Appendix G

Unfolded Results of Perturbation Effectivness Testing on Event Logs

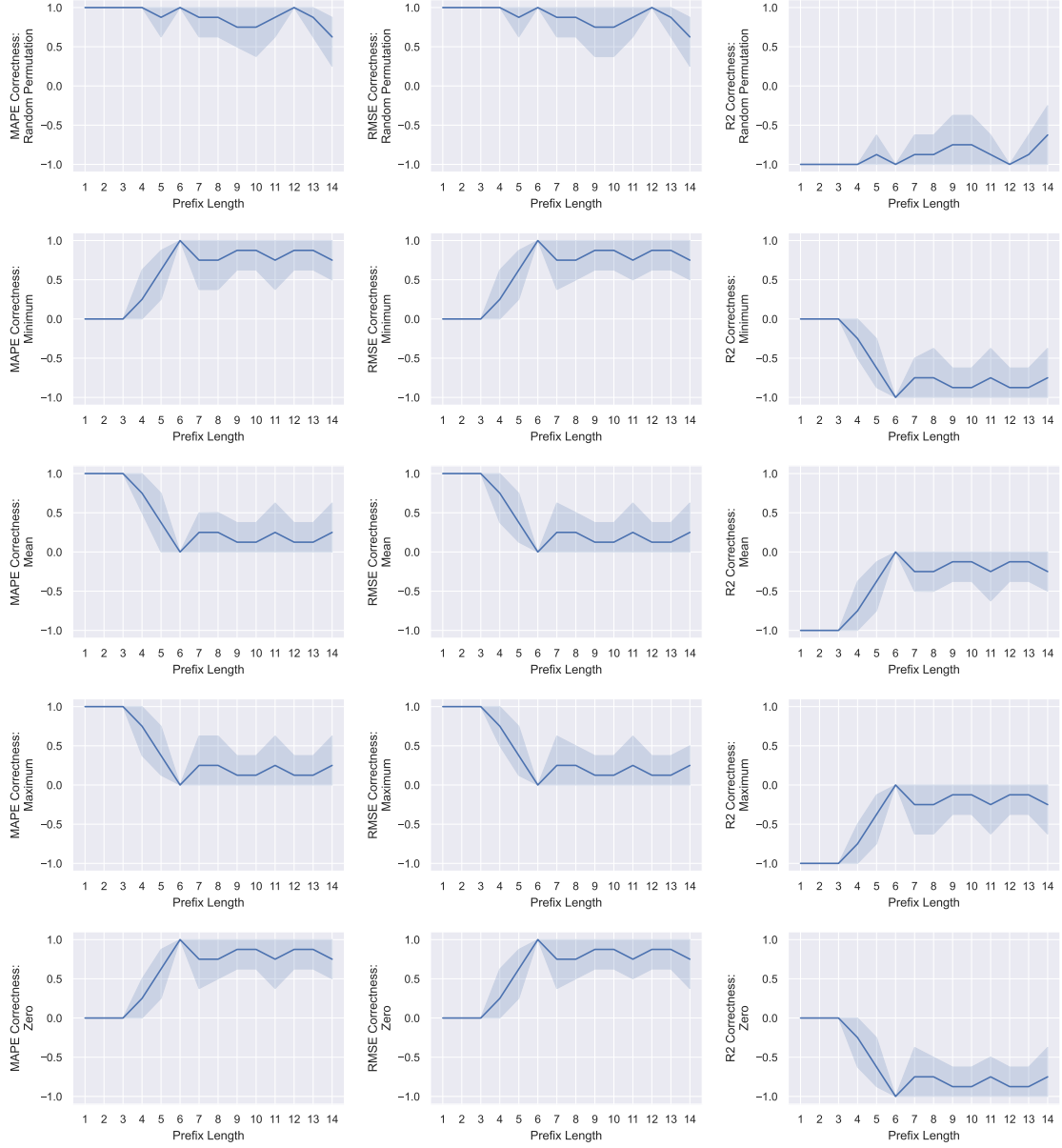## G.1   BPIC2012

G.1.1   Decision Tree

Figure G.1: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with single bucketing and aggregate encoding.
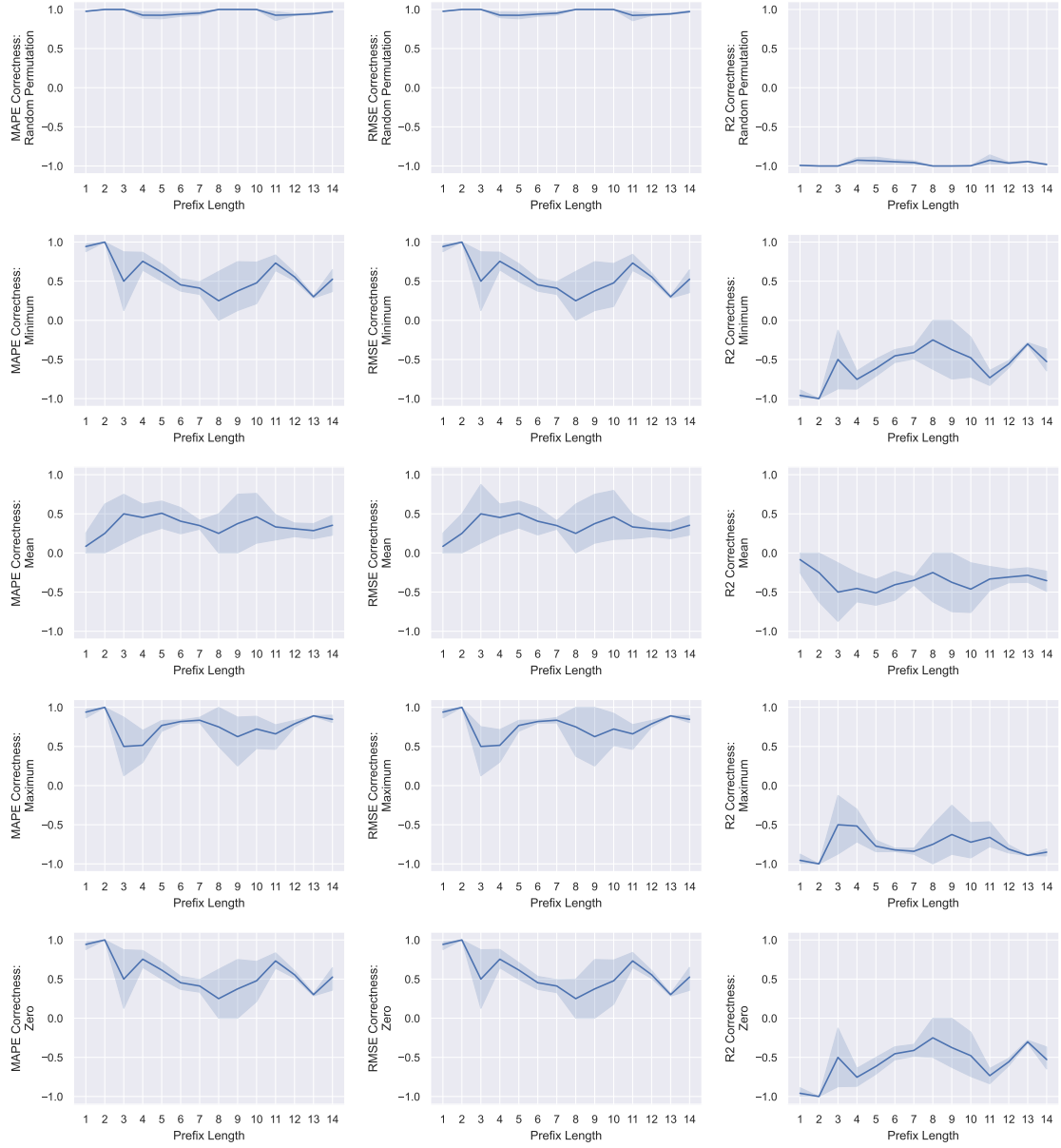
Figure G.2: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and aggregate encoding.
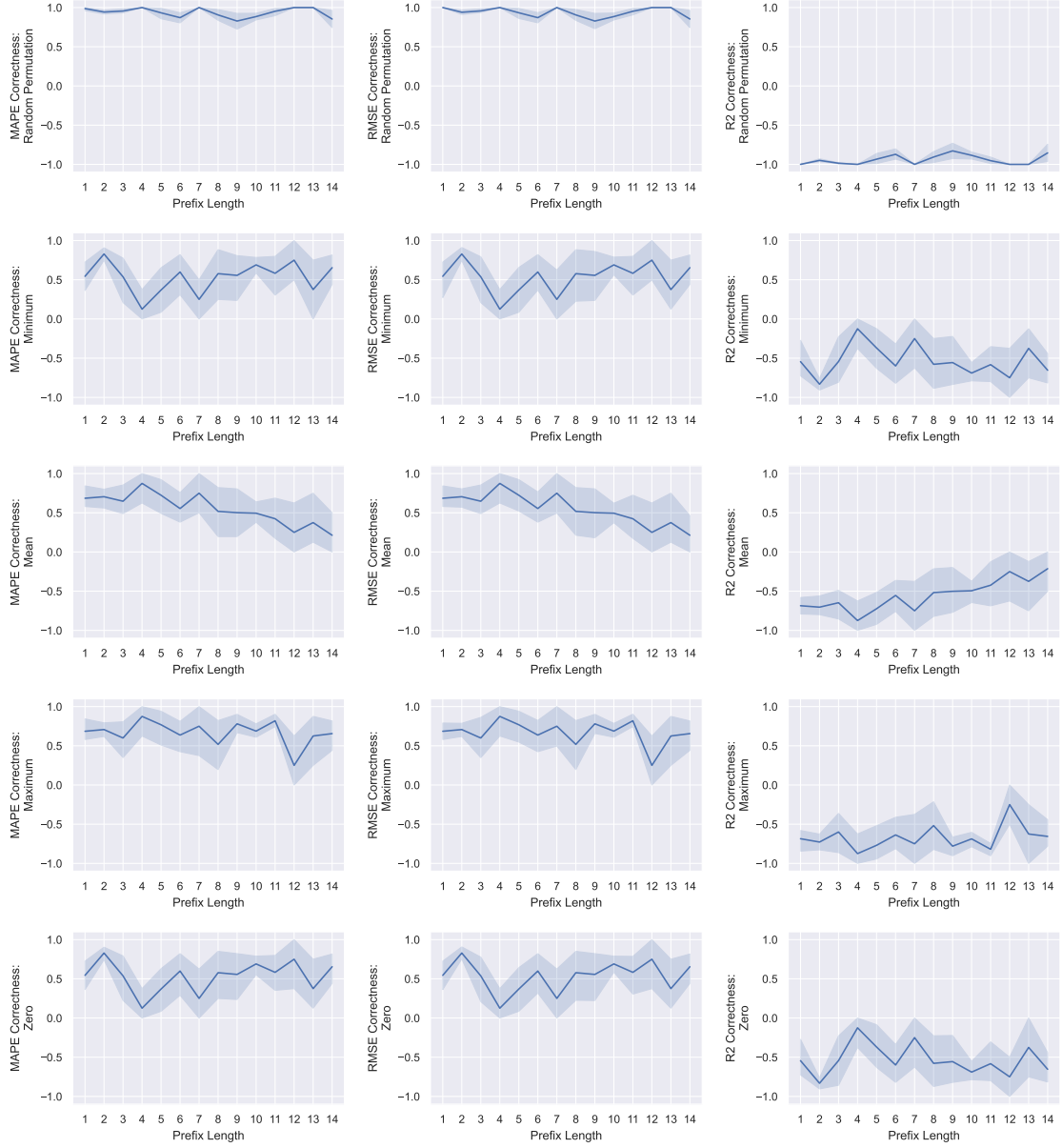
Figure G.3: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and index-based encoding.
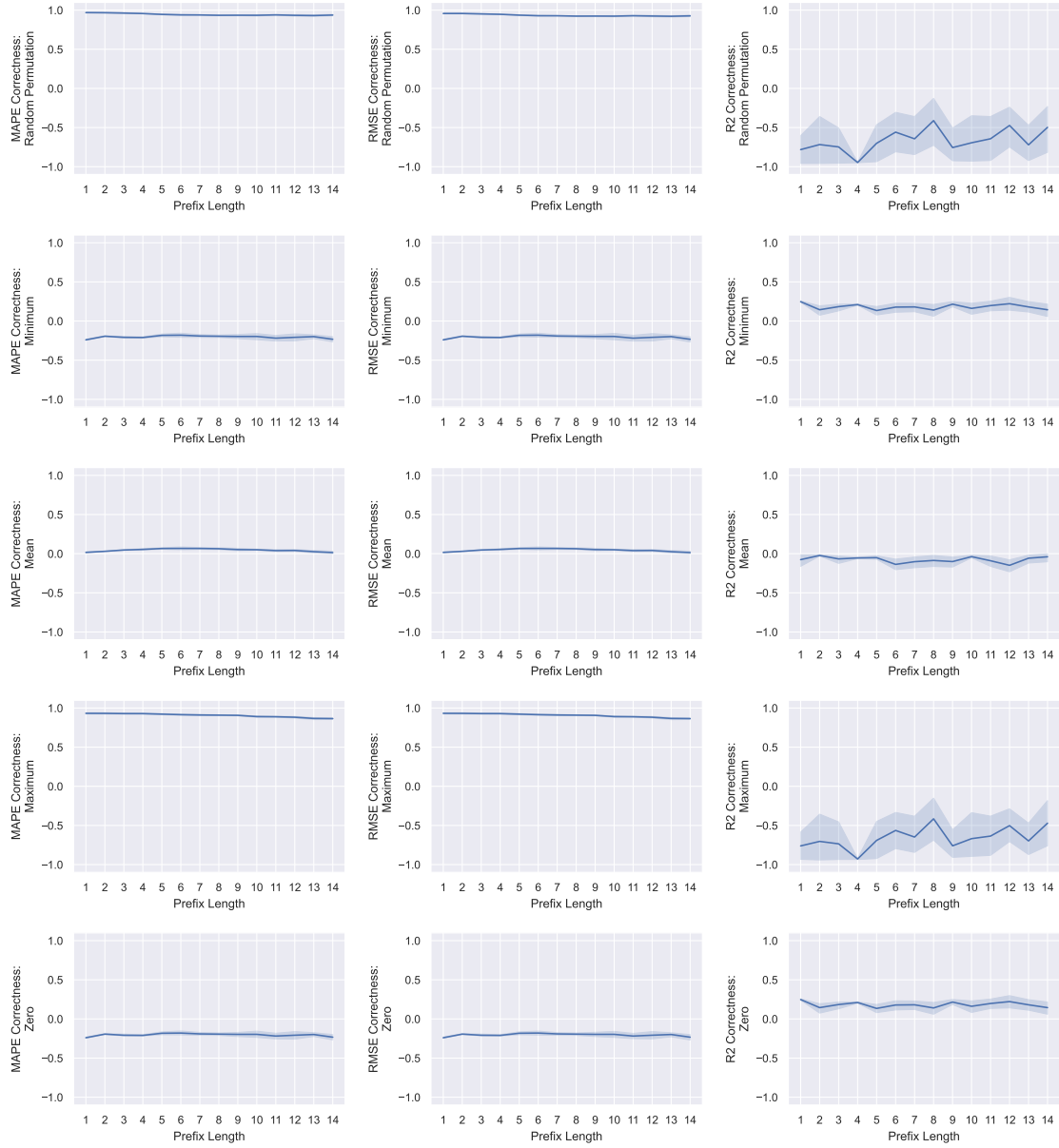
G.1.2   Logistic Regression

Figure G.4: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with single bucketing and aggregate encoding.
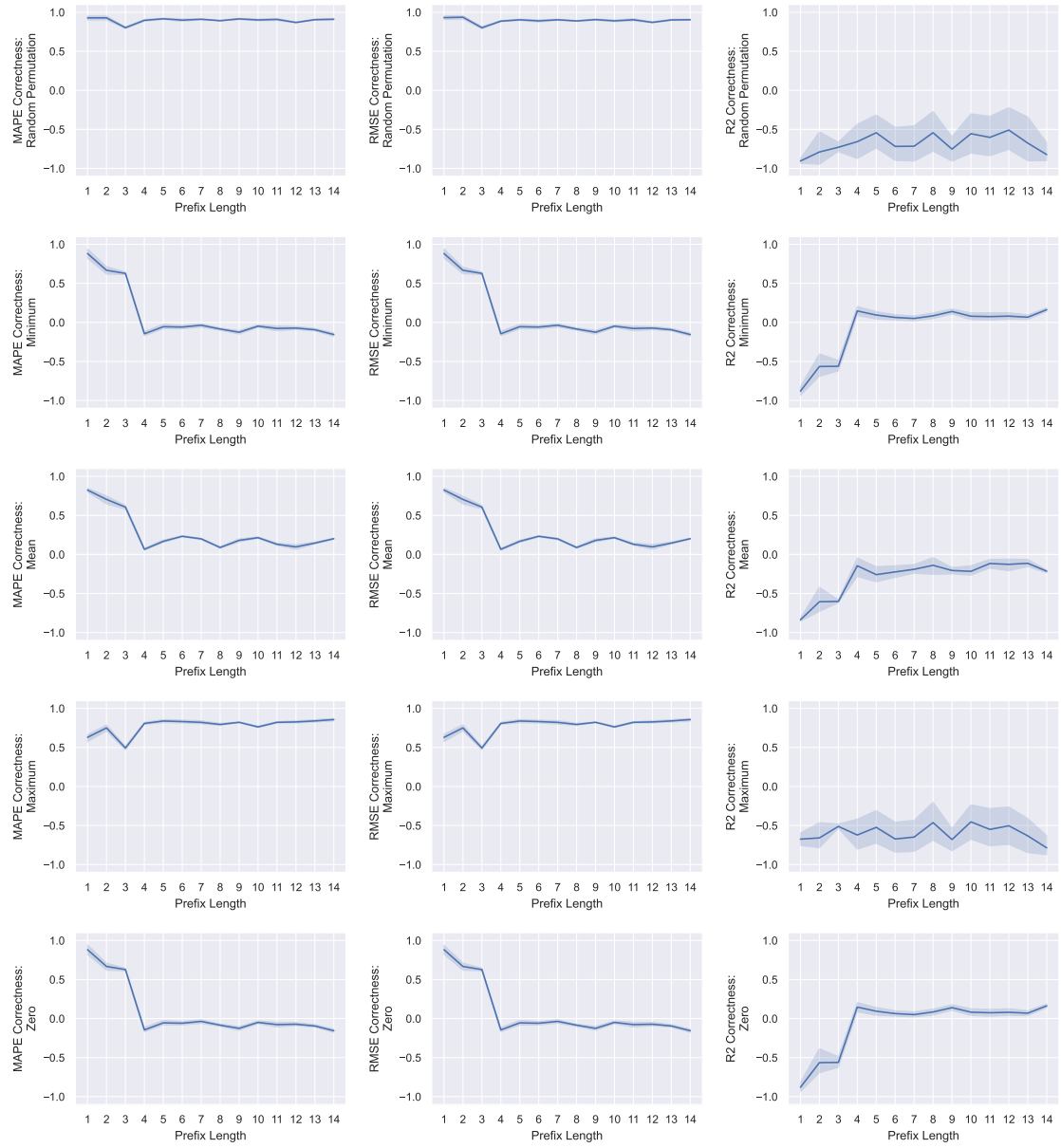
Figure G.5: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and aggregate encoding.
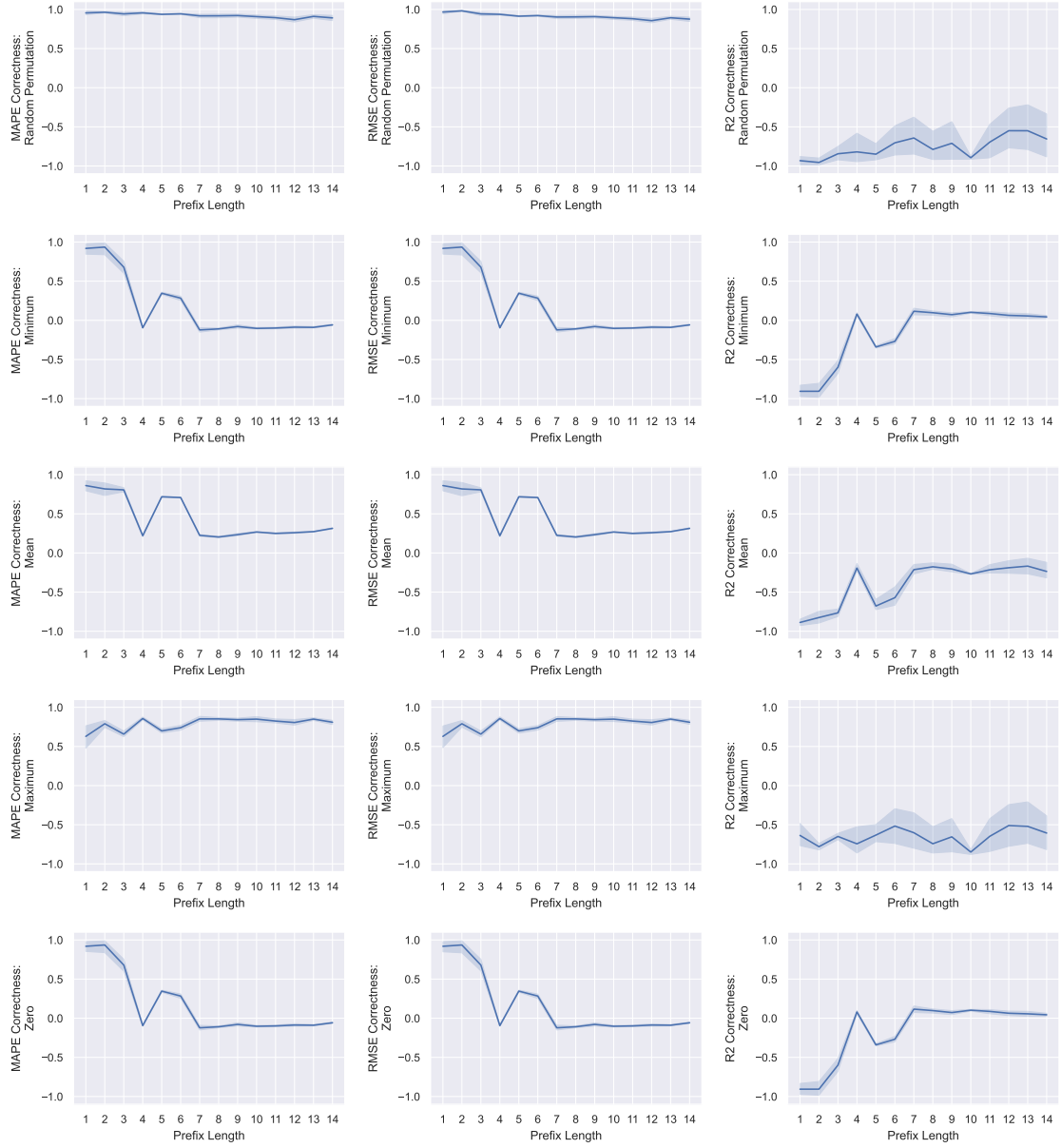
Figure G.6: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and index-based encoding.
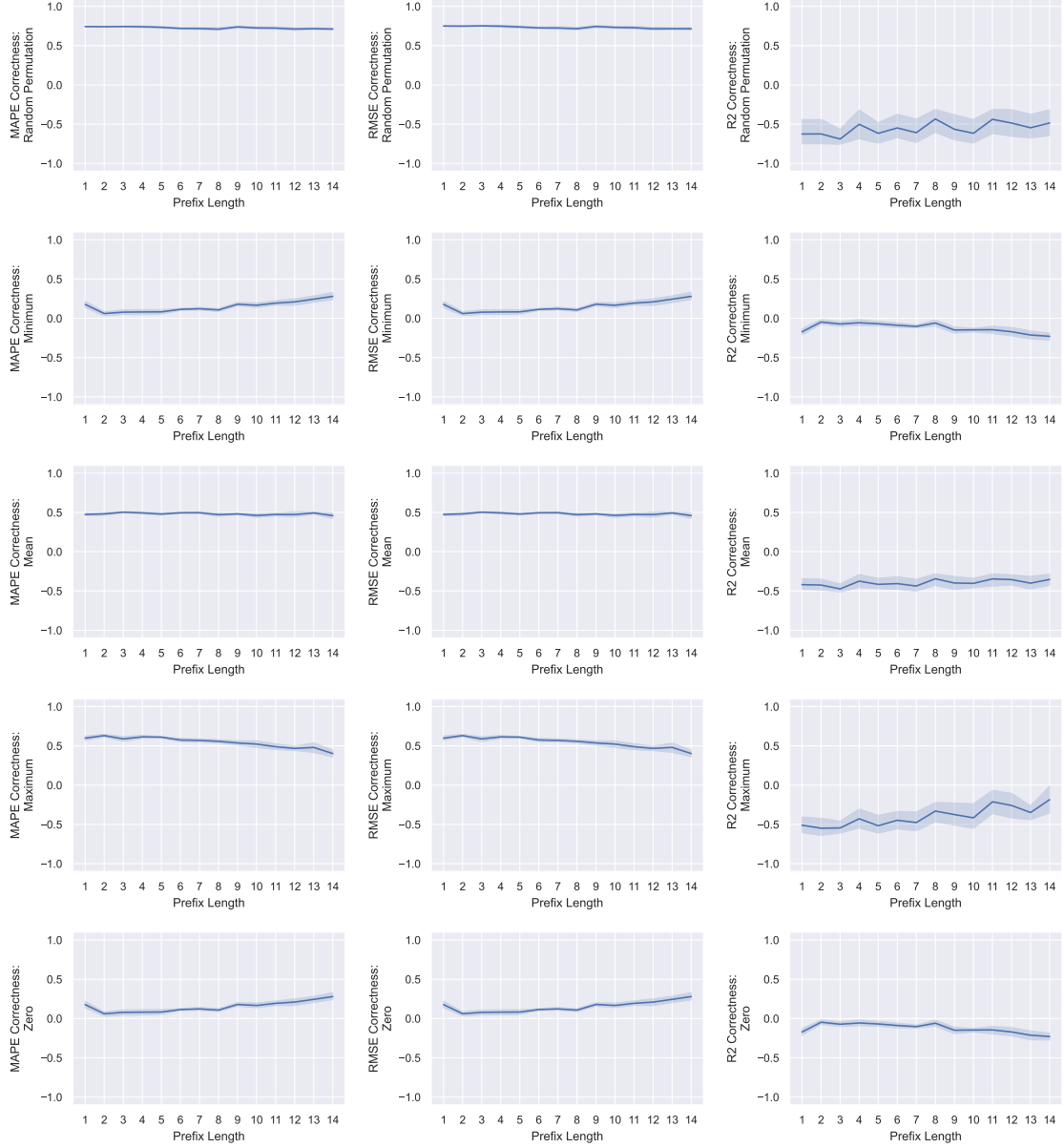
G.1.3   Naïve Bayes

Figure G.7: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with single bucketing and aggregate encoding.
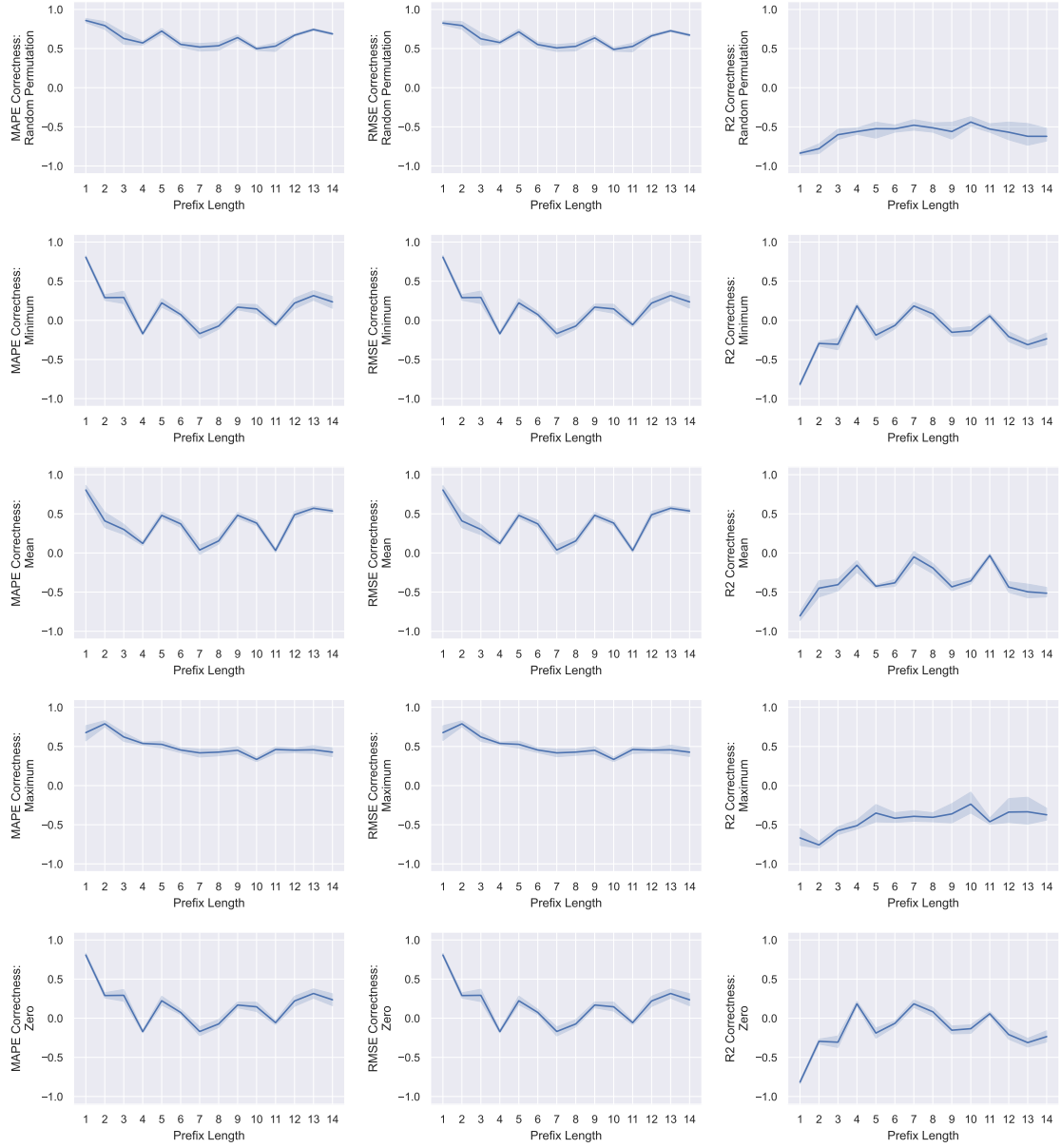
Figure G.8: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and aggregate encoding.
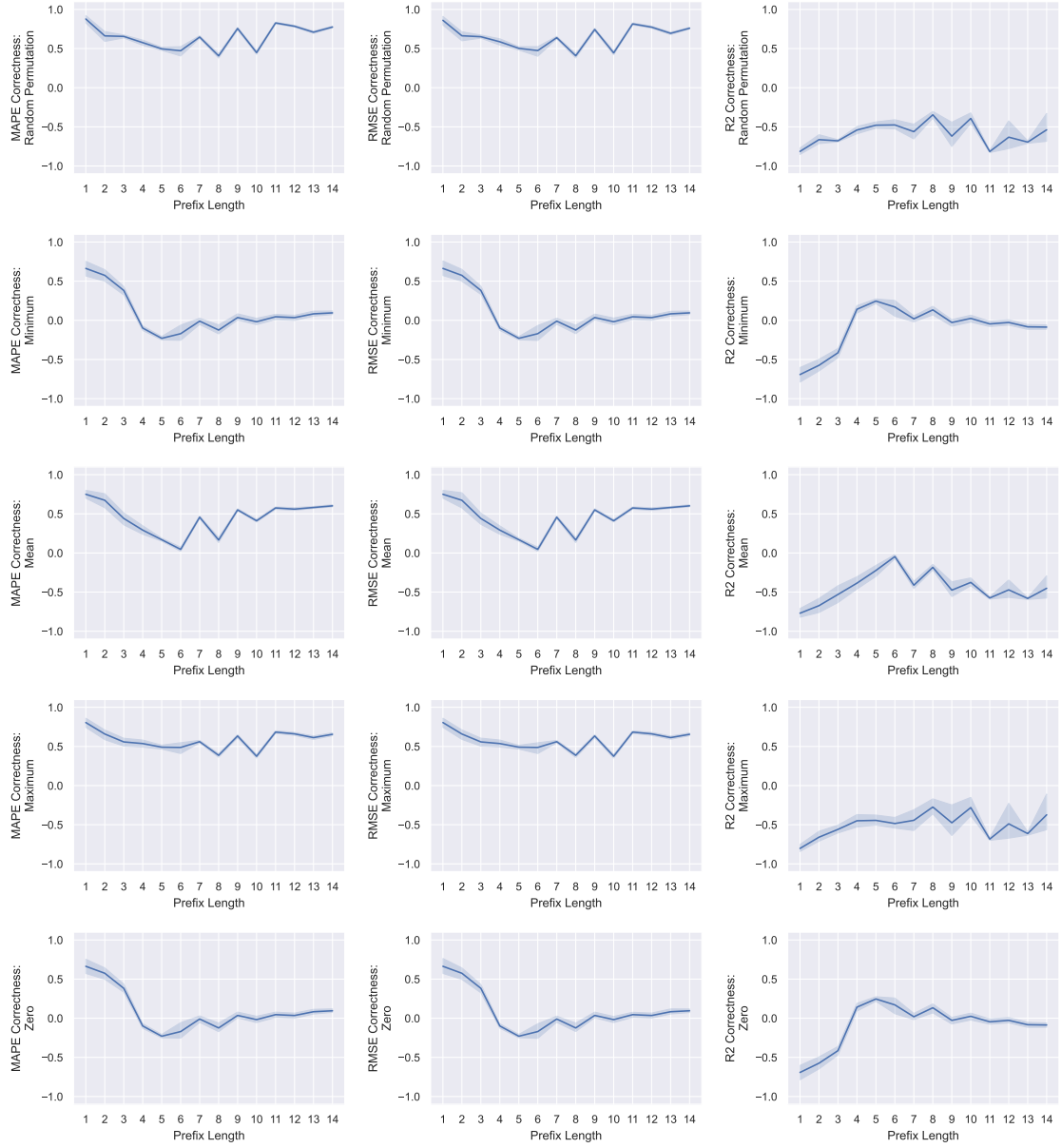
Figure G.9: Effectiveness of perturbation at determining feature importance at each prefix length, using BPIC2012 with prefix-length bucketing and index-based encoding.
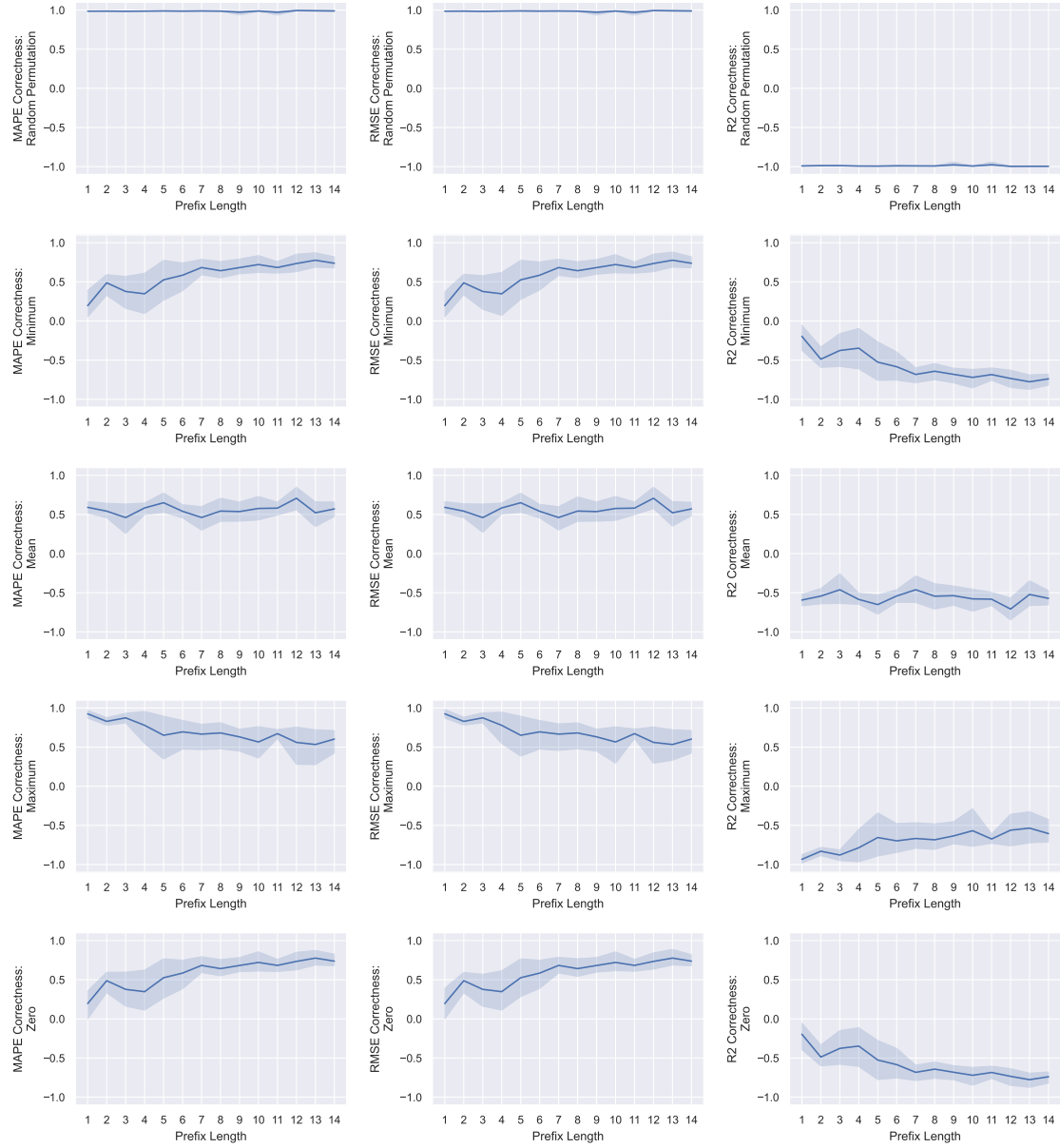
G.2 Production

G.2.1 Decision Tree

Figure G.10: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with single bucketing and aggregate encoding.
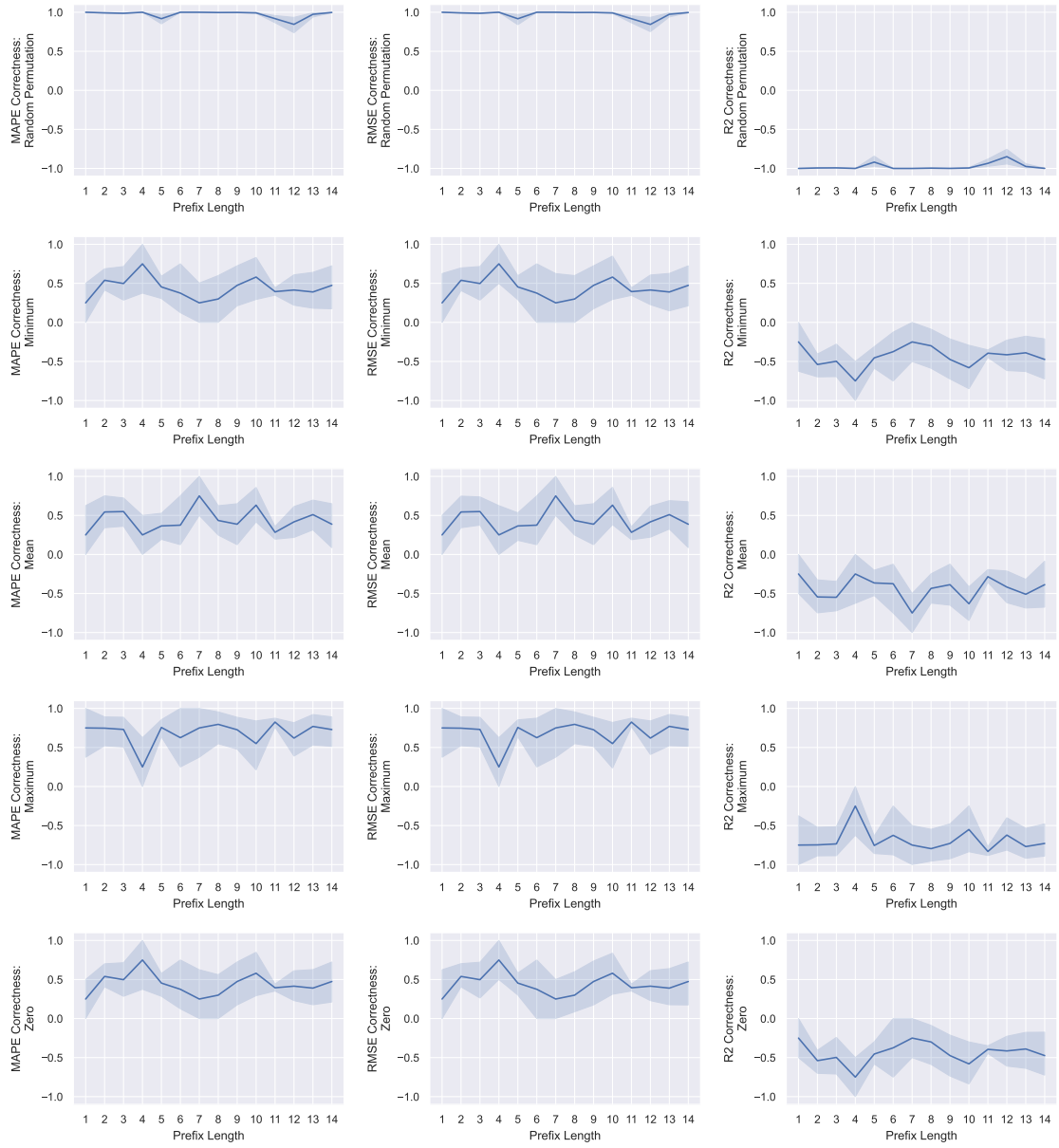
Figure G.11: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and aggregate encoding.
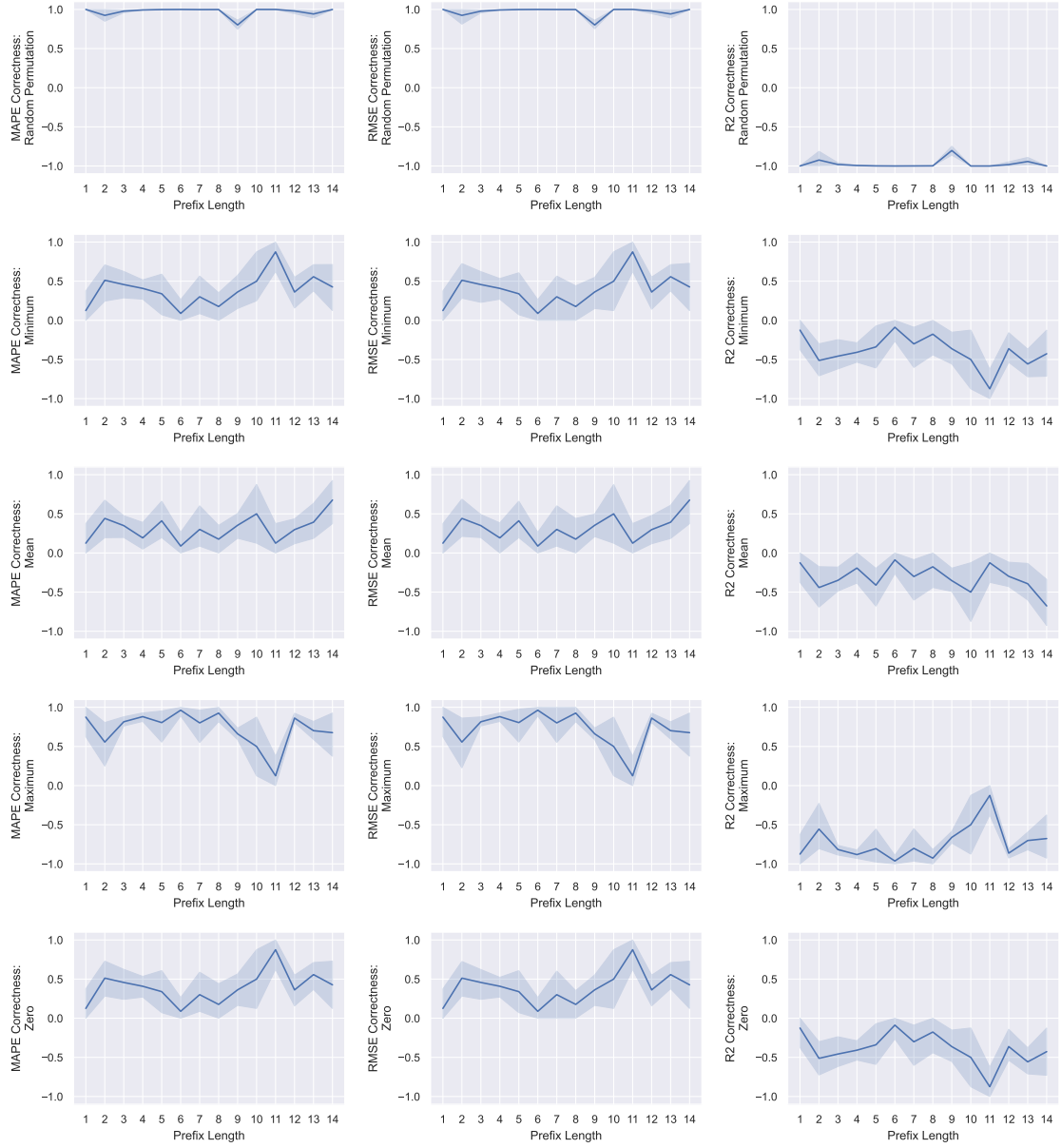
Figure G.12: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and index-based encoding.
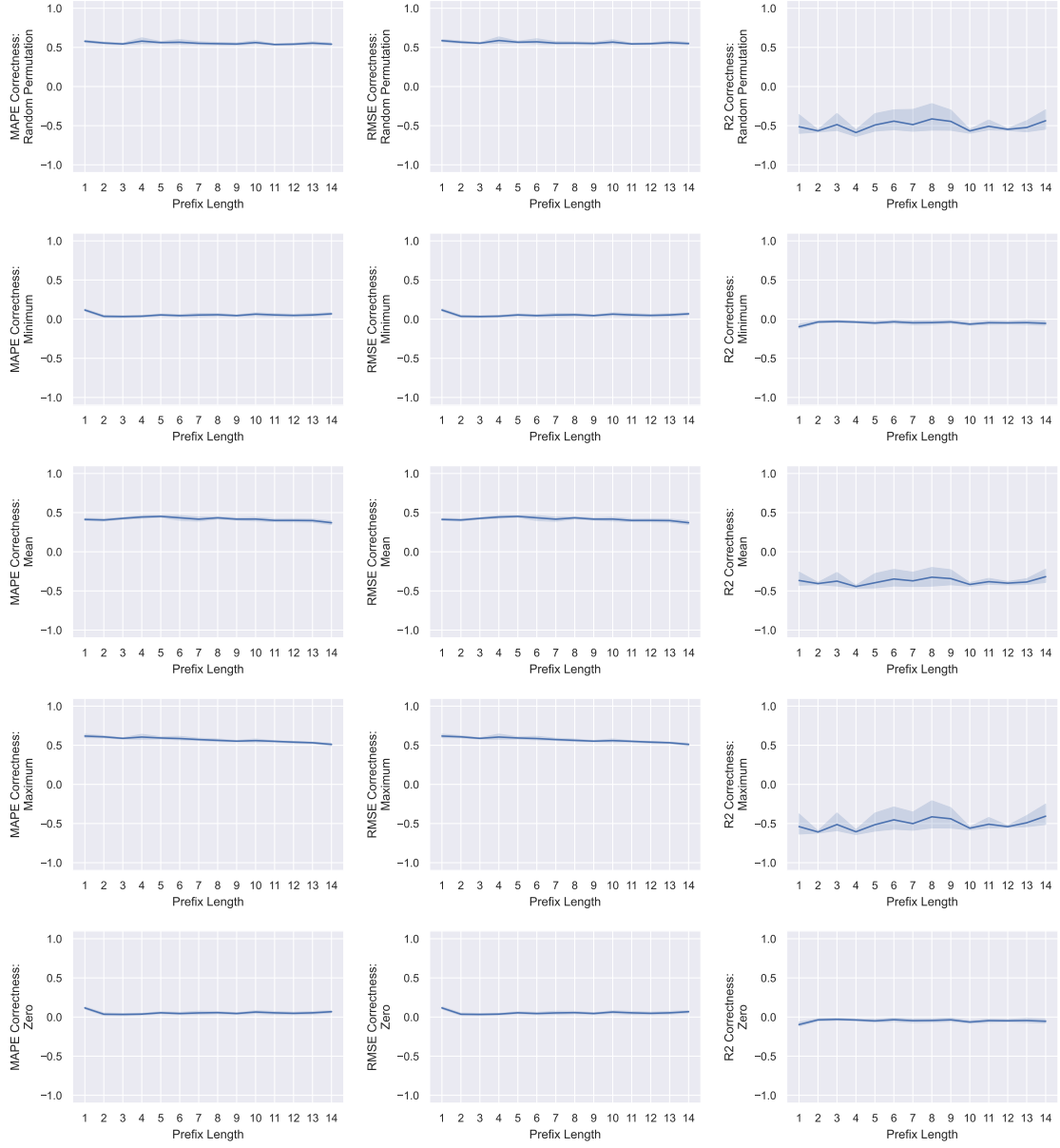
G.2.2   Logistic Regression

Figure G.13: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with single bucketing and aggregate encoding.
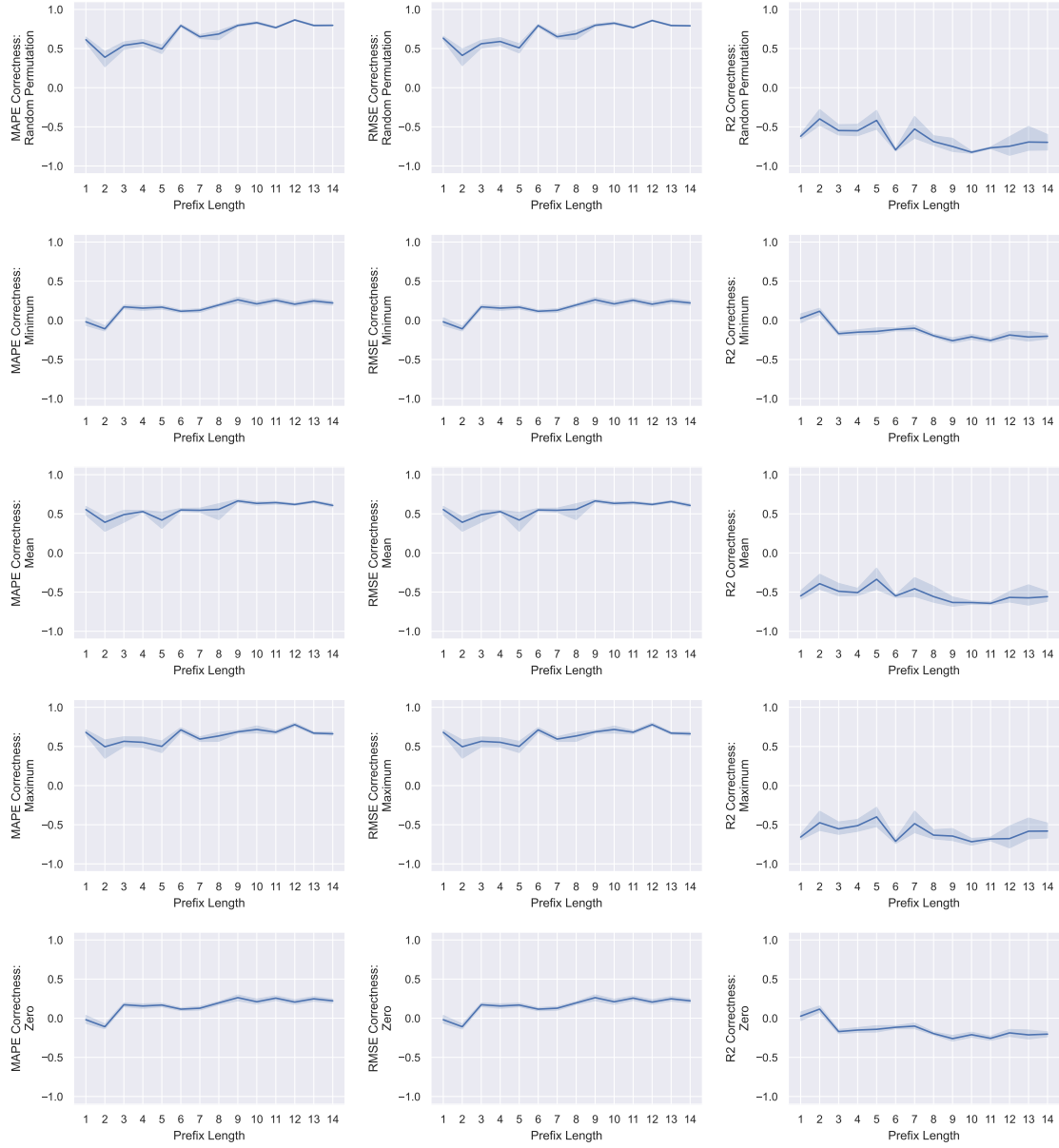
Figure G.14: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and aggregate encoding.
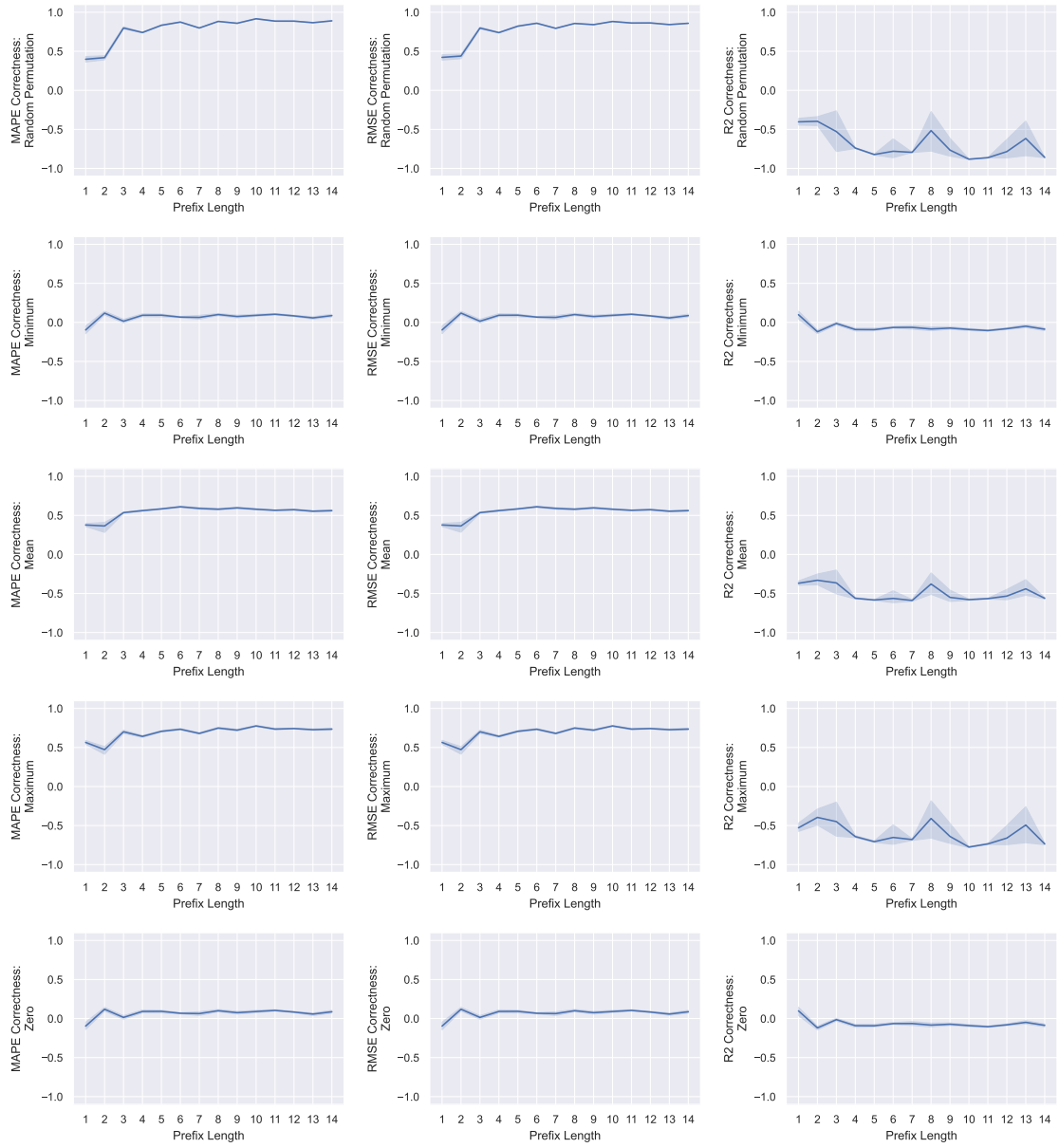
Figure G.15: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and index-based encoding.
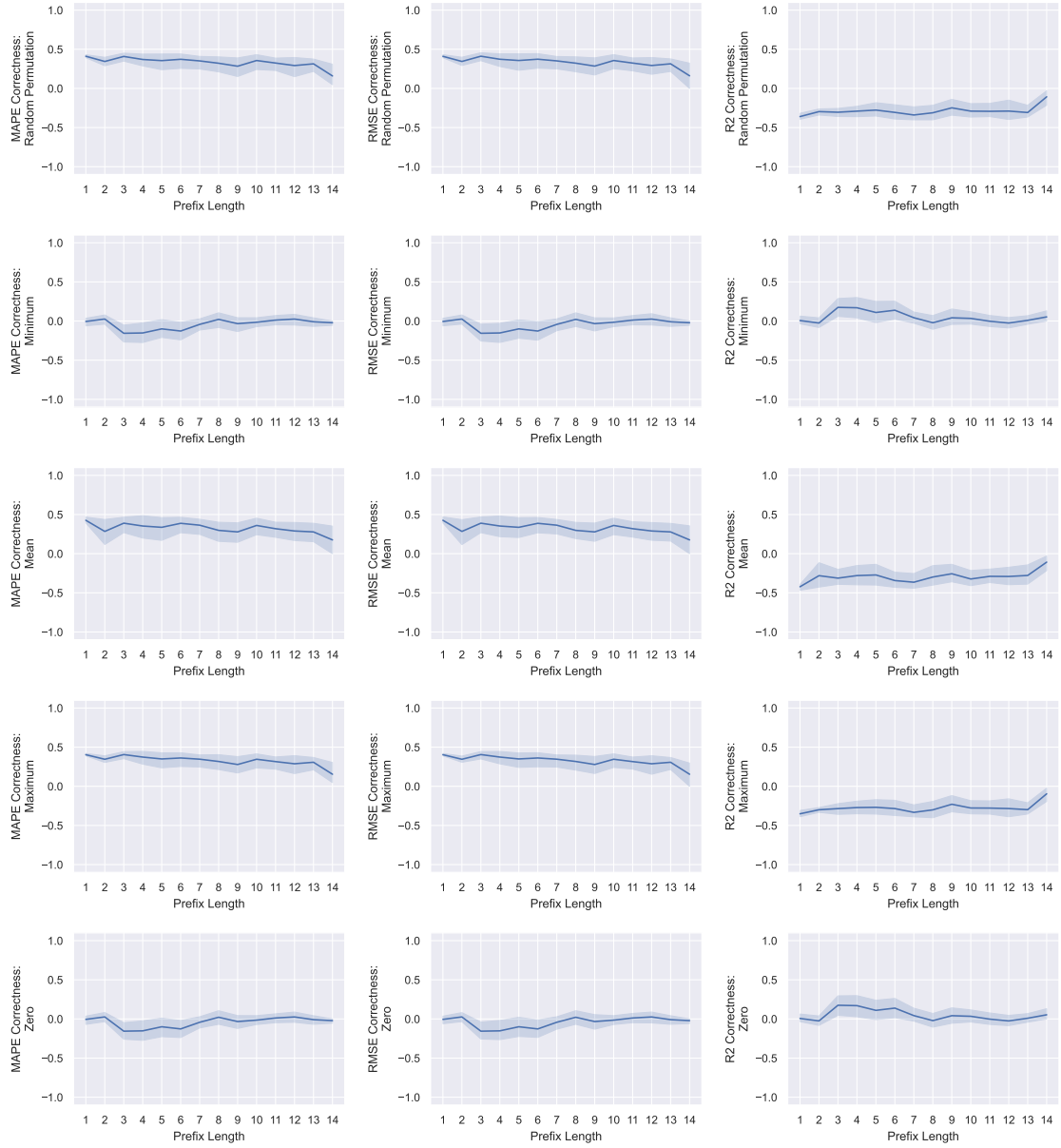
G.2.3 Naïve Bayes

Figure G.16: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with single bucketing and aggregate encoding.
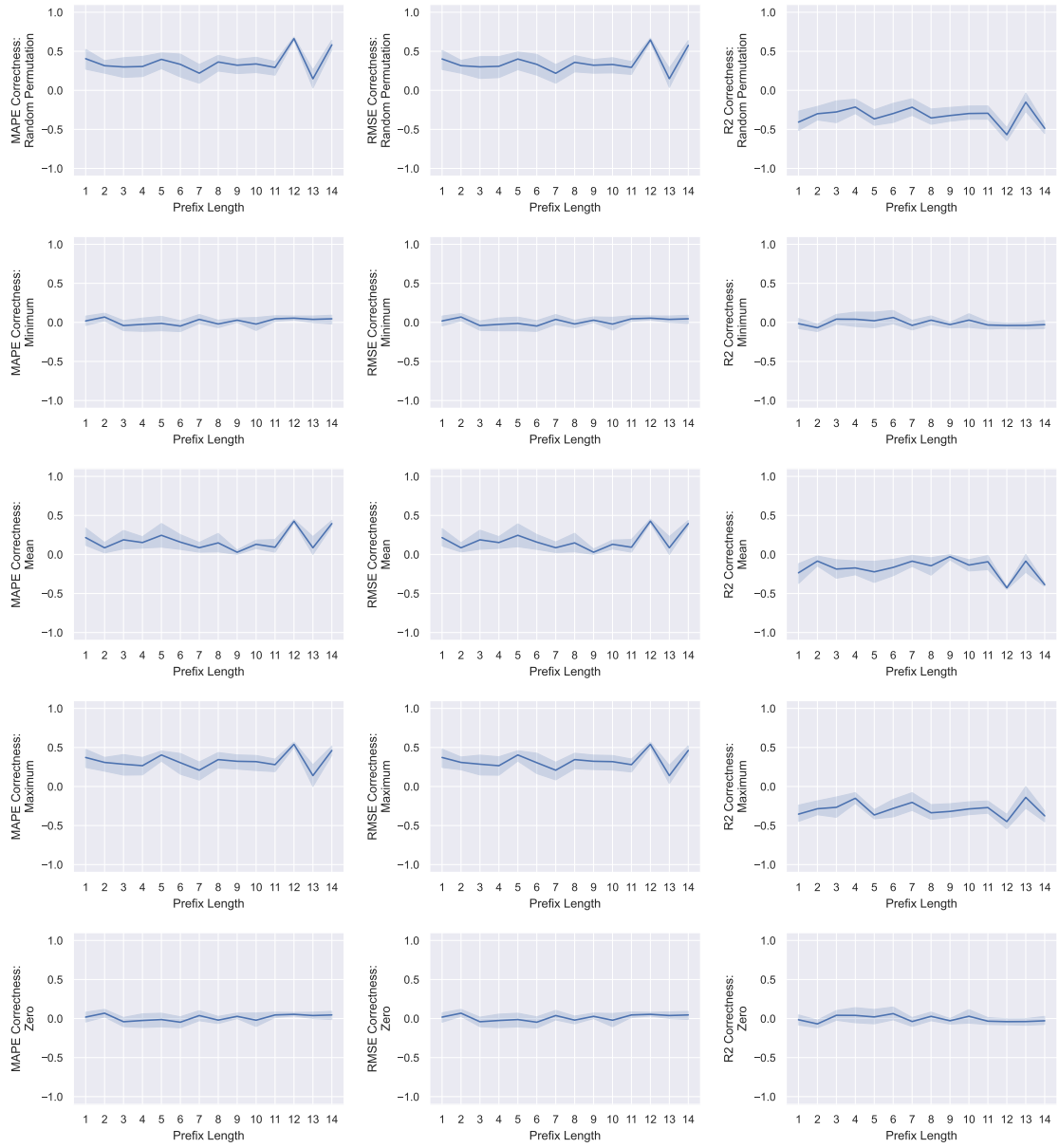
Figure G.17: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and aggregate encoding.
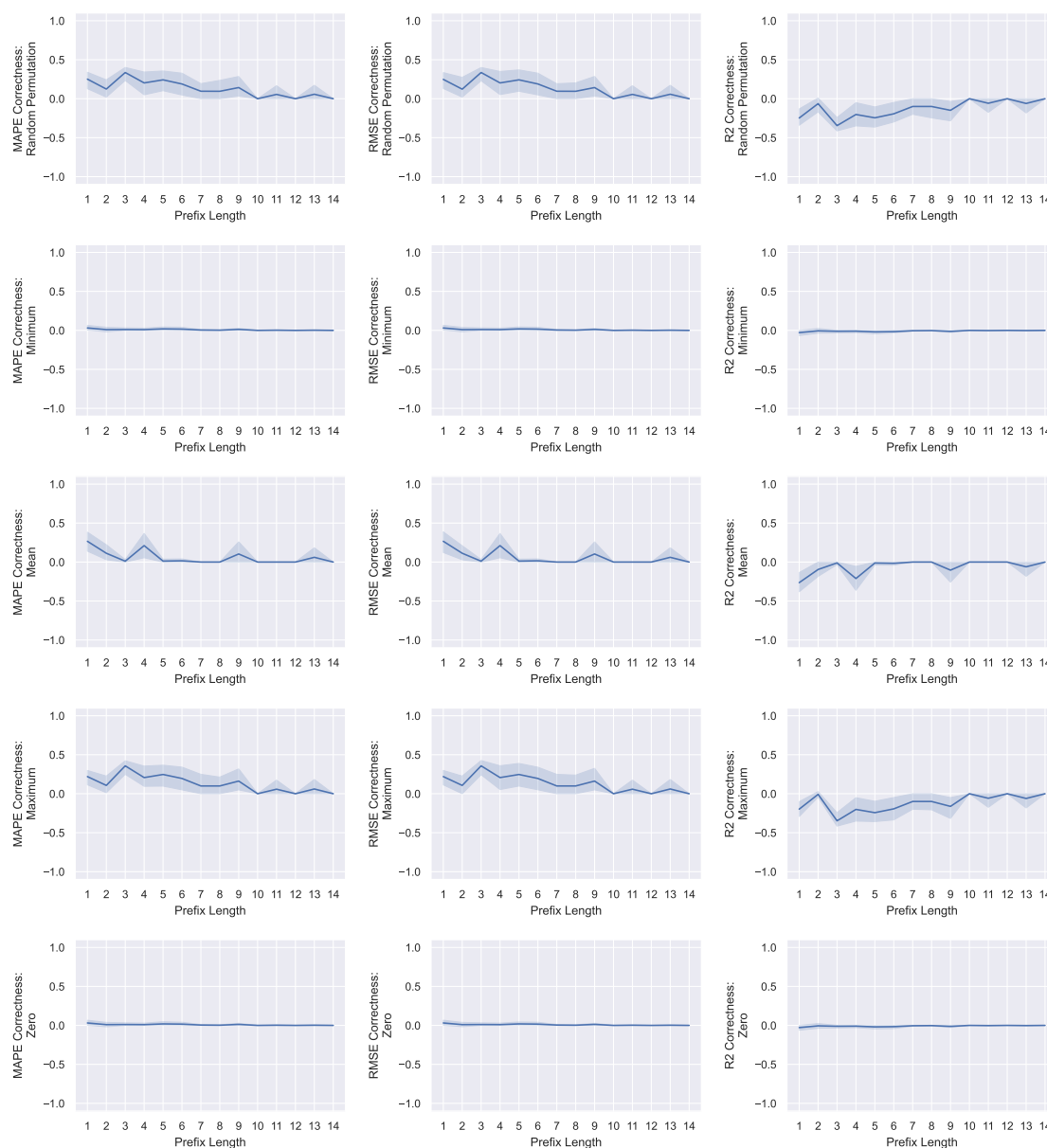
Figure G.18: Effectiveness of perturbation at determining feature importance at each prefix length, using Production with prefix-length bucketing and index-based encoding.
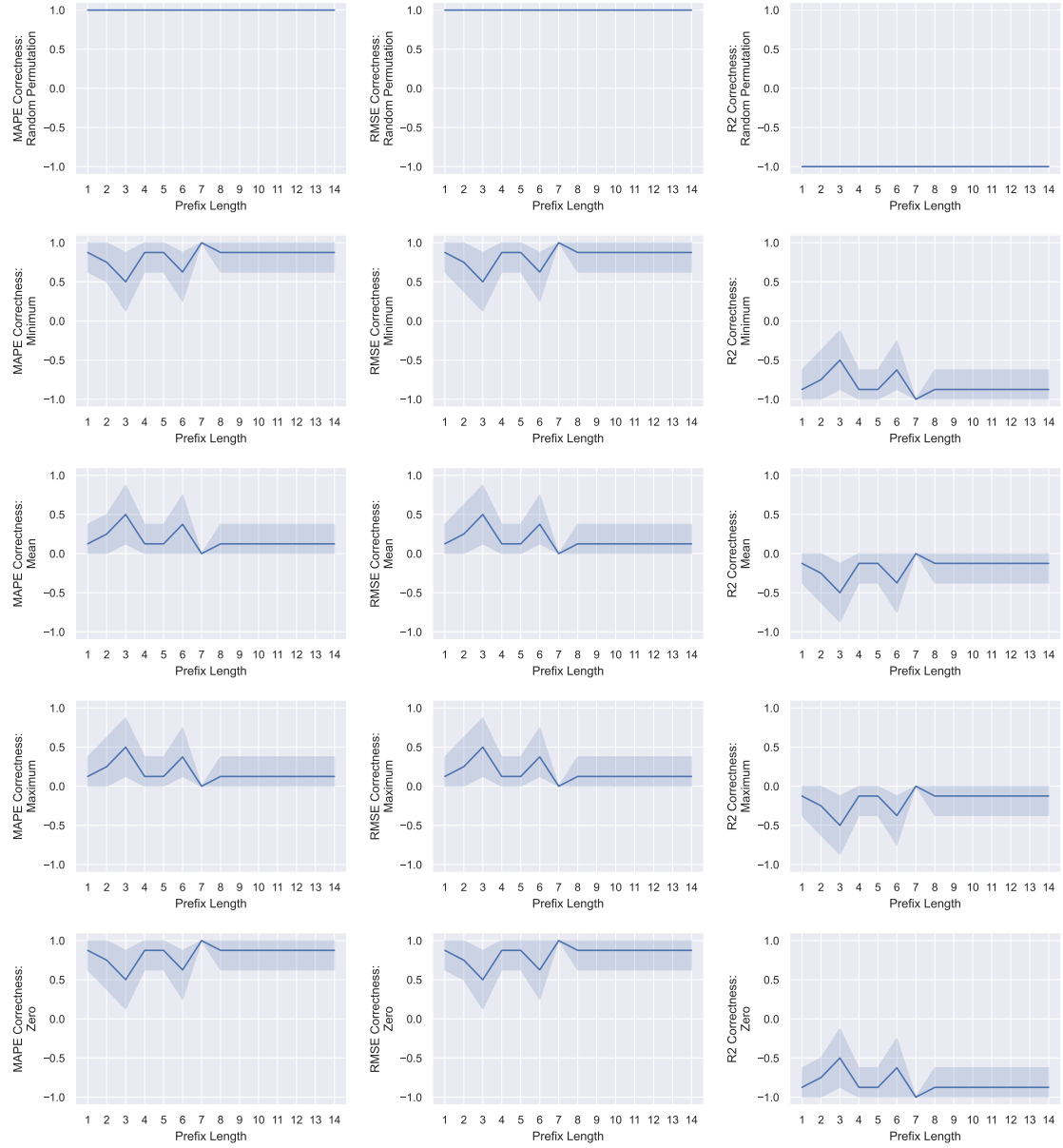
G.3   Sepsis Cases

G.3.1   Decision Tree

Figure G.19: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with single bucketing and aggregate encoding.
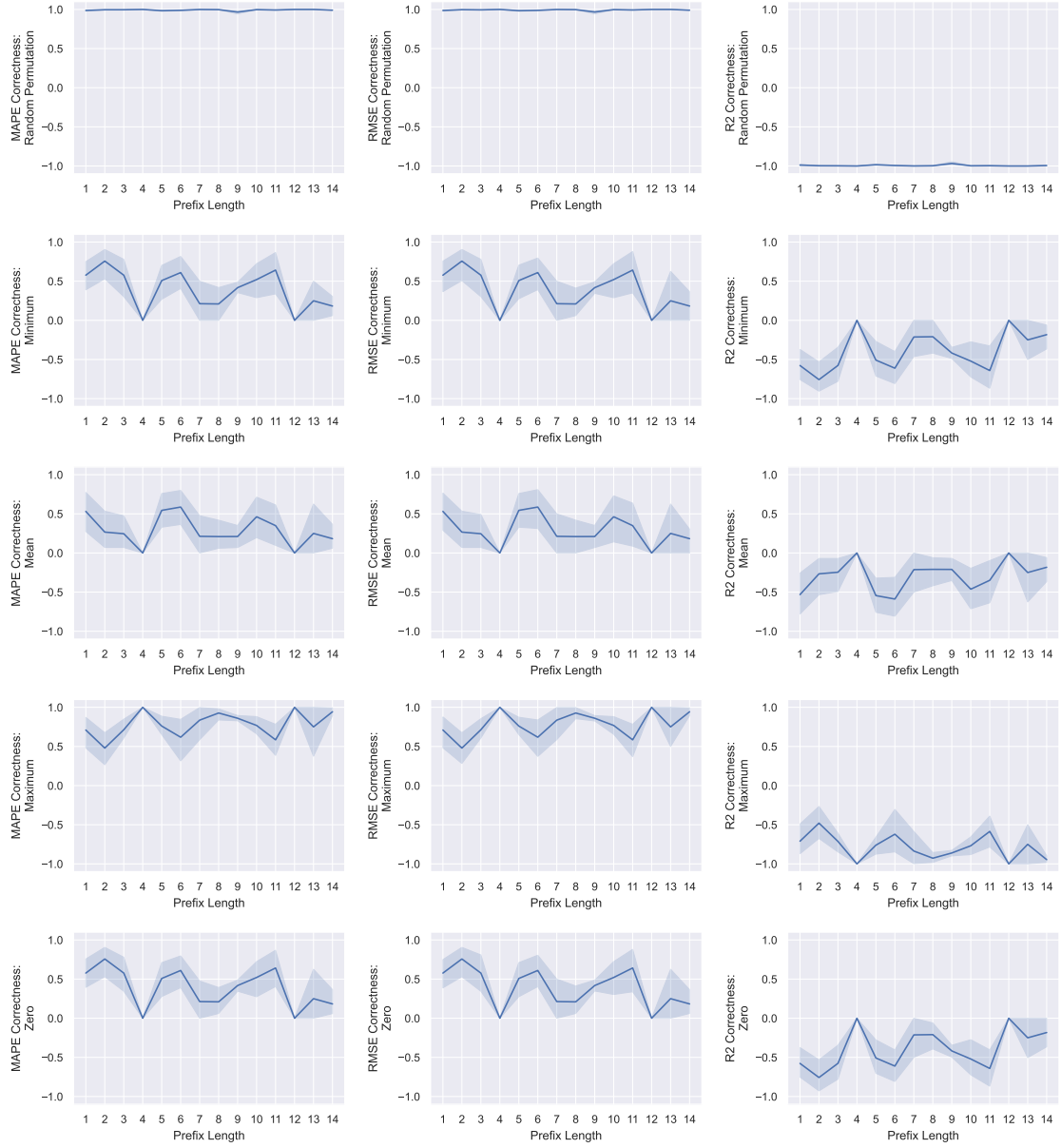
Figure G.20: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and aggregate encoding.
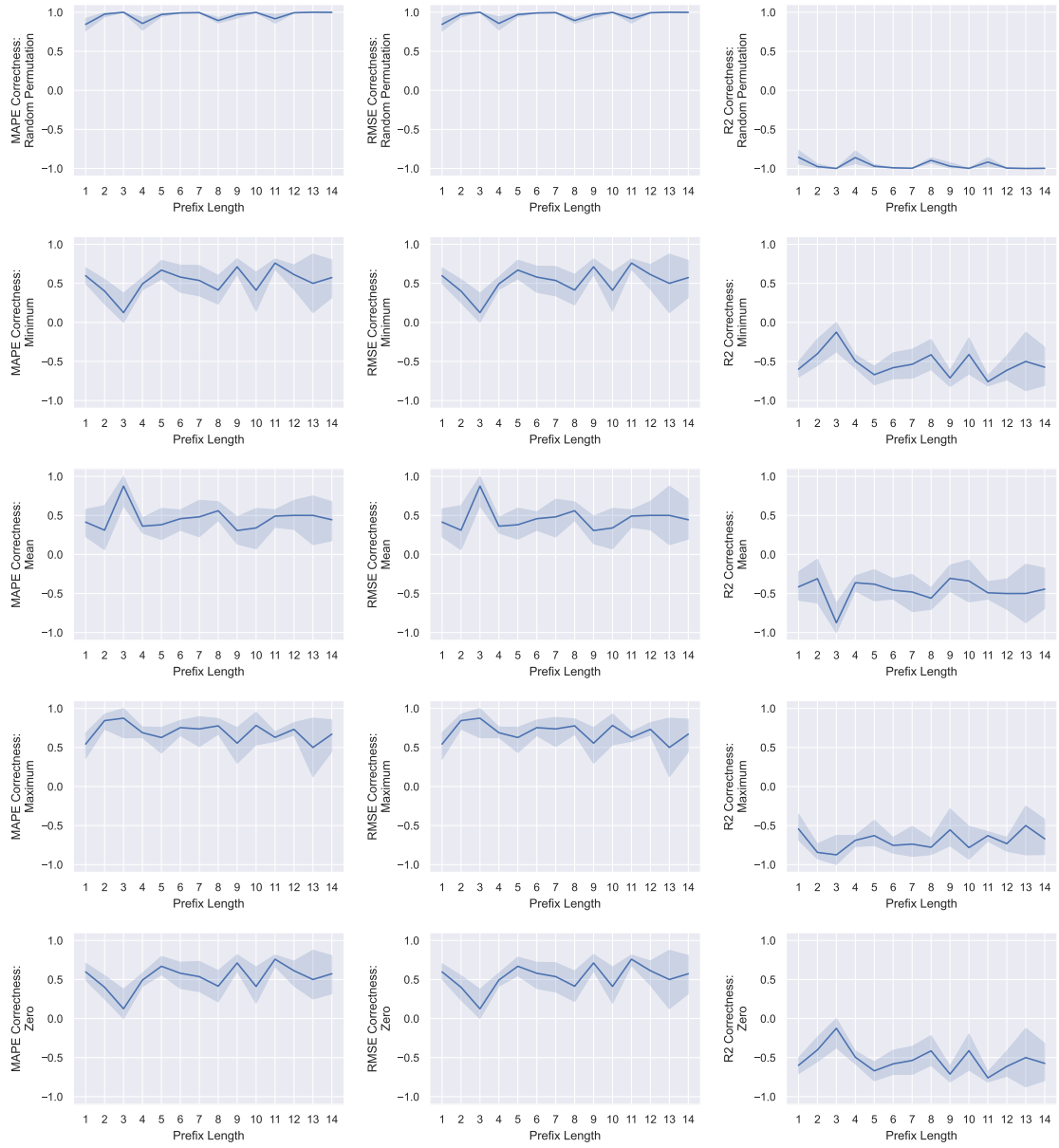
Figure G.21: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and index-based encoding.
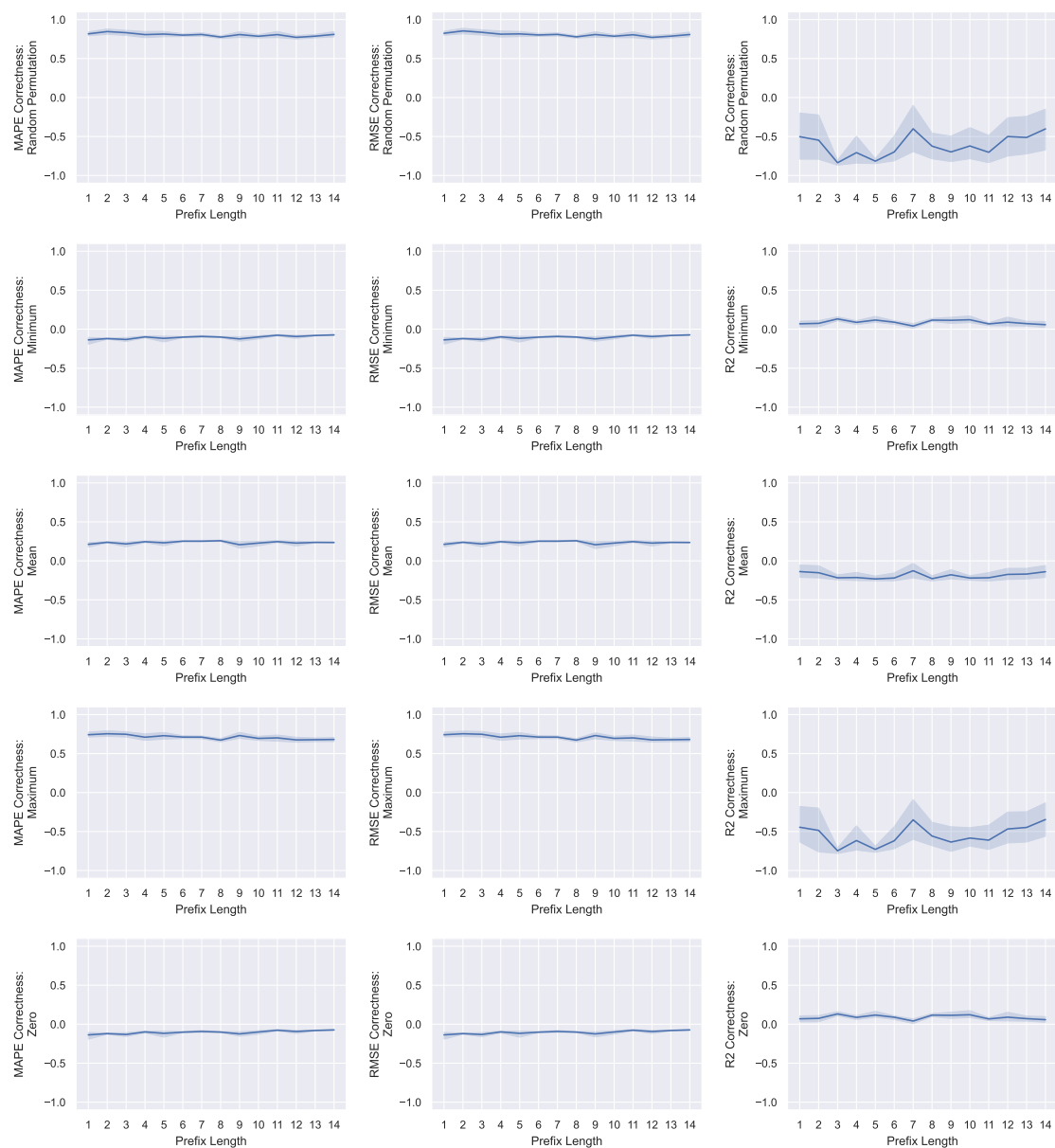
G.3.2 Logistic Regression

Figure G.22: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with single bucketing and aggregate encoding.
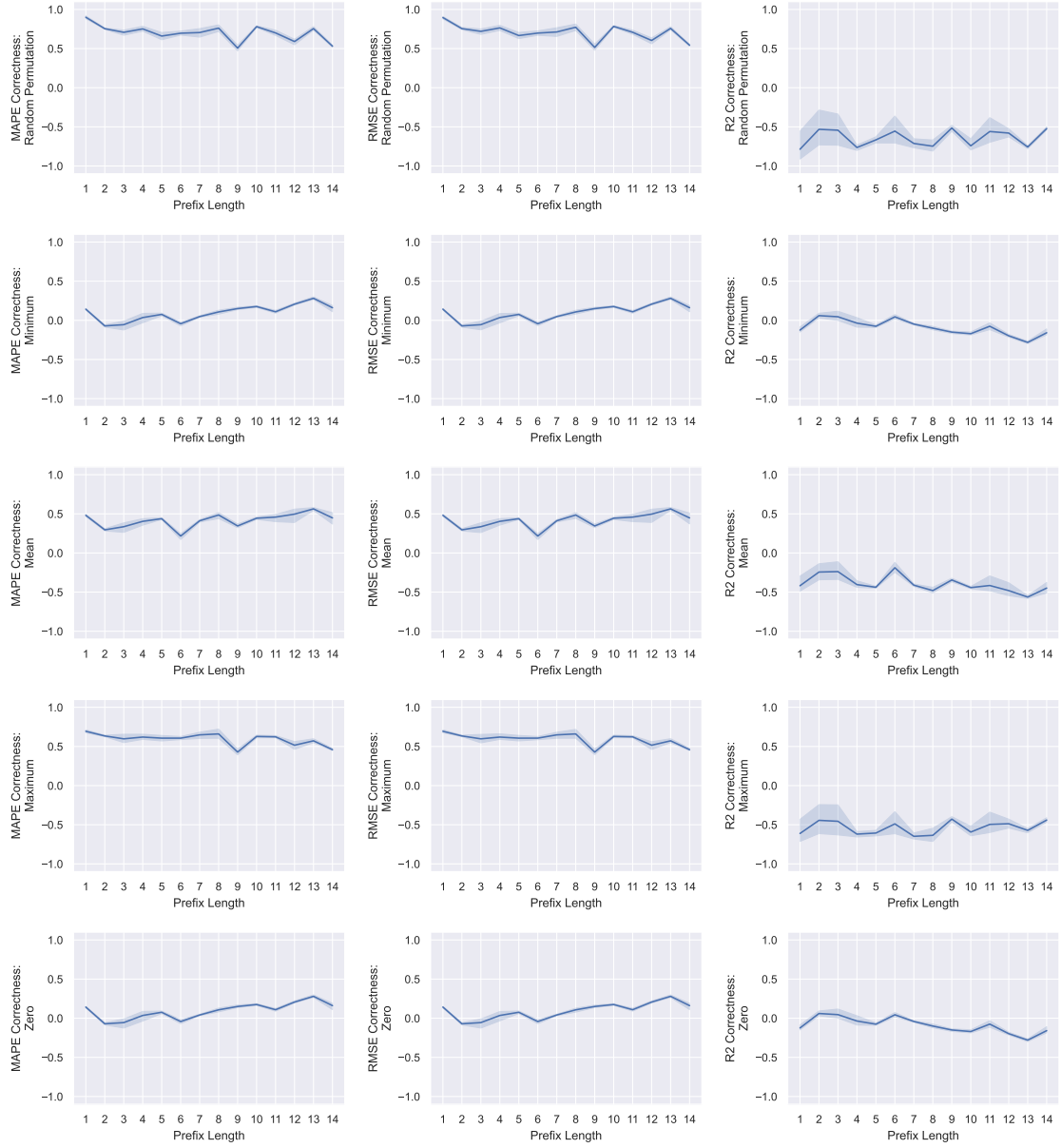
Figure G.23: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and aggregate encoding.
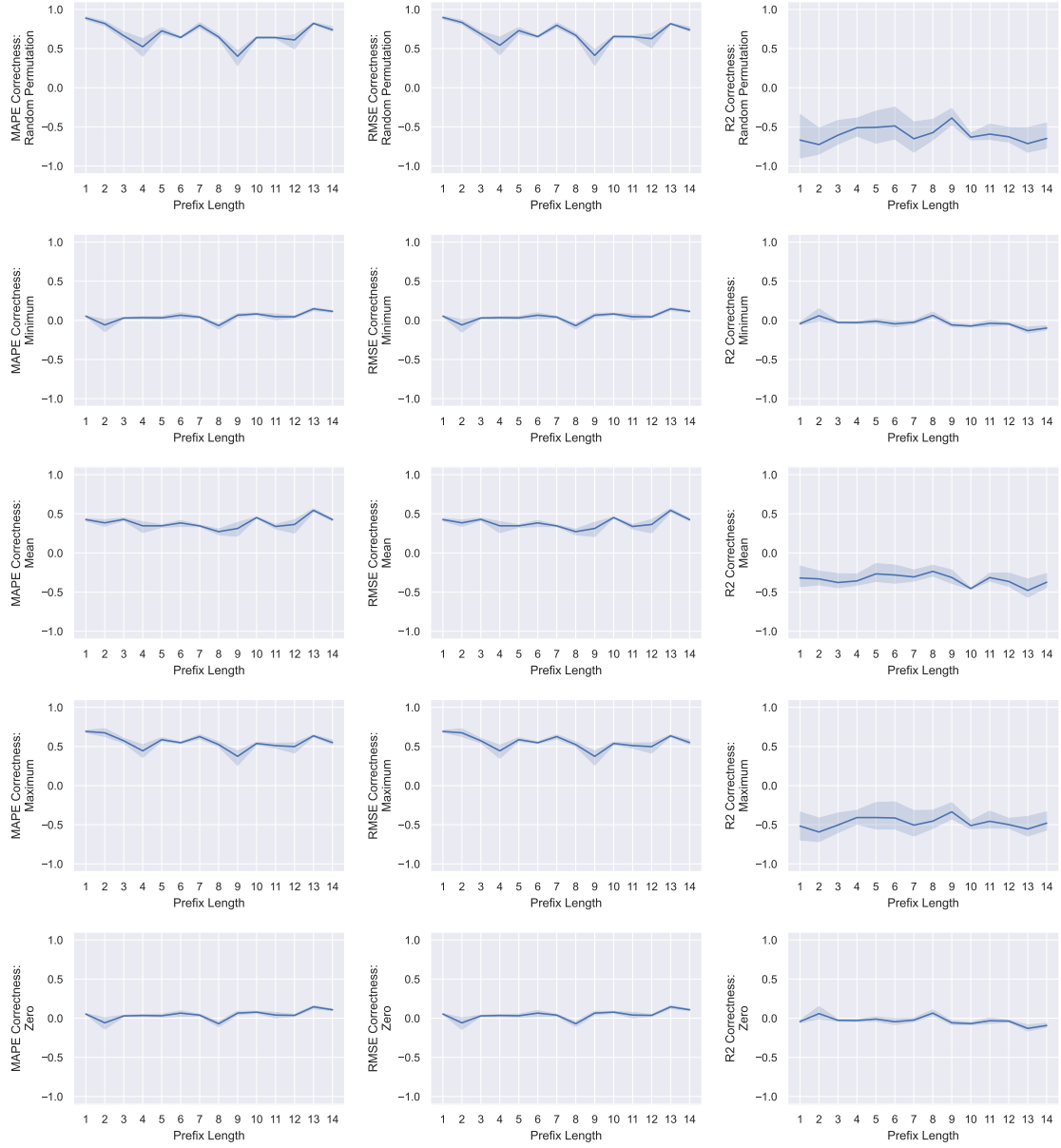
Figure G.24: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and index-based encoding.
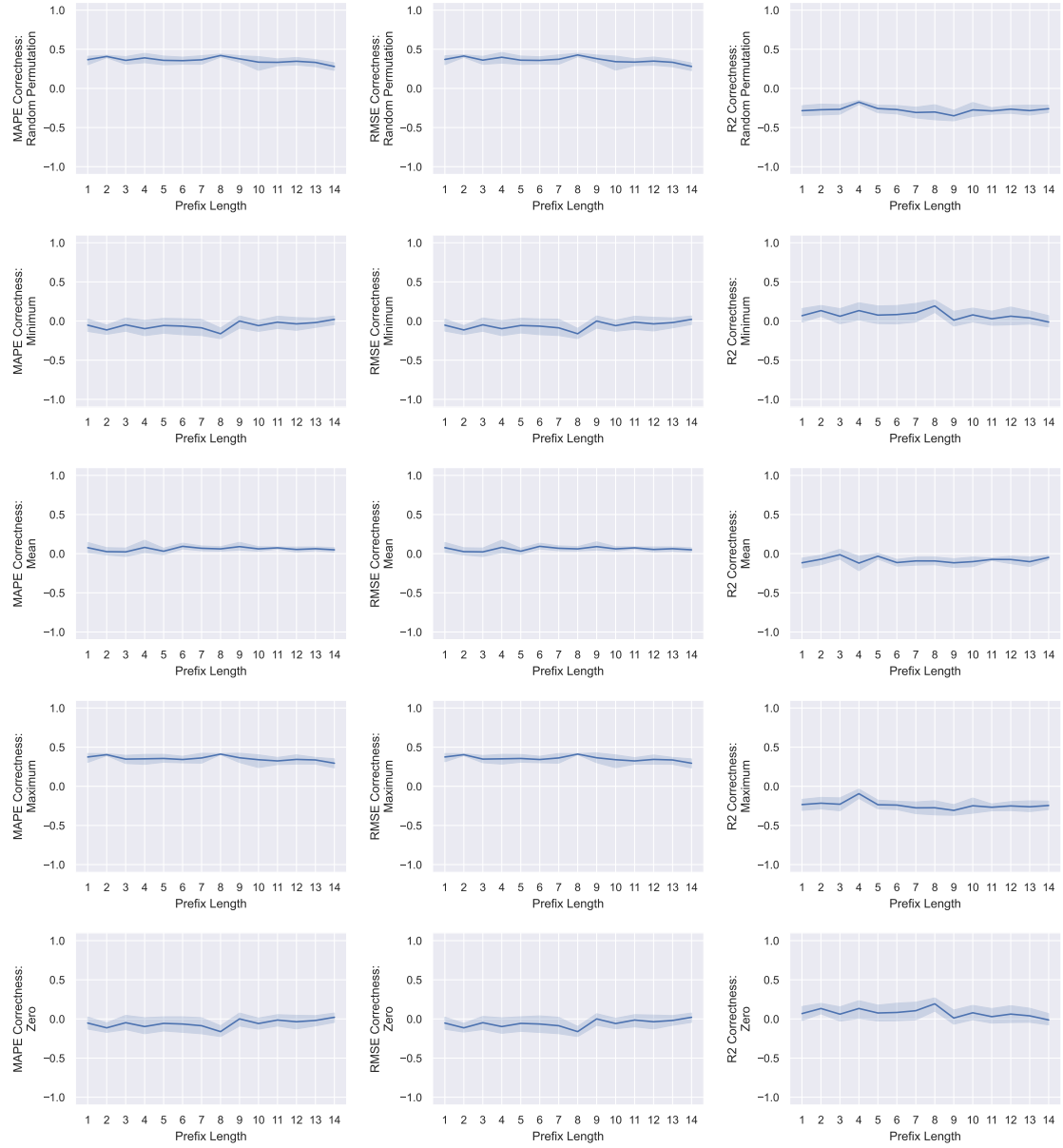
G.3.3   Naïve Bayes

Figure G.25: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with single bucketing and aggregate encoding.
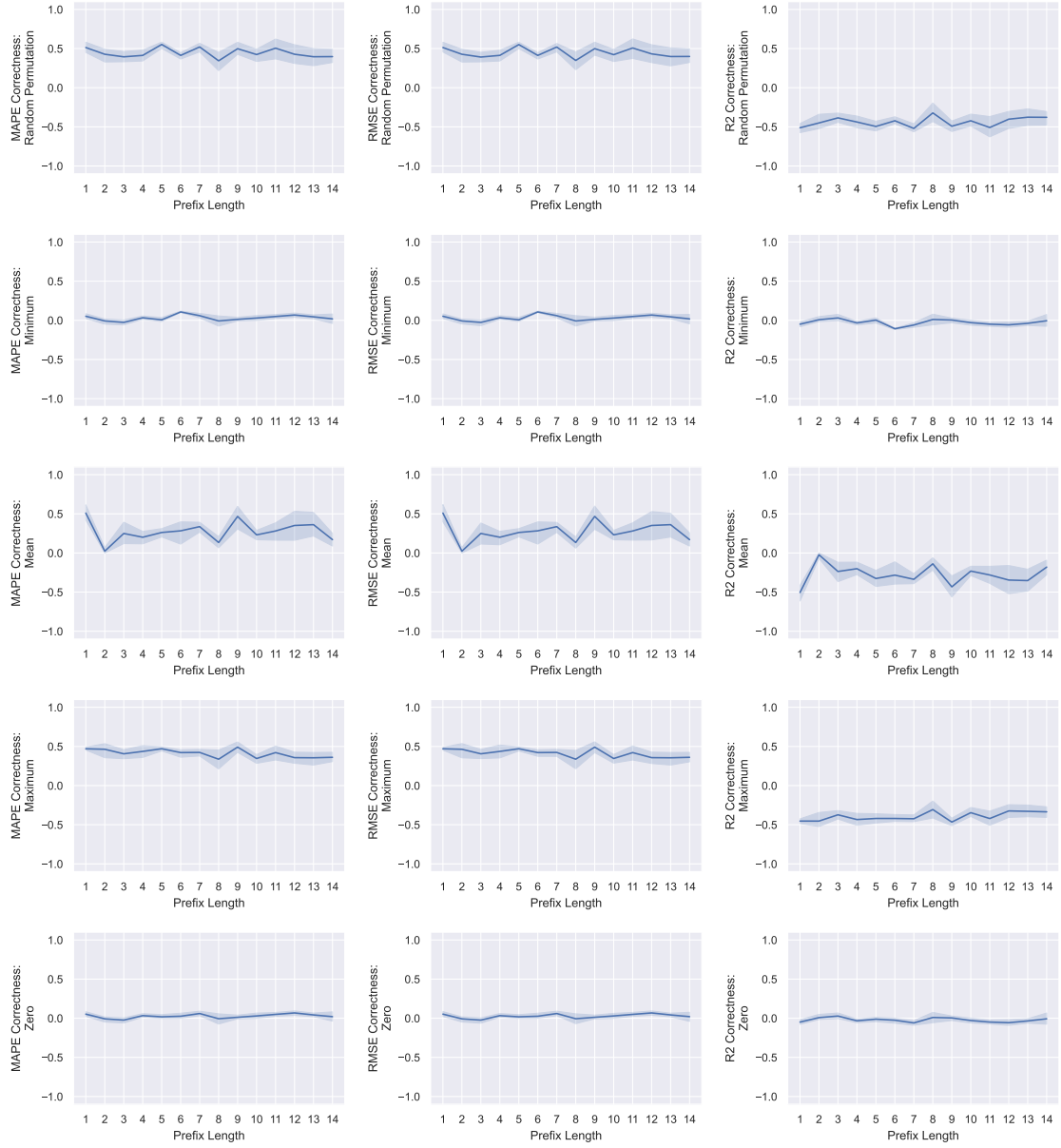
Figure G.26: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and aggregate encoding.
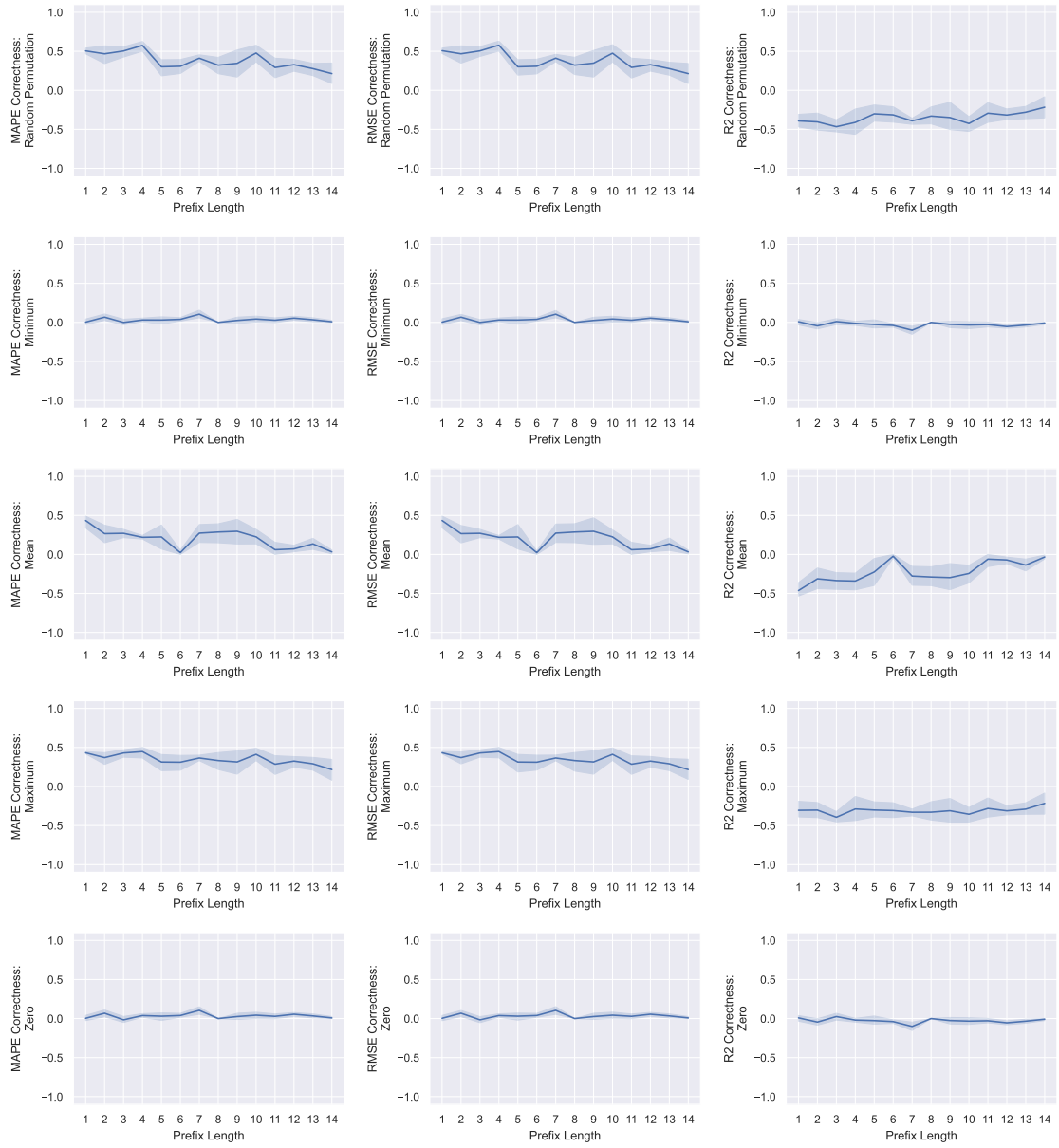
Figure G.27: Effectiveness of perturbation at determining feature importance at each prefix length, using Sepsis Cases with prefix-length bucketing and index-based encoding.