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Families With TRICARE Report Lower Health Care Quality And Access Compared To Other Insured And Uninsured Families

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ABSTRACT Children in military families, who receive health insurance through the TRICARE program, face barriers to care such as frequent relocations, unique behavioral health needs, increased complex health care needs, and lack of accessible specialty care. How TRICARE-insured families perceive health care access and quality for their children compared to their civilian peers' perceptions remains unknown. Using data from the Medical Expenditure Panel Survey, we found that TRICAREinsured families were less likely to report accessible or responsive care compared to civilian peers, whether commercially or publicly insured or uninsured. Military families whose children had complex health or behavioral health care needs reported worse health care access and quality than similar nonmilitary families. Addressing these gaps may require military leaders to examine barriers to achieving acceptable health care access across military treatment facilities and off-base nonmilitary specialty providers, particularly for children with complex health or behavioral health needs.

n 2016 there were over 1.7 million children with a parent in the US military, including active duty and selected reserve members.¹ Children of service members are eligible for health coverage through TRICARE, the military health care program for service members and their dependents that provides access to health care services in both military and civilian treatment facilities. TRICARE pediatric beneficiaries also include children of military retirees, activated reserve component service members, reserve component service members who purchase TRICARE Reserve Select, and service members killed in the line of duty. While TRICARE provides this population with near-universal health care coverage through a system that combines military treatment facilities with civilian care, the families face a unique set of circumstances that may challenge their access to health care in ways that the civilian population does not experience. As the mili-

tary continues to review its health care programs to address fiscal and service challenges, it has become critical to understand the unique barriers to coverage and access to care faced by TRICARE-insured families.

One of the consistent aspects of military service that presents a challenge to the receipt of high-quality health care is relocation. Relocation is inherent in the lives of military service members and their families: On average, military families are required to relocate every two to three years.² Regardless of where families relocate, the process necessitates that families establish new relationships with pediatric providers in an unfamiliar community.³ While all family members may experience difficulties in maintaining continuity of care during relocations, young children are particularly vulnerable to gaps in care because of their greater number of recommended well-child visits.4,5 Upon relocation, military families may also face difficulties finding Roopa Seshadri is a senior research scientist at PolicyLab at Children's Hospital of Philadelphia (CHOP), in Pennsylvania.

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David M. Rubin (rubin@email .chop.edu) is director of PolicyLab and director of population health innovation, both at CHOP, and a professor of pediatrics at the University of Pennsylvania Perelman School of Medicine. specialists in TRICARE's network who are accepting new patients. For the approximately 65 percent of families with TRICARE who are enrolled in TRICARE Prime, a health maintenance organization-type plan, administrative hurdles to accessing care include finding and obtaining appointments with new primary care providers and getting referrals to and appointments with pediatric specialists within the plan's geographic limits-all of which must be done after relocation.⁶⁻⁸ A second critical concern is that military installations are disproportionately located in medically underserved areas, where specialty care (particularly pediatric specialty care) may be difficult to access.⁹ A lack of adequate health care resources near military installations can affect families' ability to find highquality pediatric care providers and to receive care in a timely manner. This includes families who have been determined via the Exceptional Family Member Program to be in need of specialty pediatric care. There is variability in the implementation of this program across the various services, and families may need to reestablish eligibility for the program if they relocate to a command under a different service. Finally, TRICARE-insured families that receive supplemental state Medicaid coverage for a child with special health care needs with eligibility through the Social Security disability benefit are further required to reestablish Medicaid coverage after each relocation, navigating wide variation in Medicaid policies among states and the challenges that state bureaucracies afford in each location.¹⁰

The unique challenges faced by TRICAREinsured families extend beyond challenges of access and coverage related to relocation. Underlying health needs may also differ, particularly for families whose children have complex medical or behavioral health needs. In particular, mental and behavioral health needs might be elevated, often related to frequent moves, prolonged separation resulting from parents' deployments, and exposure to returning parents who themselves have been affected by the trauma of combat deployment.¹¹ Overall, the prevalence of children with complex health needs could be higher among military families as well.^{12,13} TRI-CARE has recognized these unique challenges, and its coverage allows children in these families to seek care in both the civilian and military health care systems. This provides families with additional options that may improve their access to care, particularly during times of transition such as relocation. Challenges arise, however, when community providers choose not to accept TRICARE coverage because of low reimbursement rates.7 Additionally, for children who see

providers in both military and civilian settings, the institutional barriers between the military and civilian health care systems can challenge care coordination between providers.¹⁴

In recent years the military has instituted programs and strategies-including some in partnership with civilian organizations-following principles of communities of care, though evidence of their effectiveness is limited.^{15,16} For example, Family Readiness Groups, sponsored by each command and run by volunteers, provide information and referrals as needed, such as to a patient advocate or contractors that support TRICARE managed care for health care access concerns. The nonprofit organization Give an Hour administers the Community Blueprint Network, a group of local leaders, government agencies, nonprofit organizations, and volunteers that develops community-based solutions for military families to address concerns such as those related to behavioral health and education. While these and other interventions are popular. they lack formal evaluations, and their impact is unknown.

In addition to the lack of evidence-based programs to improve access to care, pediatric health care experience among military families is rarely compared to that among civilian families. Family-reported quality of care across public and private insurance types among civilian families has been extensively documented. For example, many lower-income civilian families have reported difficulty in finding and accessing care that is responsive to their needs-particularly in the case of families whose children have special health care needs and those who receive public insurance-compared to similar families with commercial employer-sponsored insurance.¹⁷⁻¹⁹ The experience of military families has been missing in those studies. The lack of data limits the Pentagon's ability to make evidence-informed programmatic and policy decisions related to TRICARE and health services for military families.²⁰ This study therefore sought to examine family-reported outcomes related to access to and quality of health care services among TRICARE-insured families, compared to civilian families with public insurance (for example, Medicaid), commercial insurance, or no insurance, and the differential role of complex health care needs across insurance groups.

Study Data And Methods

STUDY SAMPLE AND DESIGN The study sample included all 84,783 children ages 0–17 from households that participated in the Medical Expenditure Panel Survey (MEPS) in the period 2007–15.²¹ MEPS is a set of large-scale surveys on

heath conditions and health status, health services use, satisfaction with care, and insurance coverage collected from a nationally representative sample of families, individuals, medical providers, and employers. Respondents in each sampling frame participate in five survey rounds over two years. For this analysis we used publicuse data elements from the Full Year Consolidated Data files and Full Year Medical Condition files of the MEPS–Household Component.

OUTCOME MEASURES Health care quality measures for children were assessed using the Consumer Assessment of Healthcare Providers and Systems, a family of survey instruments sponsored by the Agency for Healthcare Research and Quality. The questions about children ages 0-17 refer to experiences in the past twelve months. The outcomes assessed are having a usual source of care, getting a routine appointment, getting necessary care, getting illness care when needed, getting a referral to a specialist, getting accessible care, and getting responsive care. Respondents indicated on a four-point scale (the response options were never, sometimes, usually, and always) the ease with which they were able to get each outcome.

Accessibility and responsiveness of care are composite measures.²² Care is considered accessible if a respondent's usual source of care has office hours at night, on weekends, or both and it is not difficult to contact the source by phone and after hours. Responsive care is when the provider asks about other treatments received and involves the respondent in the decision process.

INSURANCE GROUPS The primary predictor was insurance group, with a focus on comparing how access to and quality of care for children on TRI-CARE compares with that of their peers in nonmilitary families. Hence, children for whom TRI-CARE was a source of insurance coverage at any time during the data collection round, with or without additional coverage, were considered as covered by TRICARE. The other insurance groups were Medicaid, the Children's Health Insurance Program, or other public insurance; commercial insurance; and no insurance. MEPS does not distinguish between specific types of insurance plans (for example, preferred provider organization versus health maintenance organization).

IDENTIFYING CHILDREN WITH COMPLEX HEALTH CARE NEEDS We used two indicators to identify children who had complex health care needs: an indicator from the Children with Special Health Care Needs (CSHCN) Screener, which was developed as part of the Child and Adolescent Health Measurement Initiative,²³ and a behavioral health diagnosis indicated by a medical practitioner and reported in the MEPS Medical Condition files.

The CSHCN Screener is non-condition specific and identifies children who require more than routine health and other services based on the following five health consequences: needing or using prescription medicines; needing or using more than usual medical care, mental and behavioral health care, or education services; having a functional limitation; needing or using specialized therapies or services; and needing or using mental or behavioral health counseling or treatment. Special health care needs status was categorized as having 0, 1–2, or 3–5 such needs as an indication of clinical significance.

Because obtaining coverage for and access to mental and behavioral health services is an ongoing challenge that may be different than obtaining coverage for physical health care services, particularly for children and adolescents, we sought to categorize behavioral health needs separately from special health care needs.²⁴ A behavioral health diagnosis emphasizes health care need regardless of whether children are receiving care—which is a criterion for a condition to be classified as a special health care need in the CSHCN Screener—and it is thus likely to be more inclusive than the special health care needs status. Behavioral health diagnoses were selfreported by respondents and converted to International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), codes by professional coders. The corresponding Clinical Classifications Software (CCS) codes were determined from these fully specified ICD-9-CM codes for children ages six and older.²⁵ Any instance of a diagnosis in any CCS category for mental and behavioral disorders was considered to indicate a complex behavioral health need. Notably, 57.5 percent of children with a behavioral health diagnosis were not identified as having a behavioral health need in the CSHCN Screener.

STATISTICAL ANALYSIS All outcomes were dichotomous, and 70 percent of respondents participated in each of two consecutive MEPS years. Hence, repeated measures logistic regression models were used. These models account for complex survey design, including sampling stratification and survey weights. The primary predictor was insurance group, and secondary predictors were special health care needs status and behavioral health diagnosis. Additionally, all models controlled for child age (0-5, 6-12, 6-12)or 13-17 years), sex, race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, or other), family income level (less than 133 percent, 133-400 percent, or more than 400 percent of the federal poverty level) and census region (Northeast, Midwest, South, or West).

For the primary research question about comparing access and quality measures across insurance groups, significant differences were determined using odds ratios with 95% confidence intervals for main effects. Note that rounding of the odds ratio estimate and 95% confidence interval might result in the odds ratio being the same as the lower or upper limit in some instances. A Bonferroni correction for the p value was applied to compare outcomes between TRICARE and each of the three other insurance groups at a 0.05 level of significance, and model-based adjusted probabilities were generated. The models estimated the mean probability of access and quality outcome measures for each insurance group, adjusting for age, race/ethnicity, sex, income level, special health care needs status, presence of behavioral health diagnosis, and region. (For predicted probabilities of selected outcomes across insurance groups, see online appendix exhibit A1.)²⁶ To address the secondary research question of whether there was a differential role of complex health care needs based on insurance group, separate regression models were used with an interaction effect between insurance group and each of the complex health need indicators. The models with behavioral health diagnosis were limited to children ages six and older. Model-based adjusted probabilities for complex health need groups within each insurance group were estimated, adjusting for age, race/ethnicity, sex, income level, and region. The limited sample sizes within subgroups prevented hypothesis testing of these comparisons within insurance groups.

All analyses were performed using SAS/STAT, version 9.4, of the SAS System for Windows.

LIMITATIONS Our study had some limitations. First, as survey panel data, our information was subject to reporting bias and misclassification of insurance groups, although we would not expect there to have been differential bias across groups. Additionally, a subset of children with TRICARE had dual coverage at some point during the data collection round (2.97 percent also had public insurance, and 25.7 percent also had commercial insurance), which was not parsed out in this analysis. However, variability in level of coverage exists within all insurance groups. There may also have been a temporal dissonance between the measurement of insurance coverage and the timing of access and quality experience.

Second, the results that addressed disparities between TRICARE and other insurance groups for special-needs populations were descriptive only.

Third, our results were cross-sectional and did not examine whether disparities were improving or worsening over time. Specifically, the sample sizes for the TRICARE population within strata were too small, thus increasing the standard errors.

Finally, although we hypothesized that many of the effects that were observed related to military culture and the challenges of accessing specialty care on and off the base, we could not determine the causal inference of those associations.

Study Results

SAMPLE DESCRIPTION The analytic sample of 84,783 children ages 0-17 represented a nationwide weighted count of 668,529,558 children over nine years—an annual average of 74.1 million children. Two percent of the children had TRICARE, 37 percent were on public insurance, 51 percent had commercial insurance, and 10 percent were uninsured (exhibit 1). The insurance groups differed on all demographic characteristics except sex of the child. There was also a significant difference in the prevalence of complex health care needs, as measured by both the CSHCN Screener and behavioral health diagnoses, across insurance groups. The overall reported prevalence of children with at least one special health care need was 20.2 percent, with that prevalence being highest among children with TRICARE (28.5 percent) and lowest among uninsured children (12.6 percent). The overall prevalence of a behavioral health diagnosis was 11.6 percent. Children ages 0-17 covered by TRICARE had the highest prevalence of behavioral health diagnoses (15.7 percent), a rate nearly twice as high as that among uninsured children (7.9 percent), and the prevalence was 10.7 percent among children with commercial insurance and 13.6 percent among those with public insurance.

HEALTH CARE ACCESS AND QUALITY ACROSS IN-**SURANCE GROUPS** The results of logistic regression models comparing health care access and quality across insurance groups are presented as odds ratios in exhibit 2 and model-based adjusted probabilities in appendix exhibit A1.²⁶ Perceived rates of accessibility and responsiveness of care were low regardless of insurance group, and getting illness care when needed was reported to be the easiest (appendix exhibit A1).²⁶ However, as evidenced by the *p* values for insurance group in exhibit 2, differences were observed in all access and quality measures between insurance groups, except for the ease of getting a referral to a specialist. Compared to children with TRICARE, uninsured children were less likely to have a usual source of care (odds ratio: 0.2; 95% CI: 0.2, 0.3; adjusted probability: 93.5 percent versus 72.1 percent), while

EXHIBIT 1

Demographic characteristics of and risk factors and outcomes for children from the Medical Expenditure Panel Survey, by insurance group, 2007–15

		Insurance group				
Weighted sample proportion ^a	All 100.00%	TRICARE 1.96%	Commercial 51.06%	Public 37.01%	None 9.97%	
DEMOGRAPHIC CHARACTERISTICS						
Female Age (vears)****	49.00%	45.21%	49.28%	48.95%	48.52%	
0-5 6-12 13-17	32.98 38.67 28.35	32.10 38.39 29.50	30.46 38.81 30.74	37.73 38.82 23.44	28.43 37.44 34.14	
Non-Hispanic white Non-Hispanic black Hispanic Other	53.52 13.95 23.32 9.21	58.33 17.83 13.35 10.49	68.84 8.58 12.39 10.19	34.08 21.78 35.89 8.25	46.29 11.65 34.57 7.49	
Income level (percent of FPL)**** Low (<133%) Middle (133-400%) High (>400%)	28.02 44.77 27.20	11.56 57.77 30.67	5.03 48.60 46.37	59.86 36.41 3.73	30.86 53.66 15.48	
Northeast Midwest South West	16.51 21.47 37.74 24.28	6.34 8.75 57.54 27.37	17.95 24.06 34.62 23.36	16.48 19.84 39.02 24.66	11.19 16.75 45.07 26.99	
RISK FACTORS						
Special health care needs ^b **** 0 1–2 3–5 Behavioral health diagnosis ^c ****	79.79% 14.91 5.31 11.55	71.47% 22.06 6.46 15.74	80.77% 15.31 3.91 10.66	76.82% 15.28 7.91 13.55	87.40% 10.03 2.57 7.91	
OUTCOME ^d						
Has usual source of care Easy to get routine appointment when wanted Easy to get necessary care Easy to get illness care when wanted Easy to get referral to a specialist Accessible care ^e Responsive care ^e	90.99% 77.88 71.01 84.44 64.42 43.09 52.26	93.53% 75.55 67.56 83.51 66.09 34.46 47.13	94.11% 80.49 74.56 87.42 67.54 50.73 53.61	91.56% 74.88 66.70 81.08 60.02 34.02 51.01	72.10% 73.08 61.02 79.32 59.06 36.83 50.56	

SOURCE Authors' analysis of data for 2007–15 from the Medical Expenditure Panel Survey. **NOTES** Respondents were assigned to the insurance group indicated at the time of the survey. If multiple groups were indicated, respondents were assigned to a group in the following order: TRICARE, public insurance, and commercial insurance. Chi-square tests were used to compare demographic characteristics across the groups. FPL is federal poverty level. ^aWeighted percentages representing the proportion of children ages 0–17 within each insurance group. ^bFrom the Children with Special Health Care Needs screener, described in the text. 'Behavioral health diagnoses include the relevant Clinical Classifications Software categories based on *International Classification of Diseases*, Ninth Revision, Clinical Modification, codes. Diagnoses were determined only for children ages six and older. ^dAssessed using the Consumer Assessment of Healthcare Providers and Systems. Some outcomes correspond to questions that are conditional responses. ^aComposite measures described in the text. *****p < 0.001

children with commercial insurance were more likely to report having accessible care (OR: 1.7; 95% CI: 1.4, 2.0; AP: 50.4 percent versus 34.6 percent). The accessibility of care for children on TRICARE was comparable to that for children on public insurance or those who were uninsured. Children in TRICARE-insured families experienced significantly worse responsiveness in care, compared to the other three groups. The adjusted probabilities of receiving responsive care and p values in comparison with TRI-CARE (AP: 47.3 percent) were as follows: commercial insurance (AP: 53.6 percent; p = 0.006), public insurance (AP: 51 percent; p = 0.001), and uninsured (AP: 50.2 percent; p = 0.038).

EFFECT OF HAVING A COMPLEX HEALTH CARE NEED ON HEALTH CARE ACCESS AND QUALITY Children with special health care needs were more than twice as likely to have a usual source of care, compared to those without them, but had

EXHIBIT 2

Odds ratios for comparisons of outcomes by insurance group, special health care needs status, and behavioral health diagnosis, among children in the Medical Expenditure Panel Survey, 2007-15

	nearth care quarty and access butcomes								
	Has usual source of care	Easy to get routine appointment	Easy to get necessary care	Easy to get illness care when wanted	Easy to get referral to a specialist	Accessible careª	Responsive careª		
INSURANCE GRO	UP (REF: TRICARE) ^ь							
Commercial Public None p value ^c	0.93 0.81 0.20**** <0.001	1.25 1.07 0.89 <0.001	1.33 1.10 0.76 <0.001	1.29 1.04 0.82 <0.001	1.01 0.91 0.74 0.05	1.68**** 1.09 1.17 <0.001	1.29*** 1.36**** 1.25** <0.001		
SPECIAL HEALTH	CARE NEEDS (RE	F: 0)							
1–2 3–5 p value⁵	2.09 2.26 <0.001	0.87 0.72 <0.001	0.85 0.59 <0.001	0.99 0.75 0.01	0.85 0.63 <0.001	1.03 1.08 0.45	1.04 1.22 <0.001		
BEHAVIORAL HE	ALTH DIAGNOSIS (REF: WITHOUT)							
With p value ^c	1.05 0.52	0.87 0.01	0.94 0.29	0.86 0.11	0.73 <0.001	0.95 0.26	0.99 0.82		

Health care quality and access outcomes

SOURCE Authors' analysis of data for 2007–15 from the Medical Expenditure Panel Survey. **NOTE** Outcomes, as well as the measures of special health care needs and behavioral health diagnoses, are explained in the notes to exhibit 1. ^aComposite measures described in the text. ^bBonferroni correction is applied to the comparison of TRICARE with each of the other insurance groups. ^cFrom repeated measures logistic regression models, adjusting for age, race/ethnicity, sex, income level, and region. **p < 0.05 ****p < 0.01

> greater difficulty in getting appointments or care and referrals when needed and poorer quality of care (exhibit 2). It was significantly more difficult for children with 3-5 special health care needs to receive necessary care (OR: 0.6; 95% CI: 0.5, 0.7) or get illness care (OR: 0.8; 95% CI: 0.6, 0.9) and referrals to specialists (OR: 0.6; 95% CI: 0.5, 0.7), compared to children with none. Access was also more challenging for children with 1-2 special health care needs compared to those with none-but to a lesser degree. However, children with 3-5 special health care needs experienced better responsiveness in care compared to those with none (OR: 1.2; 95% CI: 1.1, 1.4). Children with a behavioral health diagnosis had challenges similar to those of children with special health care needs: They experienced more difficulty in getting routine appointments (OR: 0.9; 95% CI: 0.8, 0.9) and getting referrals to specialists (OR: 0.7; 95% CI: 0.6, 0.8), compared to children with no behavioral health diagnosis.

> Observations on the differential effect of having complex health care needs within an insurance group were based on model-based probabilities (exhibits 3 and 4) where there was at least a 10-percentage-point difference. In comparisons within insurance groups, TRICARE-insured families of children with special health care needs or behavioral health diagnoses reported the greatest reductions in lower perceived quality across several measures, compared to families with healthier children. This disparity was larg-

est among TRICARE-insured families, while publicly insured families in general reported the least differences. Children with 3-5 special health care needs in TRICARE-insured families faced the most challenges in seeking health care (exhibit 3): These families were most likely to have difficulty in getting a routine appointment compared to those with no special health care needs (63 percent versus 79 percent got an appointment). However, TRICARE-insured families with children with 1–2 special health care needs were least likely to report difficulty in getting necessary care (0 needs: 67.2 percent; 1–2 needs: 70.9 percent; 3-5 needs: 56.5 percent) and getting illness care when wanted (0 needs: 82.2 percent; 1-2 needs: 88.2 percent; 3-5 needs: 73.1 percent). Regardless of insurance group, children with special health care needs were more likely to have difficulty getting referrals to specialists, compared to children with none. However, this disparity was least for children with TRICARE (0 needs: 67.8 percent; 3-5 needs: 58.8 percent) and greatest among children with commercial insurance (0 needs: 71.7 percent; 3-5 needs: 55.8 percent).

Children with a behavioral health diagnosis in TRICARE-insured families also faced challenges in access to care. The prevalence of behavioral health diagnoses among children ages six and older was highest in military families (TRICARE: 15.7 percent; commercial insurance: 10.7 percent; public insurance: 13.6 percent; uninsured: 7.9 percent) (exhibit 1). The biggest challenge

EXHIBIT 3



Predicted probabilities for four outcomes among children across insurance groups, by child's special health care needs (SHCN) status

SOURCE Authors' analysis of data for 2007–15 from the Medical Expenditure Panel Survey. **NOTES** Predicted probabilities were adjusted for age, race/ethnicity, sex, income level, and region. Only outcomes with at least a 10-percentage-point difference in predicted probability within a given insurance group are presented.

EXHIBIT 4



Predicted probabilities for three outcomes among children across insurance groups, by behavioral health (BH) diagnosis

SOURCE Authors' analysis of data for 2007–15 from the Medical Expenditure Panel Survey. **NOTES** The analysis sample includes children ages six and older. Predicted probabilities adjusted for age, race/ethnicity, sex, poverty level, and region. Only outcomes with at least a 10-percentage-point difference in predicted probability within a given insurance group are presented.

was in getting a routine appointment for children in TRICARE-insured families with a behavioral health diagnosis compared to those without one (61.5 percent versus 82.4 percent) (exhibit 4). Among children with TRICARE, those with a behavioral health diagnosis had difficulty in getting necessary care, again compared to those without such a diagnosis (60.0 percent versus 71.4 percent). Difficulty in obtaining a referral to a specialist was experienced by families with children with a behavioral health diagnosis, compared to those without such a diagnosis, among children with TRICARE (57.3 percent versus 75.7 percent) and commercial insurance (59.7 percent versus 70.2 percent).

Discussion

This study is the first of its kind to directly contrast the experience of families insured by TRI-CARE regarding quality of care for their children with the experience of civilian families whose children had commercial or public insurance or were uninsured. TRICARE-insured families were found to resemble publicly insured families more than commercially insured families in the aggregate, although further segmentation of families by medical need validated some concerns that were unique to military families. For example, whereas access was high for routine care among healthier children and those with isolated special health care needs, the greatest disparities in access and quality were revealed among TRICARE-insured families whose children had multiple special health care needs or behavioral health care needs. Military families whose children had multiple complex needs could obtain referrals to specialists but reported a disparity in obtaining illness care when wanted and in accessing care reliably, such as outside of regularly scheduled visits. That may suggest that TRICARE-insured families are able to obtain referrals for care from civilian providers, but referrals alone might not mitigate challenges related to transportation, provider availability in the region, or getting prompt appointments for children with the most substantial needs. It could also be indicative of long waits for primary and specialty care at military treatment facilities or delays in care associated with the TRICARE Prime referral process.

The results were even more concerning for TRICARE-insured families whose children had behavioral health needs. These families reported difficulty in receiving referrals to specialists, having appropriate access to care, and obtaining routine appointments. While these findings were consistent with the experiences of other families whose children had special health care needs, the disparities were evident across more measures for families whose children had behavioral health needs, which potentially suggests that systemic barriers might even be greater for mental health than for physical health resources for military youth. Magnifying these concerns and adding a sense of urgency was the fact that families in the military reported much higher rates of behavioral health diagnoses compared to civilian families with commercial, public, or no insurance.

The limitations of this study were balanced by the consistency in the findings that should elicit further interest from the military and TRICARE leaders as they consider improvements to the TRICARE program. Supported by a rich history of results that suggest significant barriers to obtaining needed care, our findings suggest that TRICARE-insured families might not have reliable access to care when their children have special health care needs or behavioral health needs.⁷ In some cases, the reported outcomes were inferior to those for children who were publicly insured or uninsured during the study period.

TRICARE-insured families, particularly those whose children have complex health care needs, face greater barriers to health care access and receipt of high-quality care than their peers do, which may be indicative of challenges due to mobility between installations and subsequently in getting high-quality, continuous care once a need is recognized. Identifying strategies to reduce such barriers needs further study but may require military leaders to examine the adequacy of pediatric health care resources within military treatment facilities and improve supports for families who receive needed care outside of the military direct care system. This may include a review of the adequacy of the military's specialty health care workforce, especially for pediatric and behavioral health care; identifying gaps in the geographic availability of care to improve access; and reducing administrative barriers to improve the timeliness of obtaining specialized care off installation. It may also require increased sampling of military families within longitudinal health care data sets to permit better evaluations of whether disparities improve once efforts are undertaken to improve pediatric health care among children in military families.

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- **26** To access the appendix, click on the Details tab of the article online.