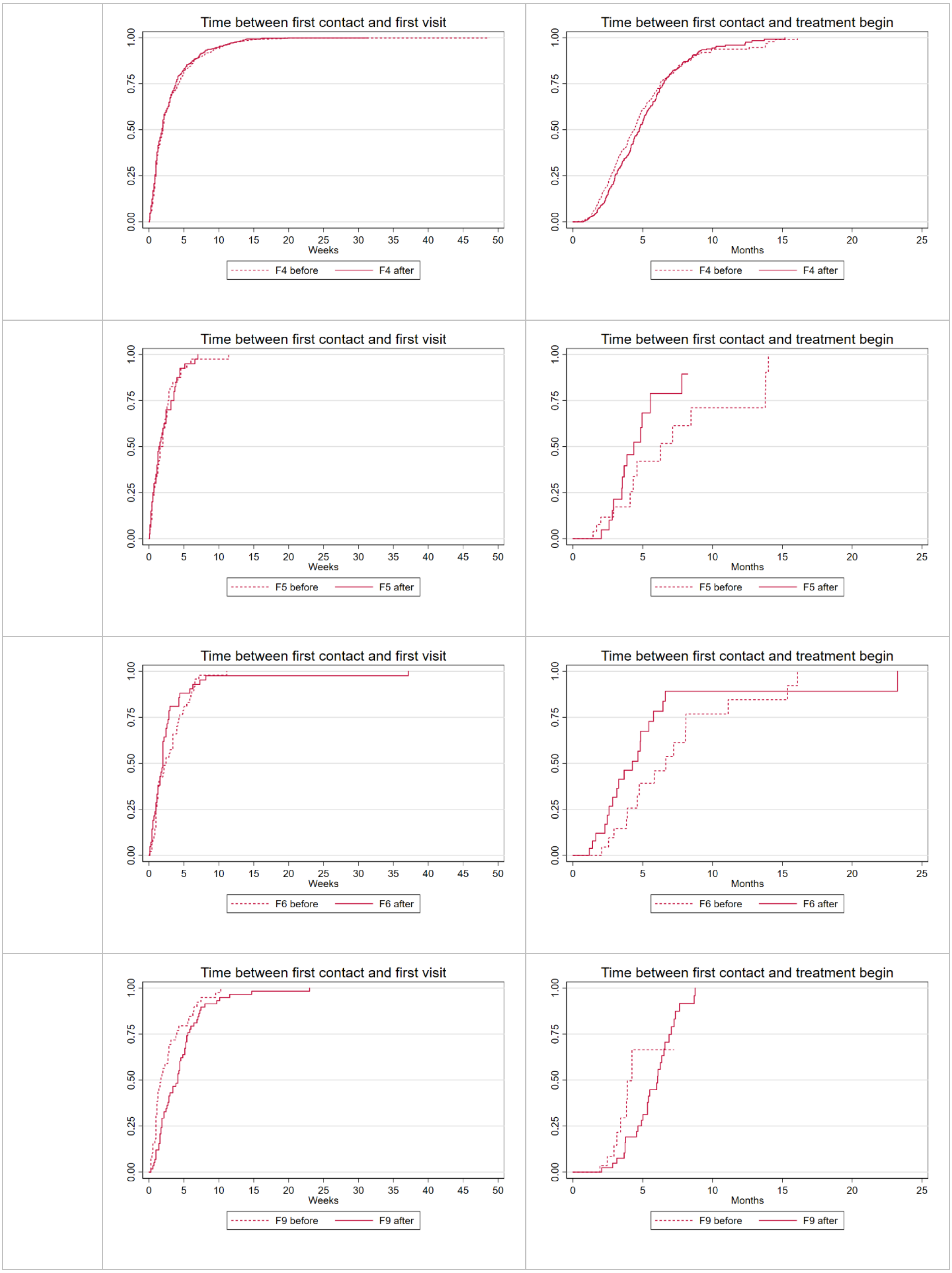

FIGURE 1 (Continued)

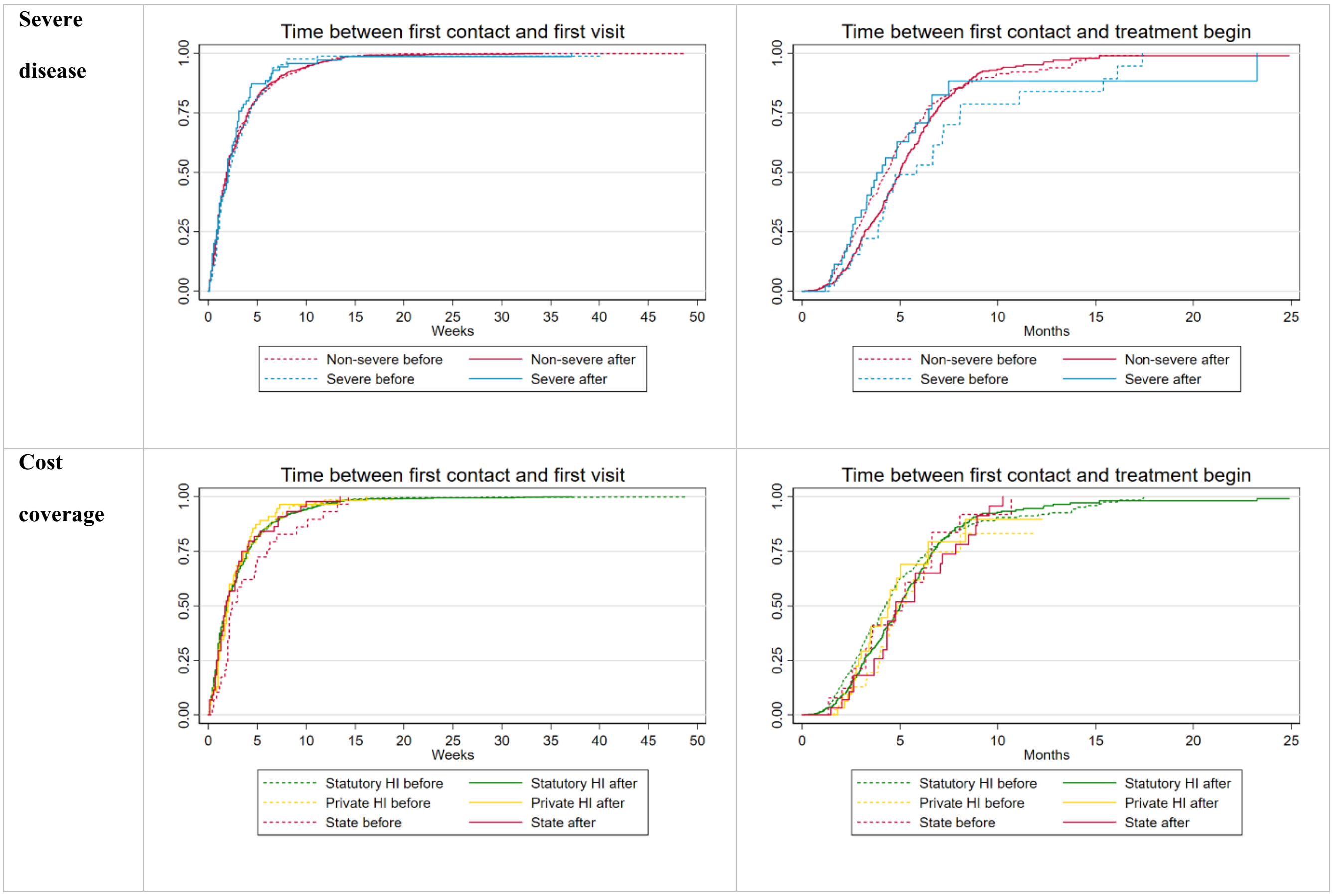

FIGURE 1 (Continued)

severe disease had to wait longer compared with the other patients both before and after the reform, but the data are also compatible with the assumption that these differences are due to chance (HR_{adj} 0.7, 95% CI 0.4–1.1 and HR_{adj} 0.8, 95% CI 0.5–1.2, respectively).

4 | DISCUSSION

In this study, we investigated which patient groups have to wait longer than others before they have a first visit to a psychotherapy practice and before they can start outpatient psychotherapy. Of particular interest was whether this pattern changed after a major reform of the national psychotherapy law in Germany.

In accordance with the international literature (Epping et al., 2017; Fischer-Kern et al., 2006; Lorant et al., 2003; Packness et al., 2021; Uhlmann et al., 2017b), people with lower *educational levels* were—before the statutory reform—at increased risk of waiting longer for a first visit after they had been able to contact the therapist. After the reform, however, this difference disappeared (once the psychotherapist and patient had met for the first time, there were no major differences between patients with different educational levels in the times until the actual treatment started, both before and after the reform). It is unlikely that this change in pattern is due to confounding factors because the law is applicable to all of Germany, for all patient groups, irrespective of age, gender, education, etc. Hence, the reform was not associated with any socio-demographic or clinical characteristics of the patients, with one exception: it was immediately valid for people with statutory health insurance, while private insurances and the state could follow this change or not at their discretion and at the time it suited them. Indeed, our results are in line with one of the objectives of the reform, namely to ease access to psychotherapy and to reduce waiting times. It seems that this aim was met especially among patients with lower education, thereby reducing social inequality.

However, on another level, inequality seems to have increased following the reform: patients whose *treatment is paid for by the state* (with or without reimbursement by private insurances) are now at increased risk of longer waiting times between the last visit before treatment start and the actual treatment start, whereas this had not been the case before. We assume that this is an indirect effect of the reform. This holds if we consider the following conditions: first, the law is primarily applicable to patients with statutory health insurance. Second, the number of accreditations for psychotherapists was not increased by the reform, so the overall "amount" of psychotherapy that can be offered did not change—hence, if one group gets "more psychotherapy," another

TABLE 4 Time between first contact and treatment start by patient characteristics in weeks

	Before ($n = 303$)							After ($n = 360$)						
	Median	D	Y	Rate	HR_{adj}	CI	p	Median	D	Y	Rate	HR_{adj}	CI	p
Age														
<20 years	14.9	17	2.1	8.0	0.6	0.2; 1.3	.20	21.6	54	3.7	14.4	0.9	0.4; 1.9	.81
20–29 years	14.2	22	1.9	11.9	0.8	0.5; 1.4	.51	11.9	17	1.3	12.9	1.0	0.6; 1.8	.99
30–39 years	16.8	44	3.4	13.0	0.9	0.6; 1.3	.63	18.1	46	3.8	12.2	0.6	0.4; 1.0	.03
40–49 years	13.1	64	3.7	17.2	1.1	0.8; 1.5	.56	14.9	75	4.4	17.1	1.3	0.9; 1.8	.14
50–59 years	17.0	91	5.9	15.4	Ref			19.6	97	6.5	14.9	Ref		
60–69 years	12.1	48	2.7	17.9	1.2	0.8; 1.7	.40	20.4	55	4.0	13.7	0.8	0.6; 1.1	.23
70+ years	19.3	17	1.1	16.1	0.8	0.4; 1.3	.36	15.9	16	1.1	14.1	1.4	0.8; 2.5	.19
Gender														
Nonfemale	14.4	63	4.9	12.9	Ref			17.2	84	6.1	13.9	Ref		
Female	14.9	240	15.8	15.2	1.2	0.9; 1.7	.18	19.0	276	18.8	14.7	1.1	0.9; 1.5	.34
Education														
College	13.3	154	9.3	16.6	Ref			16.9	169	10.1	16.7	Ref		
Postcompulsory	15.7	67	4.8	14.0	1.1	0.8; 1.5	.66	20.9	105	7.4	14.2	1.0	0.7; 1.3	.80
Compulsory	17.9	54	3.5	15.4	0.9	0.6; 1.3	.57	23.9	57	4.3	13.4	0.9	0.7; 1.3	.68
No information/too young	18.6	28	3.1	8.9	0.6	0.4; 1.0	.04	19.9	29	3.1	9.3	0.8	0.5; 1.3	.43
Costs														
Statutory HI	14.3	266	17.7	15.0	Ref			18.7	314	21.7	14.5	Ref		
Private HI	17.4	19	1.9	10.0	0.7	0.4; 1.2	.22	15.0	20	1.5	13.2	1.1	0.6; 1.7	.82
State (with or without private HI)	15.7	17	1.1	16.1	1.2	0.7; 1.9	.57	20.8	24	1.6	15.2	0.8	0.5; 1.3	.41
Patient	8.4	1	0.1	17.2	2.0	0.3; 14.5	.51	12.4	2	0.1	17.0	1.9	0.4; 8.4	.42
F-Diagnosis														
Not severe	14.3	277	18.3	15.1	Ref			19.0	332	23.0	14.5	Ref		
Severe	19.5	26	2.4	10.7	0.9	0.6; 1.5	.68	14.4	28	1.9	14.7	1.2	0.8; 1.8	.44

Note: HR <1.0 indicates higher probability of longer waiting time.

Abbreviations: D, number of events; HI, health insurance; HR_{adj}, hazard ratio (adjusted for the other variables, accounting for clustering within practices); p, p-value; Rate, rate per 100; Ref, reference category; Y, persontime (weeks per 100).

TABLE 5 Time between last visit and treatment start by patient characteristics in weeks

	Before ($n = 303$)							After ($n = 360$)						
	Median	D	Y	Rate	HR_{adj}	CI	*p*	Median	D	Y	Rate	HR_{adj}	CI	*p*
Age														
<20 years	2.3	17	0.5	34.3	2.6	1.2; 5.5	.01	1.0	53	1.6	33.5	0.9	0.5; 1.7	.70
20–29 years	3.5	22	2.1	10.3	0.7	0.4; 1.1	.12	3.4	16	0.6	26.7	1.0	0.6; 1.8	.96
30–39 years	4.1	44	2.4	18.7	0.9	0.6; 1.4	.74	3.1	45	1.9	23.6	0.8	0.6; 1.2	.35
40–49 years	3.0	64	2.8	22.6	1.3	0.9; 1.8	.15	2.8	74	2.5	29.2	1.2	0.9; 1.7	.29
50–59 years	3.3	90	4.6	19.4	Ref			3.1	97	3.9	24.7	Ref		
60–69 years	2.9	48	2.1	22.8	0.9	0.6; 1.4	.71	3.1	55	2.5	21.7	0.8	0.6; 1.2	.36
70+ years	3.0	17	0.8	21.0	0.8	0.5; 1.4	.39	3.1	16	0.8	19.6	0.7	0.4; 1.2	.18
Gender														
Nonfemale	2.6	63	4.0	15.9	Ref			3.0	83	3.1	26.8	Ref		
Female	3.2	239	11.4	21.0	1.0	0.7; 1.4	.94	3.0	273	10.8	25.3	0.9	0.7; 1.2	.63
Education														
College	3.0	153	8.3	18.4	Ref			3.0	167	6.3	26.4	Ref		
Postcompulsory	3.3	67	3.5	19.0	1.1	0.8; 1.6	.48	3.0	104	4.1	25.4	1.0	0.7; 1.3	.88
Compulsory	3.2	54	2.3	23.2	1.1	0.8; 1.6	.51	3.1	56	2.5	22.2	1.1	0.7; 1.6	.70
No information/too young	3.0	28	1.2	23.4	1.1	0.7; 1.8	.60	2.6	29	0.9	30.7	1.3	0.8; 2.2	.29
Costs														
Statutory HI	3.0	266	13.5	19.7	Ref			3.0	310	11.8	26.3	Ref		
Private HI	3.3	18	1.0	18.6	1.0	0.6; 1.7	1.00	2.6	20	0.7	29.9	0.9	0.5; 1.6	.76
State (with or without private HI)	3.3	17	0.9	19.3	1.3	0.8; 2.2	.32	5.2	24	1.4	16.8	0.4	0.3; 0.7	<.001
Patient	1.0	1	0.0	100.0	3.0	0.4; 23.1	.30	1.5	2	0.0	66.7	1.8	0.4; 8.5	.48
F-Diagnosis														
Not severe	3.0	276	12.4	22.3	Ref			3.0	328	12.8	25.6	Ref		
Severe	4.3	26	3.0	8.6	0.7	0.4; 1.1	.13	2.4	28	1.1	26.2	0.8	0.5; 1.2	.28

Note: HR <1.0 indicates higher probability of longer waiting time.

Abbreviations: CI, 95% confidence interval; D, number of events; HI, health insurance; HR_{adj}, hazard ratio (adjusted for the other variables, accounting for clustering within practices); *p*, *p*-Value; Rate, rate per 100; Ref, reference category; Y, persontime (weeks per 100).

group has to get "less." In addition, the obligatory 200 min of telephone time might also have reduced the time for actual patient treatment. Third, the law introduced novel elements of care with new reimbursement schemes, resulting in better payment for certain types of consultations (as mentioned before: this is true only for patients with statutory health insurance). As the application procedures for reimbursement of psychotherapy are more complicated for patients with state payment compared with statutory health insurances, it may be more attractive for psychotherapists to offer early treatment to patients with statutory health insurance compared with state and/or private insurance. Moreover, as the application process itself is complicated, it takes more time. It was one of the aims of the reform to reduce bureaucracy by removing some obligatory tasks during the application process for reimbursement, thereby widening the "gap in intricacy" between statutorily and privately state-insured patients.

In our study, the *severity of the disease* was not associated with waiting times for a first visit, neither before nor after the law changed. Though we could only use the F-diagnosis for defining "severity," these results are in line with data from other authors (Uhlmann et al., 2017b), who found that neither F-diagnosis nor the global level of functioning was related to obtaining psychotherapy after a hospital stay. It is reassuring to see that the more severely affected patients did not have to wait longer for a first visit. However, one must keep in mind that our study is based on documented data from practices and, naturally, it only included patients who were able to make the necessary phone calls or email contacts and who visited the practice at least once. It is highly likely that the patients with very low levels of functioning were not able to do that (Abbas et al., 2017; Bichescu-Burian et al., 2021; Bridler et al., 2013; Palm et al., 2021; Wendt et al., 2019; Wiegand & Godemann, 2017) and are therefore underrepresented in our study. Once the patients had had their last preliminary visits, those with more severe disease were at higher risk of having to wait longer for their treatment start date. Though these results had a relatively low statistical certainty due to the low number of events (which in itself could indicate that these patients do not find their way easily into outpatient psychotherapy), they are in line with data from Nikendei et al., who found that patients with more diagnoses undergo psychotherapy less frequently after first consultations (Nikendei et al., 2020). This pattern unfortunately did not change after the reform.

Regarding *age*, we found some indications for longer waiting times for first visits in the youngest patients. However, this finding must be interpreted with caution because most of the patients from this group came from a single practice. In other studies, evidence was inconclusive—some found that age is related to the uptake of psychotherapy (Ernstmann et al., 2021; Nikendei et al., 2020; O'Donnell et al., 2021; Puyat et al., 2016), while others found it is not (Bichescu-Burian et al., 2021; Uhlmann et al., 2017b).

Finally, we found waiting times to be largely independent of *gender*, which is very important as is it well known that men have more problems accessing mental health care in many cultures and across different mental health services (Alston, 2012; Bayer et al., 2020; Oliffe & Phillips, 2008; Roxo et al., 2021; Singer, Kojima, et al., 2022; Zeissig et al., 2015). It means that once men have made the first step and contacted the psychotherapist, they have the same experiences regarding waiting times as women.

The results of our study must be interpreted in the light of its limitations. In addition to the ones already mentioned, there are a few others. Most notably, structural characteristics which may play an important role in access to mental health care in terms of availability of psychotherapists in the area or socioeconomic deprivation (Abbas et al., 2017) could not be investigated because of the study design. Second, the practices participating in our study were not randomly selected. This was not possible because psychotherapists in Germany are not requested to document the various data we needed. It might thus be possible that the patients in our study are not representative of all patients in psychotherapy practices. Indeed, the waiting times we found are much shorter than the ones published by the Association of Psychotherapists in Germany (Bundespsychotherapeutenkammer, 2018). However, their results were based on estimates from psychotherapists. Uhlmann et al. (2017a) surveyed patients and found waiting times for first visits very similar to ours, namely three weeks. Nonetheless, one should keep in mind that our findings are based on data from only nine practices in Germany. Even when they are diverse in terms of region and professional qualification of the therapists, it would be worthwhile to add evidence from additional practices and regions. Finally, even though the number of patients was relatively large in our study, not all of them eventually started psychotherapy, leading to only a few events in some patient groups, which, in turn, resulted in large confidence intervals for these variables.

The advantages of our study are that we included adults as well as children and adolescents, which has rarely been done before in this research area, and that we could rely on documented data instead of patients' memories or estimations from psychotherapists, thereby reducing information bias.

In summary, there were indications that social inequality in access to psychotherapy was reduced by the change in psychotherapy law, although waiting times between last visit before treatment start and the first treatment visit for patients with state insurance increased.

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CONFLICTS OF INTEREST

Susanne Singer has received honoraria from Lilly for reviewing submissions to their Quality-of-Life Award, outside of this study. The other authors declare that they have no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to privacy restrictions.

ETHICAL APPROVAL

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2000. Ethics approval was obtained from the Ethics Committee of the state of Rhineland-Palatinate (# 2020-14898).

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