



FICO Research Brief

Impact of medical collection data removal by the CRAs on FICO® Scores



Background

In July 2022, the three US consumer reporting agencies (CRAs) — Equifax, Experian, and TransUnion — changed the handling of certain medical collections in the credit file:

- Paid medical collections are no longer reported
- The waiting period for medical collections to appear on credit files has been increased from six months to one year

Additionally, in the first half of 2023, low dollar medical collections will no longer be reported. The threshold for medical collections to be removed will be at least \$500. According to the CRAs, nearly 70% of medical collections will no longer be reported after these changes are made.

FICO undertook an analysis aimed at assessing the impact that medical collection data removal by the CRAs will have on FICO® Scores.

Executive summary

For FICO® Score 8 on the aggregate population, based on the data sample and methodology described below, FICO observed:

- Adverse predictive impact (as measured by percentage change in K-S) of less than or equal to 0.4% resulting from the medical collection data removal by the CRAs
- 1% more consumers scoring above 680

Our analysis shows that the medical collection data removal by the CRAs will have no material impact on the FICO scorable rate since the presence of a medical collection does not factor into the FICO® Score minimum scoring criteria.

74% of files impacted by the medical collection data removal by the CRAs have additional derogatory information on their credit file. Therefore, files with medical collections tend to score relatively low, even after the medical collection data in question has been removed. We found that scores typically increased by less than 20 points as a result of the removal of the medical collection data in question.

FICO conducted analysis in both pre-pandemic and pandemic-era data samples, and found similar results in each timeframe.

Analysis methodology



FICO worked with the three US CRAs to obtain the necessary data and attempt to isolate the changes that the medical collection data removal by the CRAs will have on individual credit files. This was

designed to enable FICO to quantify the impact to FICO® Scores on these files. This analysis is based on each CRA's assessment and representation of the medical collections that would be removed after the medical collection changes are implemented in the first half of 2023.

For its analysis, FICO received nationally representative random samples of at least 14 million credit files (including at least 1 million impacted credit files) from each CRA. The datasets contain credit file data from late 2017 (observation) as well as data demonstrating credit behavior of those files over the following two years (performance). These samples were used for predictive performance and odds-to-score relationship analysis. Data from prior to the pandemic was used so that the performance period was not influenced by the prevalence of pandemic-era payment accommodations.

FICO also conducted similar predictive performance and odds-to-score analysis on data during the pandemic (April 2020 – April

2022) and found directionally similar results compared with the results shared in this research brief.

Additionally, FICO received nationally representative random samples of at least 14 million credit files (including at least 1 million impacted credit files) from each CRA as of a single point in time from late 2021. This sample was used for additional analyses, such as score distributions and score differences. More recent data was used for analyses where performance data was not needed to help ensure that these analyses were as up-to-date and reflective of current credit trends (such as the general decline in medical collection reporting over time) as possible.

In total, 10% of the US FICO scorable population is projected to have a medical collection removed from their file as a result of the medical collection data removal by the CRAs.

FICO conducted impact analyses across the three CRAs, on the most widely used FICO® Score versions (across base FICO® Score versions and industry-specific FICO® Score versions). Results observed were similar for recent score versions such as FICO® Score 9 and FICO® Score 10 T. When compared to older score versions, there was less impact for these recent score versions because they include **innovations** to bypass paid collections from the score calculation and differentiate between unpaid medical and unpaid non-medical collections. FICO® Score 8 and prior versions do not differentiate between medical and non-medical collections, because this differentiation was not possible at all three CRAs during the development of those models.

In the interest of producing a streamlined report, the results presented here will focus on the impact to FICO® Score 8 at one of the CRAs (CRA1) unless otherwise specified. All results presented here are conducted on the sample's total FICO® Score 8 scorable population (aka "Total Population").

Analysis results

FICO researched the impact to predictive performance resulting from the medical collection data removal by the CRAs. The impact was assessed across industries, across the credit lifecycle, and for various FICO® Score versions. Figure 1 shows the observed relative percentage difference in the Kolmogorov–Smirnov (K-S) statistic between the FICO® Score pre-medical collection removal and post-medical collection removal. K-S is commonly used to evaluate a model's predictive strength, with higher values indicating more effective predictive performance.

The "pre-medical collection removal FICO® Score" includes impacted medical collections in the calculation of the score. The "post-medical collection removal FICO® Score" bypasses the relevant medical collections, simulating what the score would be after removal of the medical collection data.

The K-S relative percentage difference values in Figure 1 indicate the change in predictive performance between the pre-medical collection removal and post-medical collection removal FICO® Score, tied to the removal of impacted medical collections. This is calculated as the K-S difference divided by the K-S of the pre-medical collection removal FICO® Score. The results from each CRA are presented in separate columns. Negative values indicate that the removal of these medical collections led to a decrease in K-S, while positive values indicate that the removal of these medical collections led to an increase in K-S.



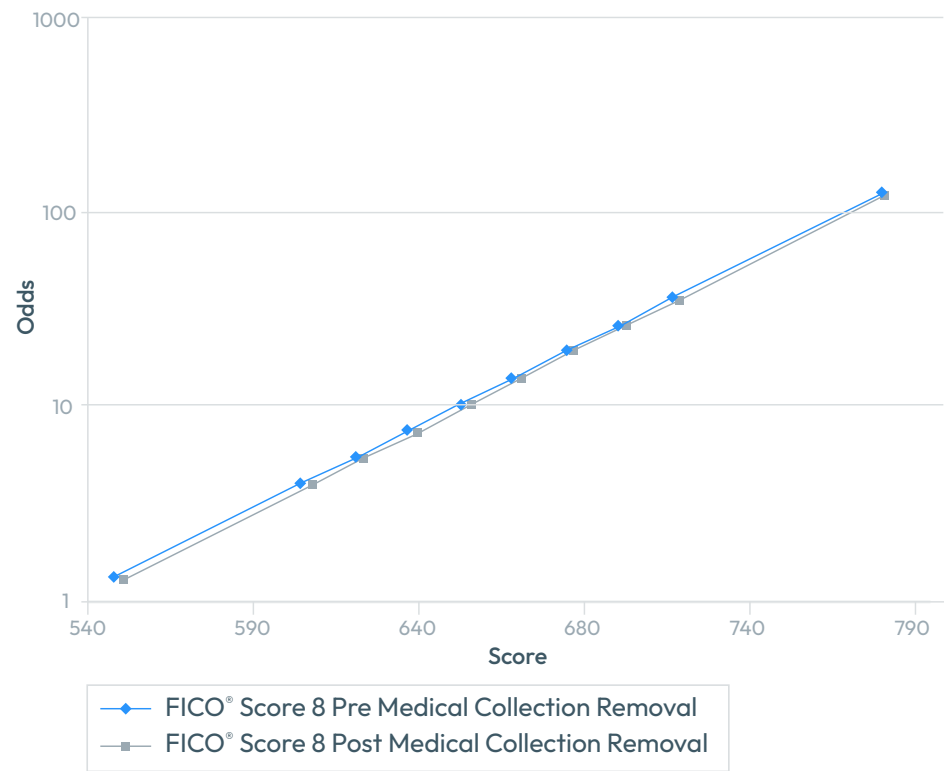
Figure 1: Relative percentage difference in K-S of the post-medical collection removal FICO® Score versus the pre-medical collection removal FICO® Score on the total population

Score Version	Use Case	CRA1	CRA2	CRA3
FICO® Score 10 T	All Industries — New & Existing Accounts	0.0%	0.0%	0.0%
	Bankcard — Existing Accounts	0.0%	0.0%	0.0%
	Bankcard — New Accounts	-0.3%	-0.3%	-0.2%
	Auto — New Loans	-0.2%	-0.2%	-0.3%
	Mortgage — Existing Loans	0.0%	0.0%	0.1%
	Mortgage — New Loans	-0.3%	-0.2%	-0.3%
FICO® Score 9	All Industries — New & Existing Accounts	0.0%	0.0%	-0.1%
	Bankcard — Existing Accounts	0.0%	0.0%	0.0%
	Bankcard — New Accounts	-0.4%	-0.3%	-0.2%
	Auto — New Loans	-0.3%	-0.2%	-0.3%
	Mortgage — Existing Loans	0.0%	0.0%	0.0%
	Mortgage — New Loans	-0.3%	-0.4%	-0.3%
Score Version	Use Case	CRA1	CRA2	CRA3
FICO® Score 8	All Industries — New & Existing Accounts	0.3%	0.3%	0.3%
	Bankcard — Existing Accounts	0.2%	0.3%	0.3%
	Bankcard — New Accounts	-0.1%	-0.1%	-0.2%
	Auto — New Loans	0.1%	0.3%	-0.1%
	Mortgage — Existing Loans	0.2%	0.2%	0.2%
	Mortgage — New Loans	0.6%	0.0%	0.2%
Classic FICO® Score ¹	All Industries — New & Existing Accounts	0.3%	0.2%	0.4%
	Bankcard — Existing Accounts	0.3%	0.3%	0.3%
	Bankcard — New Accounts	-0.3%	0.0%	-0.1%
	Auto — New Loans	0.1%	0.1%	0.0%
	Mortgage — Existing Loans	0.2%	0.2%	0.2%
	Mortgage — New Loans	0.5%	-0.1%	0.0%

¹ Classic FICO® Score is FICO® Score 2 based on Experian data, FICO® Score 4 based on TU data, or FICO® Score 5 based on Equifax data.

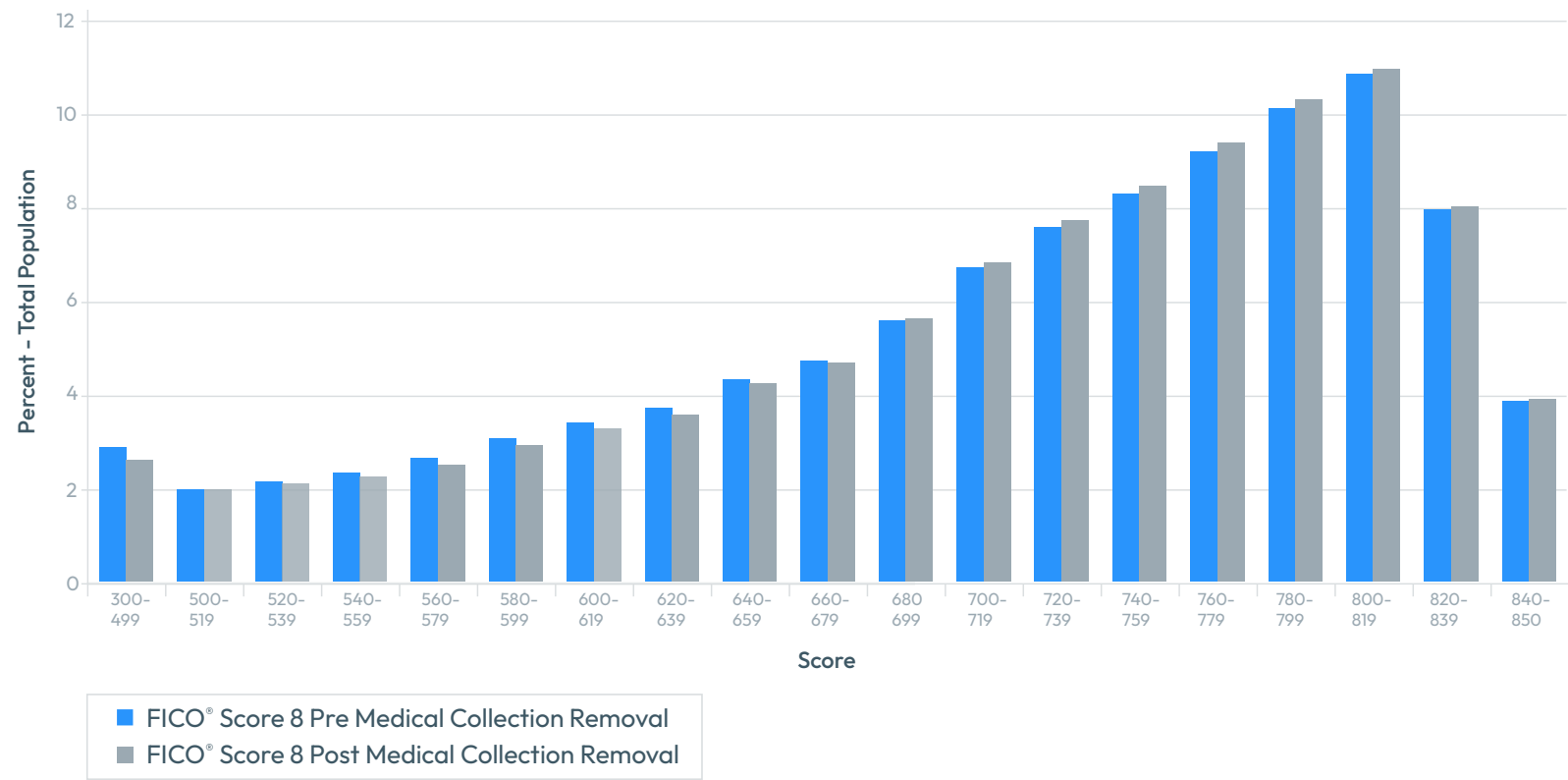
We found an estimated shift to the aggregate FICO® Score odds-to-score relationship as a result of the CRAs' medical collection changes, as shown in Figure 2 for FICO® Score 8. In this chart, we graphed the fitted odds-to-score relationship of FICO® Score 8 pre-medical collection removal and compared that to the fitted odds-to-score relationship of FICO® Score 8 post-medical collection removal.

Figure 2: Odds-to-score relationship of pre-medical collection removal FICO® Score 8 and post-medical collection removal FICO® Score 8 on the total population



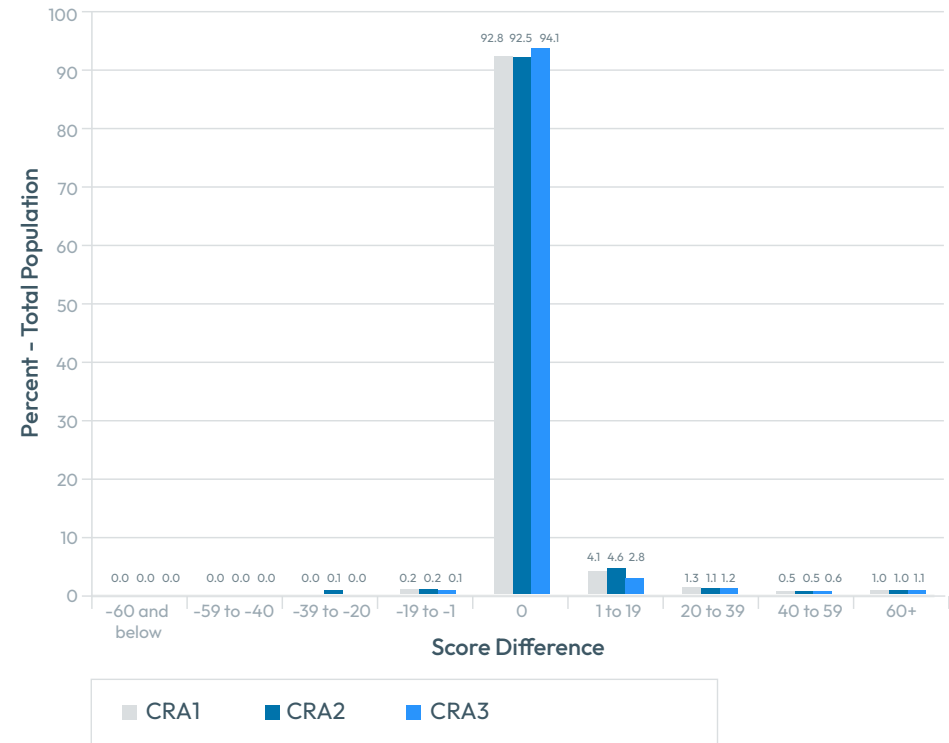
In addition, impacts to the aggregate score distributions were observed.
Volumes within interval score ranges were similar, as shown in Figure 3 for FICO® Score 8.

Figure 3: Interval score distribution of pre-medical collection removal FICO® Score 8 and post-medical collection removal FICO® Score 8 on the total population



The score difference distributions shown in Figure 4 quantify how individual credit files are estimated to be affected by the removal of these impacted medical collections across the three CRAs. Positive score differences on the right-hand side of the graph indicate a score increase after the medical collection is removed, while negative score differences on the left-hand side of the graph indicate a score decrease. For example, for CRA1, 4.1% of the population has a score increase of 1–19 points after the impacted medical collection(s) are removed.

Figure 4: FICO® Score 8 score difference distributions on the total population

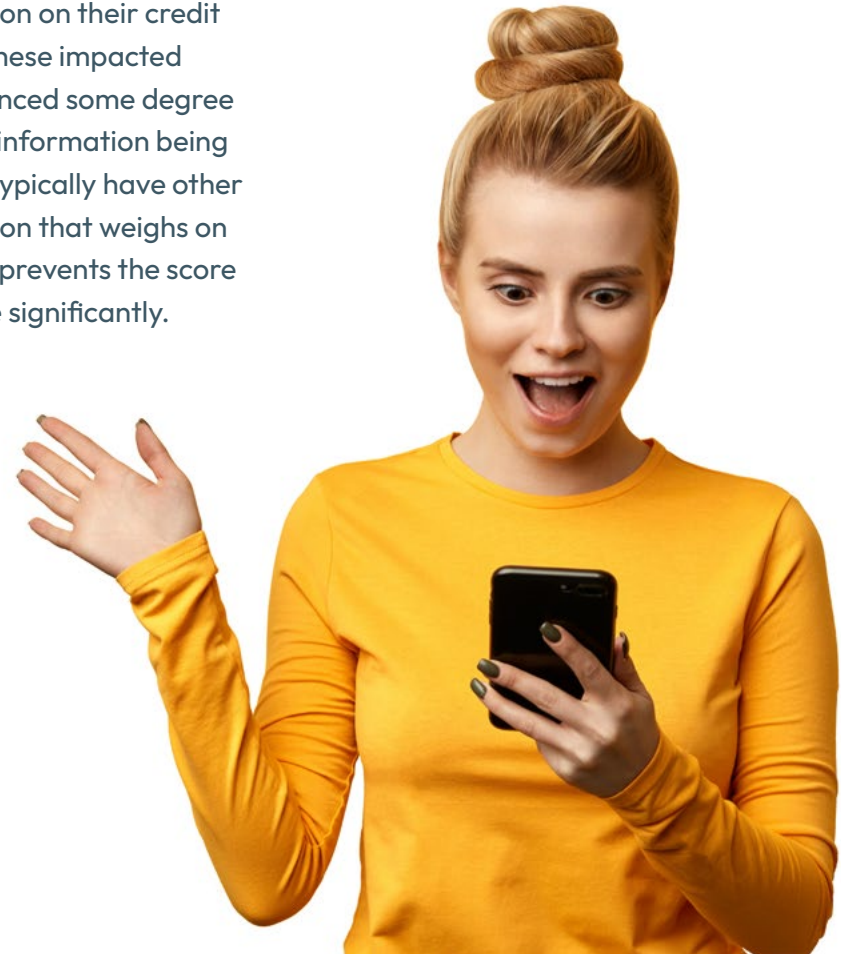


Because only 10% of the population is projected to have a medical collection removed from their credit file as a result of the medical collection data removal by the CRAs, the vast majority of the population will not experience any impact to their FICO® Scores from these changes. We can see that 6%–7% of the population does experience a score increase as a result of the removal of medical collections; a majority of these score increases are between 1–19 points.

Less than 0.3% of the population experiences a score decrease as a result of the medical collection reporting changes. This can occur when the change in the consumer's credit file (as a result of the medical collections being removed) causes the consumer to shift to a different scorecard, and to be evaluated by a different set of characteristics.

There are several reasons why impacted consumers did not tend to experience significant shifts in their FICO® Scores:

- Characteristics based on tradeline data such as credit accounts have a substantially larger influence on the FICO® Score than characteristics based on collections.
- 74% of the impacted population has other derogatory information on their credit file. So even though these impacted credit files all experienced some degree of medical collection information being removed, these files typically have other derogatory information that weighs on the FICO® Score and prevents the score from increasing more significantly.



Conclusion

We made the following observations when examining the impact to FICO® Scores of the CRAs' removal of medical collections from the credit file:

- Percentage decreases in K-S of less than or equal to 0.4%, depending on the use case.
- 1% more consumers scoring above 680.
- No material impact on the FICO scorable rate.
- 10% of the FICO scorable population had a medical collection removed from their file.
- Impacted files are likely to have additional derogatory information on their credit file and therefore tend to score relatively low, even after the medical collection data in question has been removed.

FICO conducted analysis in both pre-pandemic and pandemic-era data samples and found similar results in each timeframe.

Lenders are encouraged to conduct similar analyses on their portfolios and/or their proprietary bureau-based analytics to fully understand the potential impact to their specific situation. For more information about this analysis, FICO® Scores, or FICO® Score services, please contact a FICO representative at scoresupport@fico.com



Let's talk about you.

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