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## Why Do TRICARE Beneficiaries Miss Medical Appointments?

### INTRODUCTION

In 2015, TRICARE introduced an online feature that enables beneficiaries to set reminders via an automated telephone message, a text, and/or email for their appointments at MTFs. This brief describes changes in the prevalence of and reasons for missed, canceled, and rescheduled appointments with military and civilian providers since the reminder system was implemented.

This brief describes changes in the prevalence of and reasons for missed, canceled, and rescheduled appointments with military or civilian providers between 2013 and 2018. In 2015, TRICARE introduced an online feature that enables beneficiaries to set reminders via an automated telephone message, a text, and/or email for their appointments at military facilities (Military.com 2015). Differences over time in the prevalence and reasons for missed, canceled, and rescheduled appointments might mean that the reminder system is helping beneficiaries keep their appointments. We compare these data for direct care versus purchased care users.

According to an analysis of the 2013 Health Care Survey of Department of Defense Beneficiaries (HCSDB), nearly 1 in 10 beneficiaries missed a scheduled appointment during the year before the survey. Around one-third canceled or rescheduled an appointment during that same period (Q2 FY2013 HCSDB 2013). Missed appointments and last-minute cancellations disrupt physicians' schedules and occupy appointment slots that other patients could have used (White 2017). Research shows that appointment reminder systems can reduce the number of missed appointments (McLean et al. 2016).

In addition to comparisons between 2013 and 2018, the brief also explores health-related beneficiary characteristics (smoking, obesity, self-reported health) that may be linked to more missed appointments, given that focus groups with general practitioners suggest that patients who consistently miss appointments may differ systematically from the general population (Williamson et al. 2017). Finally, the brief discusses whether there are differences in rates of missed appointments for beneficiaries who have to call multiple times to make an appointment. Our analyses are based on responses from the first quarter of the 2018 HCSDB (Q1 FY2018 HCSDB) and the second quarter of the 2013 HCSDB (Q2 FY2013 HCSDB).

### PREVALENCE OF MISSED APPOINTMENTS

The HCSDB asked beneficiaries to report if they had missed, canceled, or rescheduled any appointments with a provider at the facility where they went for health care most often in the past 12 months. In the 2018 survey, 7 percent of beneficiaries reported missing an appointment in the last 12 months.<sup>1</sup> This is consistent with the Military Health System's annual report of missed appointments, which says that 6.7 percent of appointments made at military treatment facilities in fiscal year 2017 were missed (Under Secretary of Defense 2018).

Canceling or rescheduling appointments was more common than missing them, with 37 percent of

beneficiaries canceling or rescheduling in the last year. These rates were similar to the rates from 2013, when 8 percent of beneficiaries missed an appointment and 36 percent canceled or rescheduled (figure not shown).

The type of care (direct or purchased) was not a major driver of whether a beneficiary missed an appointment.<sup>2</sup> In 2018, among beneficiaries with purchased care, 6 percent missed an appointment and 35 percent canceled or rescheduled, compared with 9 percent of direct care users who missed an appointment and 39 percent who canceled or rescheduled. These differences were not statistically significant. The rates were also similar to the 2013 rates; although the rates of missed, canceled, and rescheduled appointments

for purchased care beneficiaries fell from 2013 to 2018, the differences were not statistically significant (Figure 1).

The most common reason given by beneficiaries with direct care for missing appointments was a scheduling conflict (62 percent of direct care beneficiaries who missed an appointment cited this as

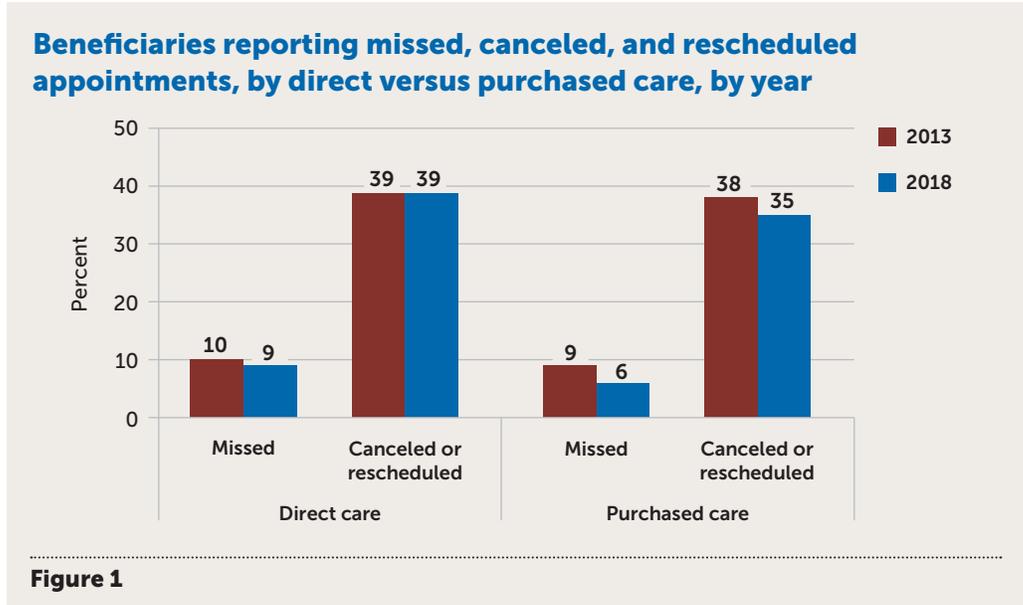


Figure 1

one of their reasons in 2018). Scheduling conflicts were slightly less common in 2013—when 47 percent of direct care users cited this reason—but this difference between years was not significant.

2013. However, this difference was not statistically significant either (Figure 2).

Forgetting about the appointment was also a common reason; 38 percent of direct care users who missed an appointment cited this as a reason in 2018, compared with 35 percent in

Purchased care users had similar reasons for missing an appointment, with scheduling conflicts and forgetting about the appointment the two most commonly cited reasons in both 2013 and 2018. Although forgetting about an appointment slightly increased and scheduling

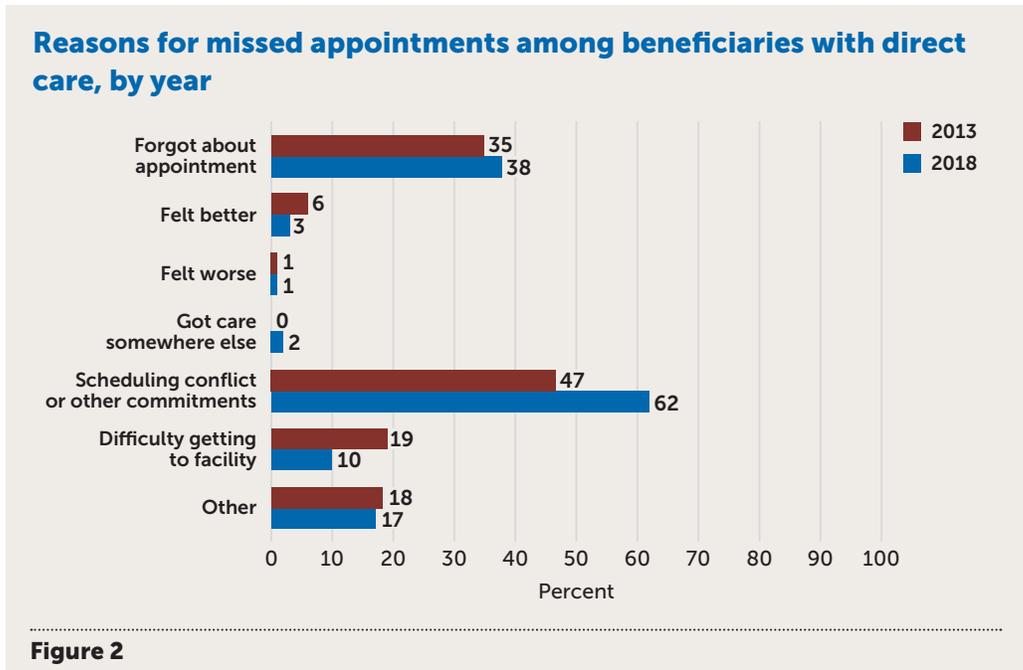


Figure 2

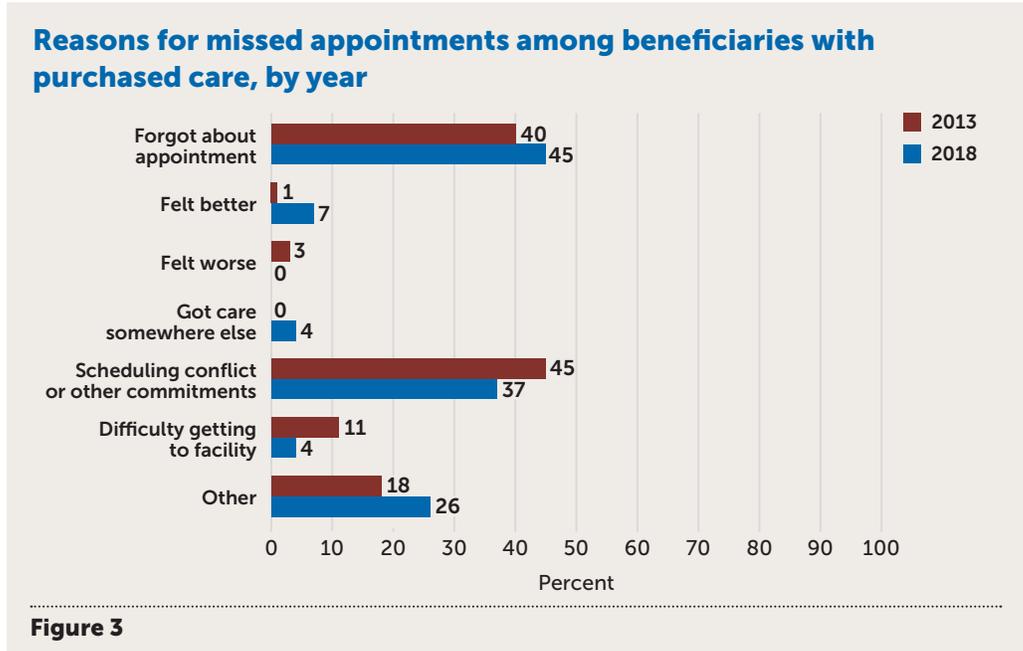
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<sup>1</sup> The survey asked two questions about the facility where beneficiaries went most often for health care. (1) In the last 12 months, have you **missed** any scheduled appointments with a provider at this facility? And (2) In the last 12 months, did you **cancel or reschedule** an appointment with a provider at this facility?

<sup>2</sup> Beneficiaries were defined as having purchased care if they were under age 65 and had either a civilian primary care manager or one of the following types of insurance coverage: TRICARE Standard/Extra, TRICARE Plus, TRICARE Retired Reserve, or TRICARE Young Adult Standard/Extra.

conflicts slightly decreased since 2013, neither of these differences were statistically significant (Figure 3).

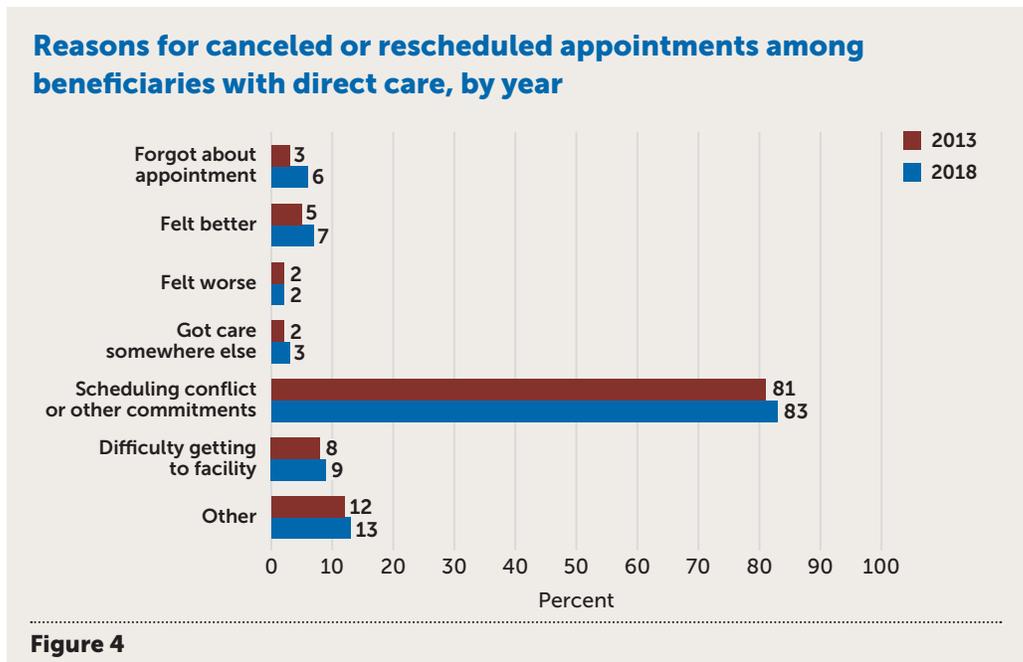
Beneficiaries with direct care reported slightly different reasons for canceling or rescheduling an appointment than for missing it. In 2018, 83



percent of direct care users reported that they canceled or rescheduled because of a scheduling conflict or other commitment. This was slightly higher than the 81 percent of direct care users who reported this in 2013, although the difference was not significant. Forgetting an appointment was less commonly given as a reason for canceling or rescheduling an appointment than

for missing it, with 6 percent of direct care users giving this reason in 2018 (Figure 4).

Purchased care users were most likely to cancel or reschedule an appointment because of a scheduling conflict, similar to direct care users (Figure 5).



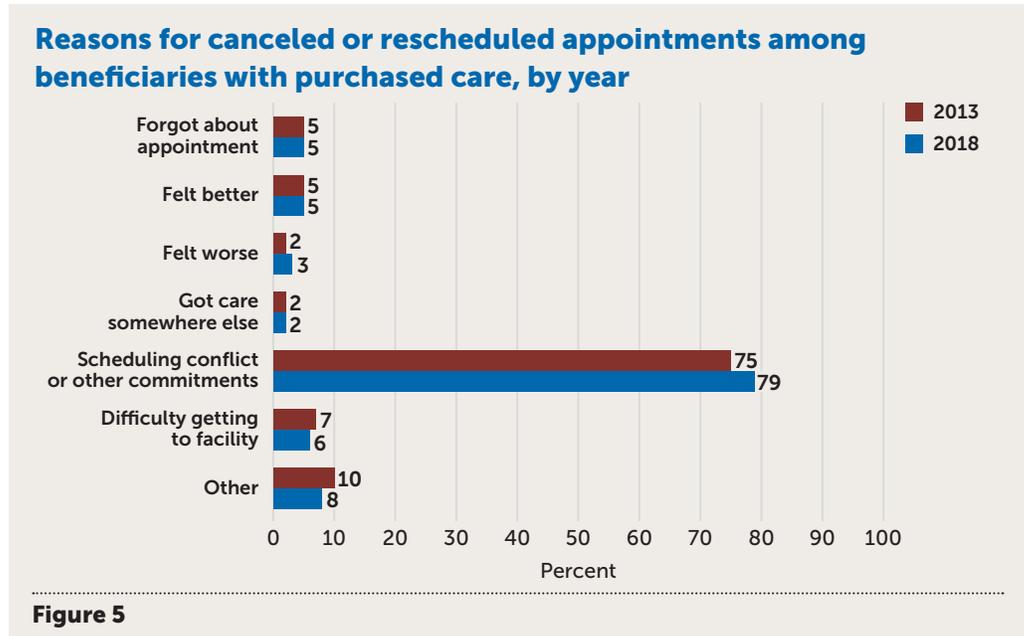


Figure 5

## BENEFICIARIES' CHARACTERISTICS

To learn whether certain types of beneficiaries are more likely to miss appointments than others, we examined the prevalence of missed appointments by a selection of health-related beneficiary characteristics.

We found no significant differences in the rate of missed appointments by smoking status or body mass index (Table 1). Self-reported health, both general and mental or emotional, was related to missing appointments. Thirteen percent of beneficiaries who rated their general health as poor or fair missed a scheduled appointment, compared with only 6 percent of beneficiaries who rated their general health as good, very good, or excellent. Among

### Prevalence of missed appointments by beneficiary characteristics, 2018

|   | Percentage of beneficiaries missing appointments |
|---|--|
| <b>Smoking (n.s.)</b>                           |  |
| Do not smoke                                    | 7%   |
| Smoke some days or every day                    | 11%  |
| <b>Body mass index (n.s)</b>                    |  |
| Normal weight                                   | 7%   |
| Overweight                                      | 8%   |
| Obese or morbidly obese                         | 8%   |
| <b>Self-reported general health</b>             |  |
| Poor or fair                                    | 13%  |
| Good, very good, or excellent                   | 6%*  |
| <b>Self-reported mental or emotional health</b> |  |
| Poor or fair                                    | 13%  |
| Good, very good, or excellent                   | 6%^  |

n.s. No statistically significant differences between the groups.

\*Significantly different from the percentage of beneficiaries with poor or fair self-reported general health who missed appointments ( $p < 0.05$ ).

^Significantly different from the percentage of beneficiaries with poor or fair self-reported mental or emotional health who missed appointments ( $p < 0.05$ ).

Table 1

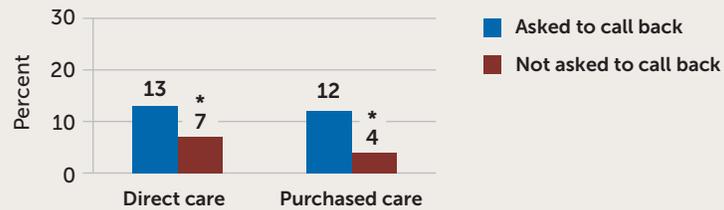
those beneficiaries rating their mental or emotional health as poor or fair, 13 percent had missed an appointment, versus 6 percent of beneficiaries rating their mental or emotional health as good, very good, or excellent. Note that the survey did not specify whether the missed appointments were for physical or mental health concerns.

## BARRIERS TO SCHEDULING APPOINTMENTS

In 2018, beneficiaries were asked whether, when trying to make an appointment in the last 12 months, they were told that no appointments were available but to call back later. Being asked to call back was more common at military facilities than at civilian facilities. Sixteen percent of beneficiaries said they were asked to call back at military facilities, compared with only 7 percent at civilian facilities (figure not shown).

Being asked to call back had a significant relationship with missing at least one appointment in the past 12 months. Beneficiaries who were asked to call back (regardless of the facility type) were more likely to miss an appointment than beneficiaries who were able to schedule an appointment in one phone call. Thirteen percent of direct care users who were asked to call back missed an appointment, compared with only 7 percent who were not asked to call back. These rates were similar for purchased care users: 12 percent who were asked to call back missed an appointment, compared with 4 percent who were not asked to call back (Figure 6). Note that we were unable to determine whether the appointment that was scheduled through the follow-up phone call was the one that was missed.

**Beneficiaries who missed appointments, by whether or not they were asked to call back to schedule and by direct versus purchased care, 2018**



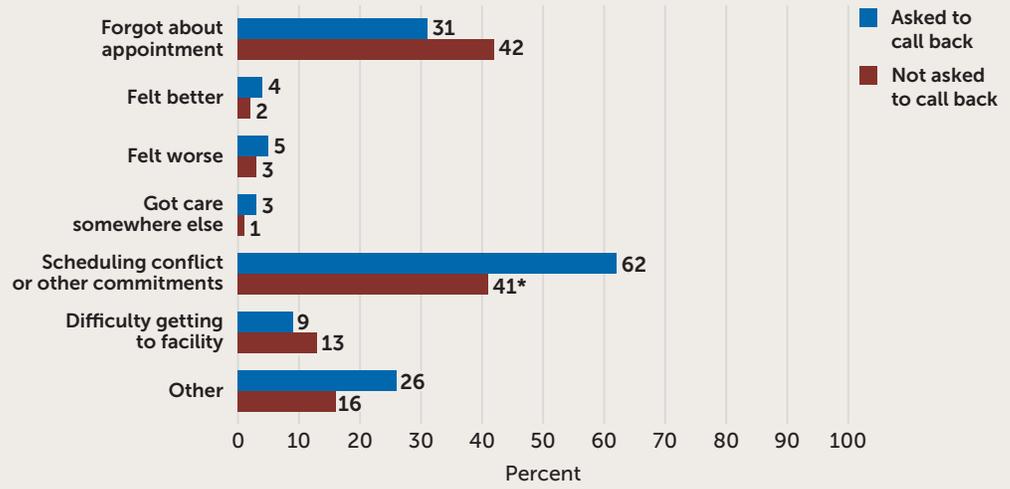
\*Significantly different from the percentage of beneficiaries who missed appointments among those asked to call back ( $p < 0.05$ ).

**Figure 6**

Figure 7 shows the reasons that beneficiaries gave for missing appointments, by whether or not they were asked to call back. The only significant difference between beneficiaries who were asked or not asked to call back was how often they reported missing appointments because

of a scheduling conflict or other commitments. Among those asked to call back, 62 percent missed an appointment because of a scheduling conflict, compared with only 41 percent of those not asked to call back.

### Reasons for a missed appointment, by whether beneficiaries were asked to call back to schedule, 2018



**Figure 7**

## CONCLUSION

Although missed appointments are not all that common, they are costly. This brief discussed several aspects of this problem, including changes in the number of missed appointments over time, beneficiaries' reasons for missing an appointment, the characteristics of the beneficiaries who often miss appointments, and the link between missing an appointment and inconvenient mechanisms for scheduling appointments.

We found that rates of missed appointments and the reasons beneficiaries give for missing appointments were generally similar in 2013 and 2018. The rates of missed, canceled, or rescheduled appointments were also similar for beneficiaries with direct and purchased care. Taken together, this may indicate that the reminder function in TRICARE's online appointment system is not helping users keep their appointments, possibly because they are not using this feature.

Beneficiaries in poor physical and mental health were more likely to miss appointments than those who reported excellent, very good, or good health. People with poor health may have more appointments than healthy beneficiaries—and are therefore more likely to miss at least one appointment a year. However, missing appointments disrupts the continuity of care and could be more harmful to these vulnerable beneficiaries

than to their healthier peers. Research shows that frequently missing appointments is associated with less compliance with age-appropriate preventive health services, and that patients with hypertension and diabetes who frequently miss appointments are less likely to control their conditions than patients who usually keep appointments (Nguyen et al. 2011). Thus, reducing missed appointments among beneficiaries in poor health may improve their health outcomes.

There is also evidence that an appointment system that requires beneficiaries to call multiple times is linked to more missed appointments, in part because of scheduling conflicts. That is, beneficiaries who need to call several times to make an appointment may have trouble getting an appointment that fits their schedules. Changing such systems so beneficiaries can make an appointment in one call may reduce the number of missed appointments.

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## SOURCES

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"Q2 FY2013 Health Care Survey of Department of Defense Beneficiaries." N = 8,066. The response rate was 16.0 percent. The survey was fielded from December 12, 2012, to March 8, 2013.

