Psychological Distress and Rates of Health Insurance Coverage and Use and Affordability of Mental Health Services, 2013–2014

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Objective: The study compared changes in rates of health insurance coverage, utilization and affordability of mental health services, and reported satisfaction with health coverage between 2013 and 2014 for people in moderate and severe psychological distress with people in no or low psychological distress.

Methods: A nationally representative data set restricted to participants ages 26 to 65 (N=35,602) was used. Changes in outcome measures were calculated by using linear regression adjusted for the complex survey design.

Results: Relative to individuals with no or low levels of psychological distress, individuals with moderate distress showed gains on selected outcome measures, and they experienced net improvements on several measures. Individuals with severe psychological distress showed fewer net improvements and no relative improvements compared with individuals with no or low levels of psychological distress, although they reported net increases in subjective satisfaction with health care.

Conclusions: Between 2013 and 2014, selected health care outcomes improved for individuals in moderate psychological distress but not for individuals in severe distress.

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Americans experiencing greater levels of psychological distress have lower rates of health insurance coverage (1), greater unmet need for mental health services (2), poorer health, and greater levels of functional impairment (3) compared with Americans with lower levels of psychological distress. People with levels of psychological distress high enough to indicate the presence of serious mental illness are confronted with particularly low rates of health coverage and particularly high rates of unmet need for mental health services (2,3). The Patient Protection and Affordable Care Act (ACA) was introduced with the intention of increasing rates of health insurance coverage in the United States. It also includes mandates specifically intended to enforce mental health parity for a broader range of health insurance plans and improve integration of behavioral health services with primary care (4).

Prior to the full implementation of the ACA, some researchers estimated that the act would have a positive impact on insurance coverage and rates of mental health care utilization for people with serious mental health conditions, particularly because of the implementation of Medicaid expansions and health insurance exchanges beginning January 1, 2014 (5). However, data are needed to compare actual improvements in health care and coverage outcomes among people in psychological distress versus people with no or low psychological distress.

In this study, we compared short-term changes in rates of health insurance coverage, utilization and affordability of mental health services, and satisfaction with health coverage and health care between 2013 and 2014 among adults in moderate and severe psychological distress with people in no or low psychological distress. Net changes in rates of these outcomes were also calculated.

METHODS

Data from the National Health Insurance Survey (NHIS) were used to assess relative changes in outcome measures of interest between the years 2013 and 2014 for people between the ages of 26 and 65. The NHIS is a complex, nationally representative cross-sectional sample of the civilian noninstitutionalized U.S. population featuring continuous interviewing throughout the year; results are reported by quarter. The sample was restricted to survey respondents ages 26 to 65 because of the idiosyncratic legal situation of people below the age of 26, who became eligible to remain covered under their parents' health insurance plans in 2010, as well as people over 65, who are eligible for Medicare. The

sample was restricted to the last three quarters of 2013 and the last three quarters of 2014 so that the analyses could detect changes attributable to the January 2014 health insurance expansion while avoiding the effects of seasonal variation (final unweighted N=35,602).

The NHIS data set includes a proxy for mental health called the K6. A cutoff score of 5 on this measure can be used to reliably identify the presence of functionally significant psychological distress (3). A cutoff score of 13 can be used to identify the presence of severe mental illness (specificity=.96, sensitivity=.36) (6). We used these cut points to define three mutually exclusive comparison groups: persons with no or low distress, persons with moderate psychological distress, and persons with severe psychological distress. Each participant provided informed consent. The public data used here were preexisting, and the analyses were exempt from the institutional review board approval process.

We examined four outcome domains: health insurance coverage, utilization of mental health services, affordability of mental health services, and satisfaction with health coverage and health care. Health insurance coverage was measured by items asking whether respondents had any current health insurance coverage, whether they were currently insured by public health insurance (Medicaid or Medicare), and whether they found it difficult to obtain an affordable health insurance plan in the past three years. Utilization of mental health services was measured by an item asking whether respondents had received any mental health services within the past year, and affordability of mental health services was assessed by an item asking whether the respondent was unable to afford needed mental health care or counseling within the past year. Reported satisfaction with health care and health coverage was assessed by items asking whether respondents felt that their current insurance coverage was better than their coverage during the previous year, whether they were satisfied with the health care that they received during the past year, and whether they worried about paying for medical costs associated with a potential serious illness or accident.

We tested for relative changes in rates of the aforementioned outcome measures among people who reported moderate psychological distress and people who reported severe psychological distress compared with people who reported no or low psychological distress. These relative changes were calculated by using linear regressions that included demographic variables as covariates (income, education, race [white versus nonwhite], sex, age, and unemployment [unemployed for past ≥12 months versus held job in past 12 months]). Net changes in rates of the selected outcome measures between 2013 and 2014 (not adjusted for covariates) were also calculated for people in moderate psychological distress and people in severe psychological distress. All analyses were adjusted for weighting, clustering, and nested stratification. Standard errors were estimated by using Taylor series linearization, a method that has been used to account for the effects of serial correlation (7). [R scripts for all analyses are available in an online supplement to this article.]

RESULTS

Table 1 presents relative changes in rates for outcome measures among people in moderate psychological distress and people in serious psychological distress compared with people in no or low psychological distress. Between 2013 and 2014, the rate of health insurance coverage increased among people with no or low psychological distress and among people with moderate psychological distress, but there was a statistically significant greater increase among people with moderate psychological distress (increase of 3.6 percentage points after adjustment for covariates, 95% confidence interval [CI]=.6–6.7). Compared with people with no or low psychological distress, people in moderate psychological distress also showed a significantly greater increase in the percentage of persons who were able to find an affordable health care plan (increase of 15.7 percentage points after adjustment for covariates, CI=1.6–29.8), almost entirely closing the gap between these two cohorts on this item. There were no measurable relative changes on any other outcome measure for people in moderate psychological distress compared with people in no or low psychological distress, nor were there any statistically significant relative changes on any of the outcome variables for people in serious psychological distress compared with people in no or low psychological distress.

With respect to net changes between 2013 and 2014 among people in moderate psychological distress, there were statistically significant net increases in health coverage (6.3%, CI=3.3–9.4), rates of public health insurance (4%, CI=1.4–6.8), and subjective improvement in their health coverage compared with last year (4.4%, CI=2.3–6.4) as well as significant net decreases in reported difficulty obtaining affordable health coverage (–17.7%, CI=−30.2 to −5.2) and worries about paying for costs associated with possible accidents or serious illnesses (–4.6, CI=−7.6 to −1.6). People in serious psychological distress showed no significant net changes in health coverage, utilization of mental health care, difficulty obtaining affordable health coverage, or affordability of mental health care but showed increases in satisfaction with health care (5.5%, CI=.2–10.8), perceived improvements in their health coverage compared with the previous year (5%, CI=1.1–8.9), and decreased concerns about paying for health care after a hypothetical accident or illness (–6.2%, CI=−11.7 to −.6).

DISCUSSION

Between 2013 and 2014, people in moderate psychological distress showed greater decreases in perceived difficulty in finding an affordable health plan compared with people in no or low psychological distress. People in moderate psychological distress also showed significantly greater

TABLE 1. Relative changes in rates of health insurance coverage, mental health care utilization, affordability of needed mental health care, and satisfaction with health coverage, by level of psychological distress (2013–2014)[a]

	Psychological distress													
	No or low				Moderate					Severe				
	2013		2014		2013		2014			2013		2014		
Characteristic	%	95% CI	%	95% CI	%	95% CI	%	95% CI	Relative change[b]	%	95% CI	%	95% CI	Relative change[b]
Health insurance coverage														
Covered by any health insurance	83.1	82.2–84.1	86.4	85.6–87.2	75.8	73.8–77.7	82.1	79.9–84.3	3.6*	70.6	66.5–74.8	75.9	71.4–80.5	2.6
Covered by Medicaid or Medicare	7.8	7.1–8.5	9.8	9.1–10.5	18.7	17.1–20.4	22.8	20.7–25	2.3	40.2	35.4–45.1	42.3	37.3–47.3	.7
Finding an affordable health care plan in the past 3 years was very difficult	26.1	21.5–30.8	24.3	20.6–28	46.4	36.6–56.2	28.7	20.7–36.6	−15.7*	44.8	22.0–67.5	44.4	20.4–68.3	6.4
Mental health care utilization														
Received mental health treatment in the past 12 months	4.7	4.1–5.2	4.6	4.2–5.1	16.4	14.8–18	18.1	16.1–20.1	1.7	37.2	32.7–41.7	35.8	30.9–40.7	−.4
Mental health care affordability														
Could not afford mental health treatment despite perceived need in the past 12 months	.8	.6–.9	.7	.5–.9	6.2	4.9–7.4	5.9	4.8–6.9	−.1	20.7	17.2–24.2	20.3	16.0–24.5	−.2
Satisfaction														
Satisfied with health care in the past 12 months	94.9	94.5–95.5	95.3	94.7–95.8	88.6	87.1–90.2	89.1	87.5–90.7	.4	76.7	66.9–94.3	82.2	78.4–86	5.3
Concerned about paying for health care	47.2	45.9–48.3	44.4	43.1–45.7	71.9	69.9–74.1	67.4	65.2–69.7	−2.1	80.9	77.5–84.4	74.8	70.3–79.2	−4.5
Health coverage was better this year	6.8	6.3–7.4	9.8	9.1–10.5	9.3	7.9–10.6	13.7	12.0–15.3	1.2	7.2	4.9–9.6	12.3	9.0–15.4	1.8

[a] Yearly rate estimates for 2013 and 2014 were not adjusted for covariates. All percentages are weighted.
[b] Percentage point changes between 2013 and 2014 compared with changes among people in no or low psychological distress, adjusted for income, education, race (white versus nonwhite), sex, age, and unemployment (unemployed for past ≥12 months versus held job in past 12 months)
*p<.05, after standard errors were adjusted according to the complex survey design by Taylor series linearization

increases in rates of health insurance coverage compared with people in no or low distress. However, despite these significant relative improvements among people in moderate psychological distress (as well as net increases in rates of health insurance, public health insurance, and ability to find an affordable plan for the same cohort), there were no measurable relative improvements for any outcome measure examined in this study for people in severe psychological distress compared with people with no or low distress, nor were there net improvements among people in serious psychological distress in rates of health coverage or difficulty finding an affordable health plan, affordability of mental health services, or utilization of mental health services. The absence of measurable improvements among people in severe psychological distress suggests the possibility that people with serious mental illness may face unique barriers that limit the extent to which they benefit from recent changes in public health policy, at least at this early stage.

People with serious mental illness cite cost as the largest barrier to getting mental health treatment in the United States, with approximately 12% reporting an inability to afford mental health care even with the help of insurance (2). Costs related to mental health care are not always addressed through increased rates of health insurance because health insurance coverage does not eliminate costs associated with seeking care (for example, transportation costs, opportunity cost, and copays), and these costs are typically especially prohibitive for people with greater degrees of psychological distress (8). In addition, mental health parity legislation allows some health insurance providers to limit or exclude mental health treatment from coverage. Increases in rates of public health

insurance coverage in tandem with stricter legislation of mental health parity would likely decrease the financial barriers associated with mental health care faced by people in psychological distress. Public insurance coverage in particular has been shown to increase access to specialty mental health care for people with serious mental illness (9), perhaps because these health insurance policies do not have significant copays and are subject to relatively strict mental health parity regulations (10). Enrollment in these public programs, therefore, may be inordinately effective at increasing access to mental health care for people with poor mental health compared with commercial coverage plans.

Another barrier to mental health care reported by people with severe mental illness is a lack of knowledge about where to go for treatment (16.4%) and a belief that known treatments will not be helpful (9.1%) (2). There is a widespread lack of awareness among the general public about the availability of effective treatments for mental health problems (11). Initiatives aimed at improving mental health literacy and spreading awareness of available services may increase engagement with mental health care services. Programs that make it easier for people who are experiencing psychological distress to engage with ACA representatives in places that they already frequent may also increase engagement with mental health care services.

There were several limitations of this study. The data set does not contain region-level data sufficient to determine differences between states that chose to expand Medicaid versus those that did not. Further research should explore variations in mental health disparities between Medicaid-expanding states versus those that have not expanded Medicaid. Also, while psychological distress is a good proxy for mental health problems, it would be beneficial to have more fine-grained measures that allow a distinction between types of disorders, for example, substance use and other mental disorders. Finally, the study examined only short-term effects of the ACA. It is likely that some effects of the act will take several years to emerge.

CONCLUSIONS

Between 2013 and 2014, individuals with moderate psychological distress experienced greater increases in rates of health insurance coverage and self-reported ease of finding an affordable health plan compared with individuals with no or low psychological distress. Yet people in severe psychological distress experienced no improvements on any variable examined in this study compared with people with low or no psychological distress, suggesting the possibility that this cohort may have benefited less (or more slowly) from recent policy changes. Although people in moderate psychological distress showed some net improvements in rates of health coverage, rates of public health insurance coverage, and reported financial barriers to obtaining health coverage, people in serious psychological distress showed no net improvements on these measures, although they reported measurable net increases in satisfaction with health care and coverage. There were no relative or net increases in mental health care utilization or reported affordability of needed mental health care for any cohort. Targeted strategies for increasing enrollment in health insurance and mental health care for these at-risk groups are warranted.

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