# Appendix J

# Unfolded Results of Internal Correctness Evaluation on Event Logs

- J.1 BPIC2012
- J.1.1 Decision Tree

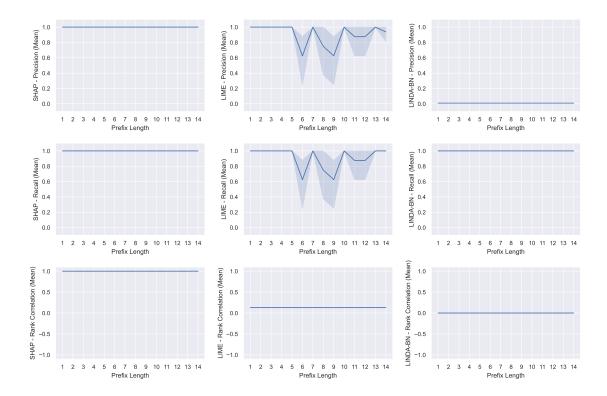


Figure J.1: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

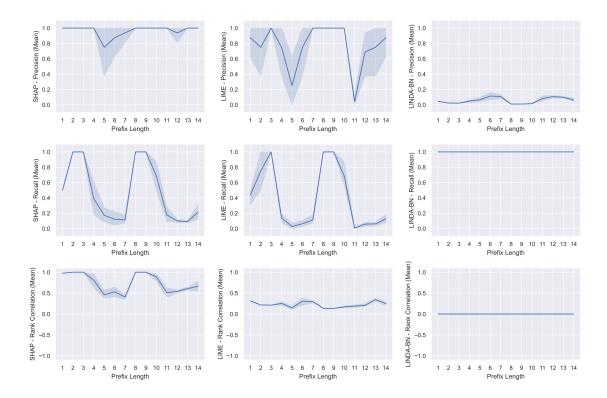


Figure J.2: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

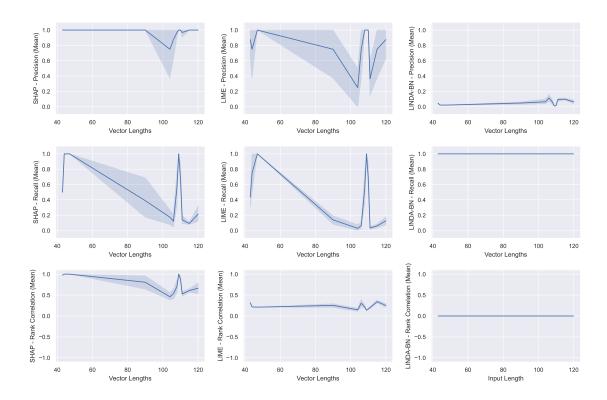


Figure J.3: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding.

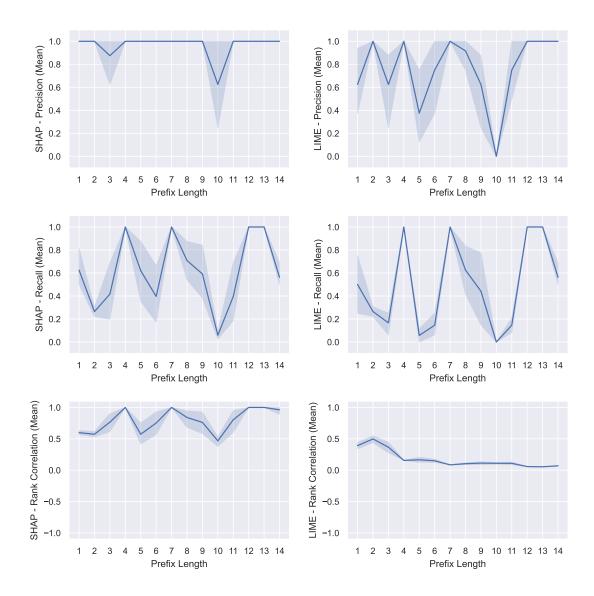


Figure J.4: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

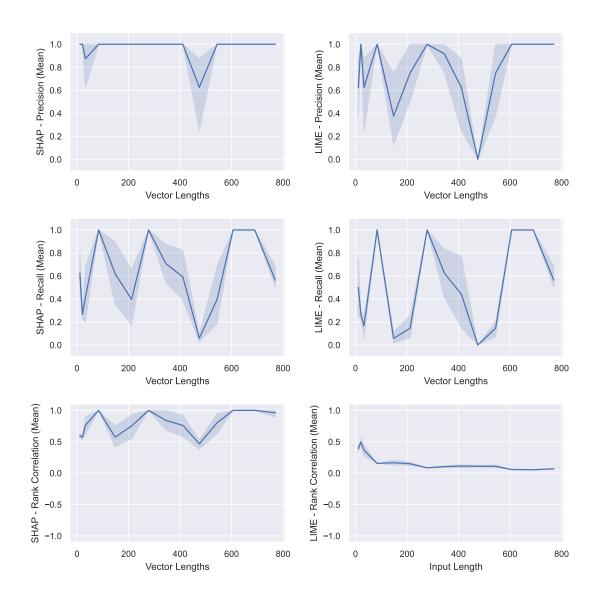


Figure J.5: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-abased encoding.

#### J.1.2 Logistic Regression

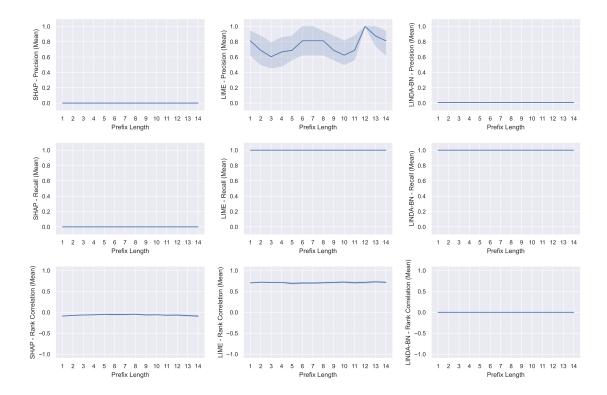


Figure J.6: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

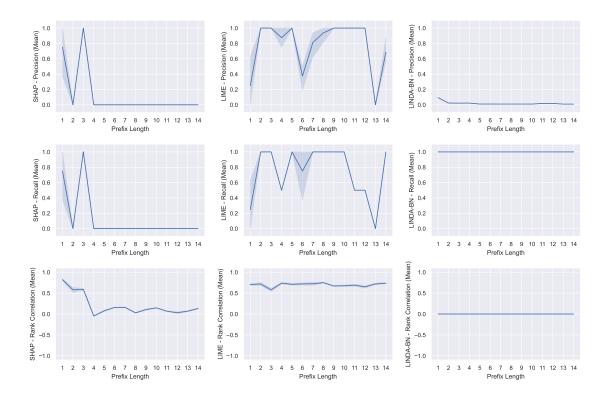


Figure J.7: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

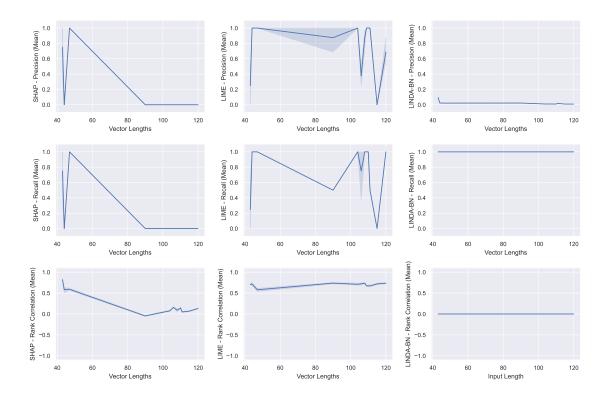


Figure J.8: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding.

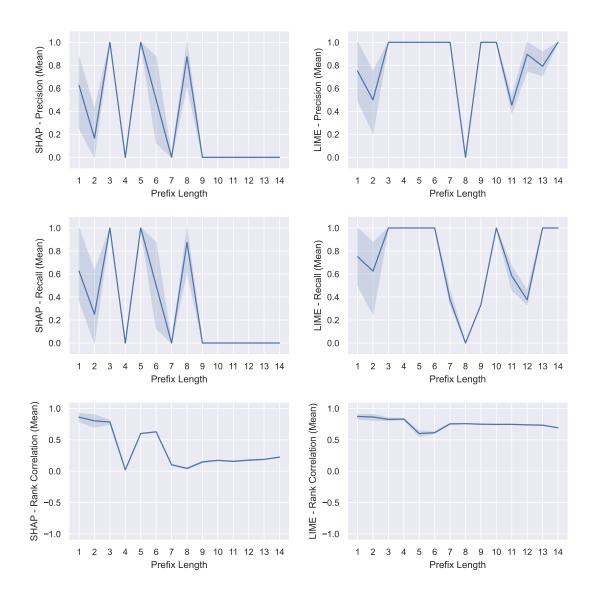


Figure J.9: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

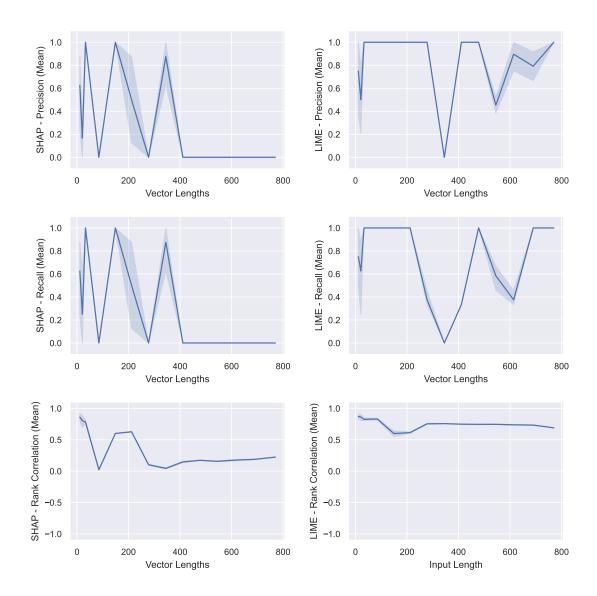


Figure J.10: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-abased encoding.

#### J.1.3 Naïve Bayes

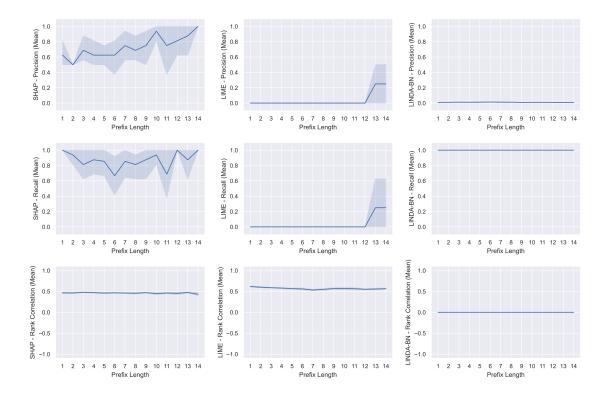


Figure J.11: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

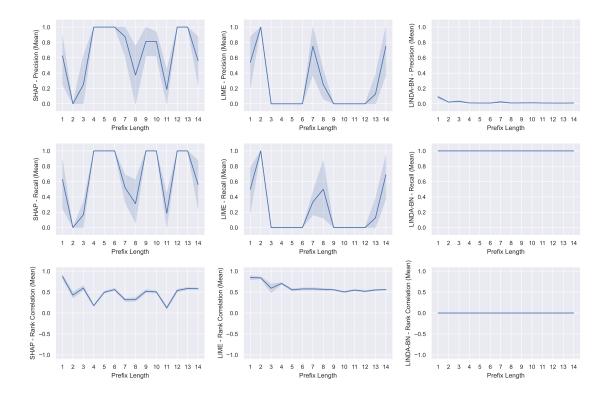


Figure J.12: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

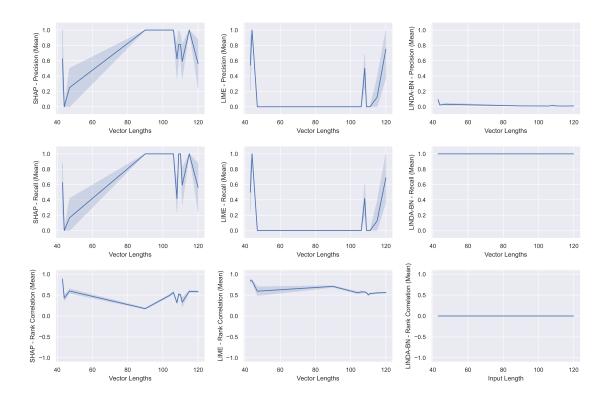


Figure J.13: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and aggregate encoding.

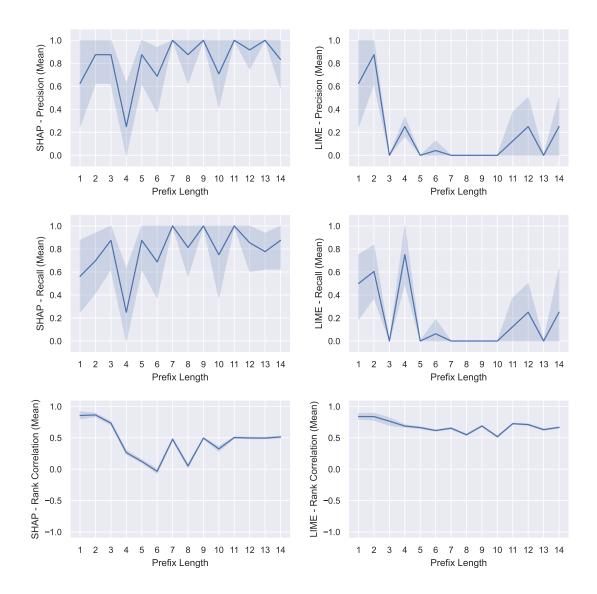


Figure J.14: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

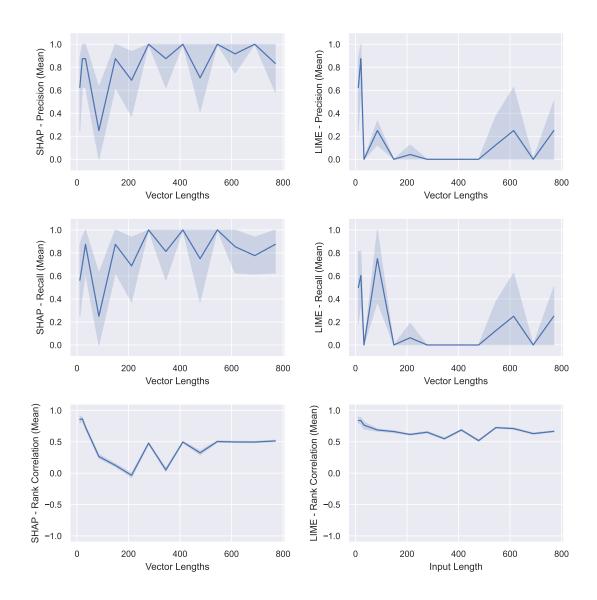


Figure J.15: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using BPIC2012 with prefix-length bucketing and index-abased encoding.

## J.2 Production

#### J.2.1 Decision Tree

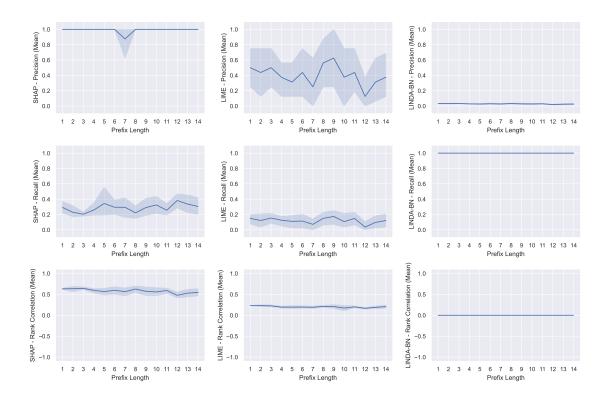


Figure J.16: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

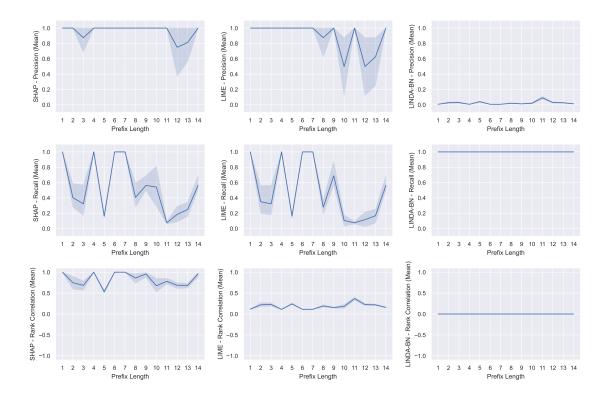


Figure J.17: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

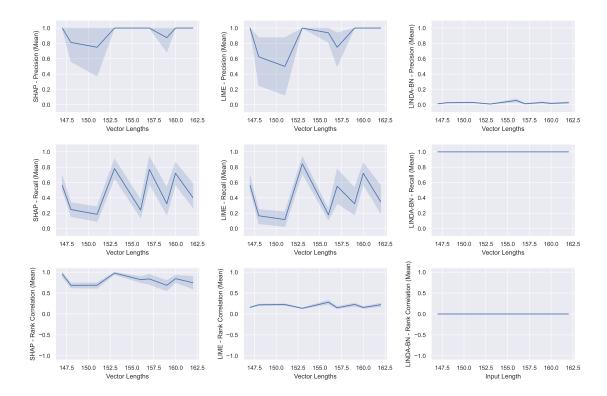


Figure J.18: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding.

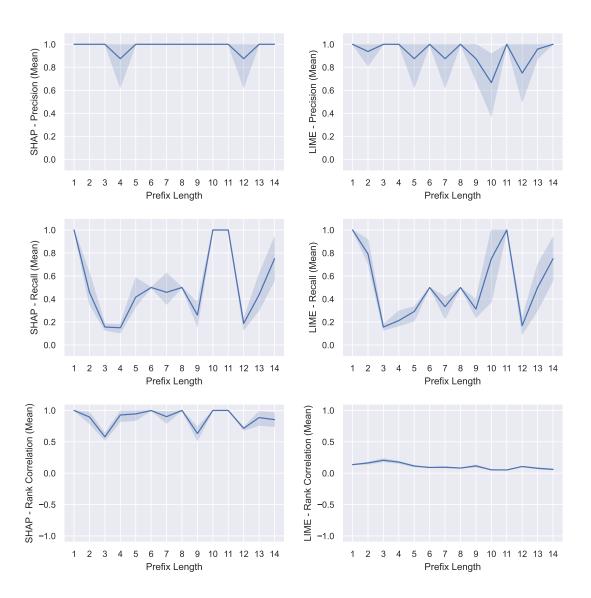


Figure J.19: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

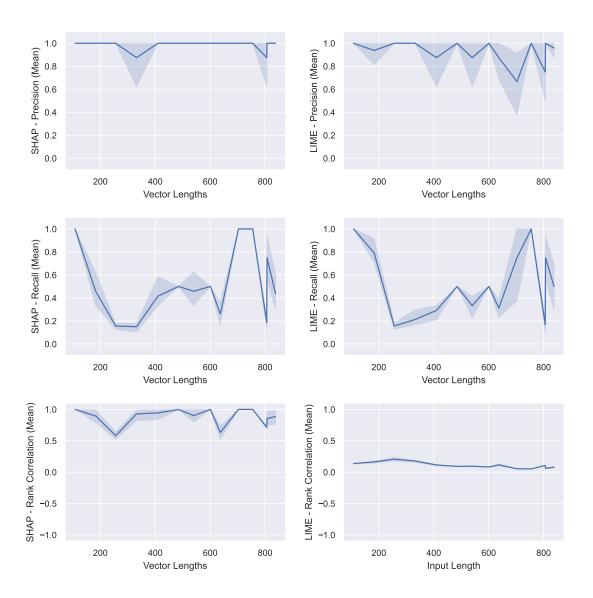


Figure J.20: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-abased encoding.

#### J.2.2 Logistic Regression

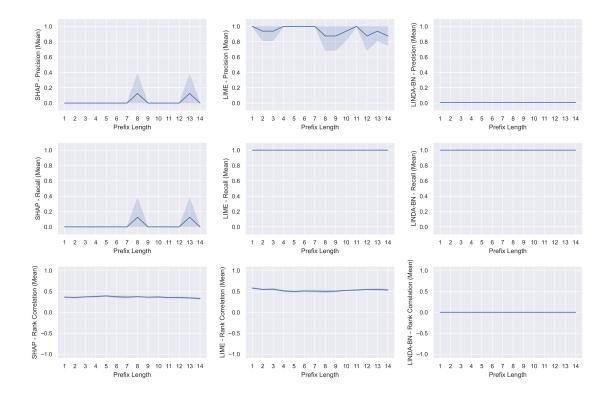


Figure J.21: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

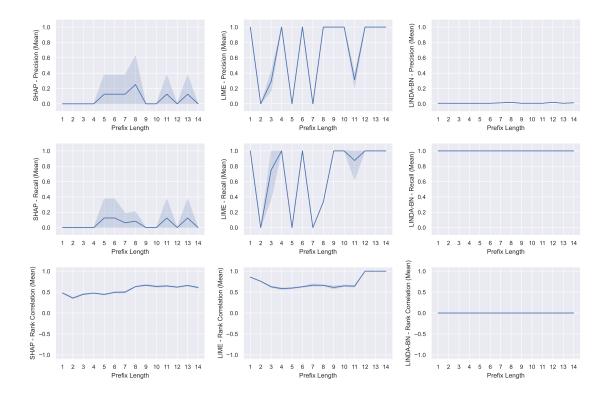


Figure J.22: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

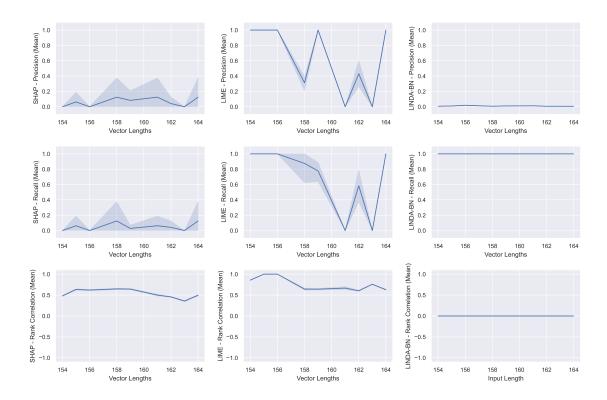


Figure J.23: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding.

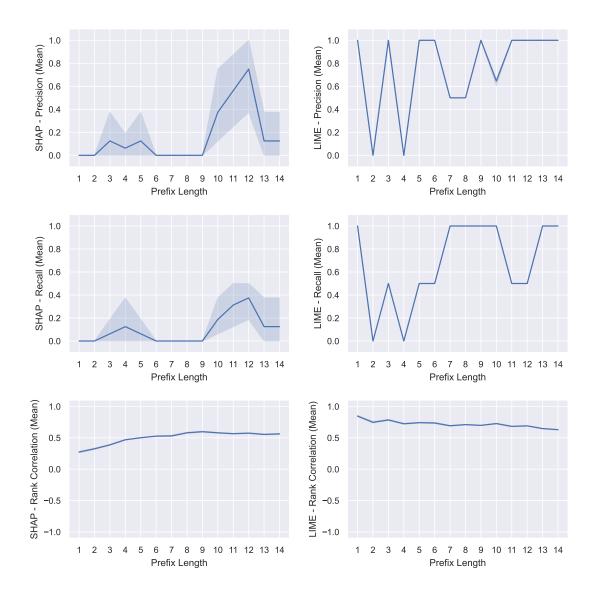


Figure J.24: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

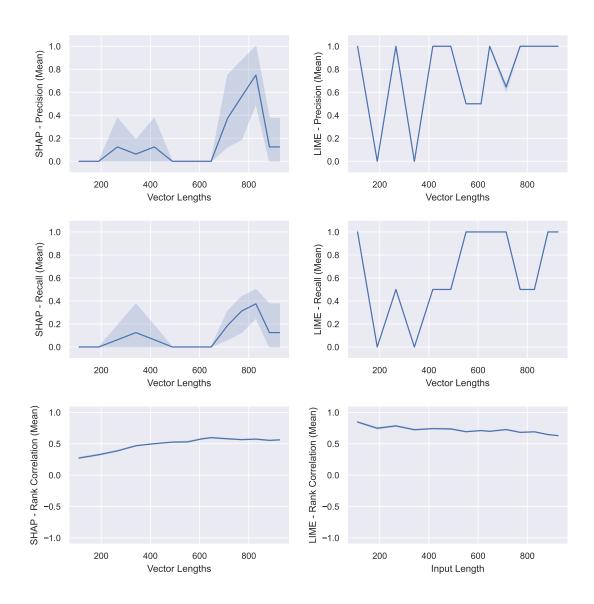


Figure J.25: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-abased encoding.

#### J.2.3 Naïve Bayes

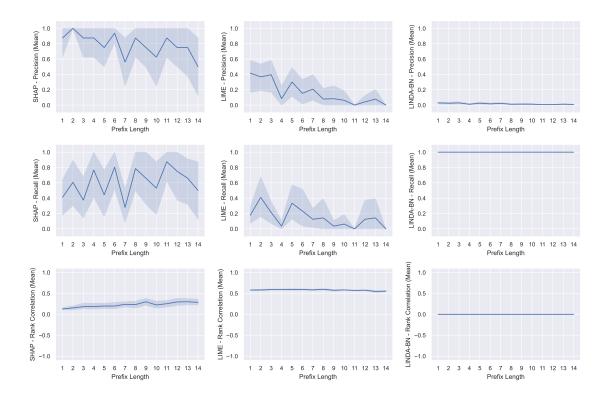


Figure J.26: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

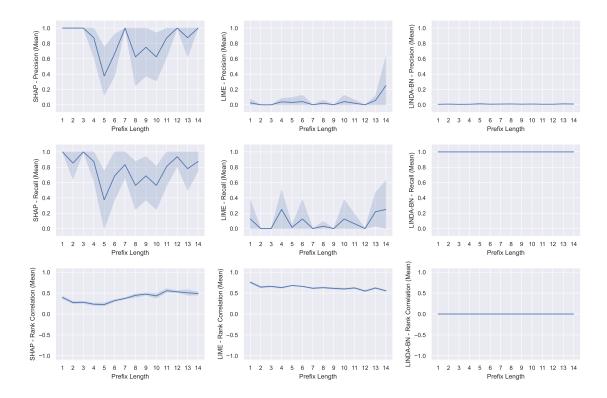


Figure J.27: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

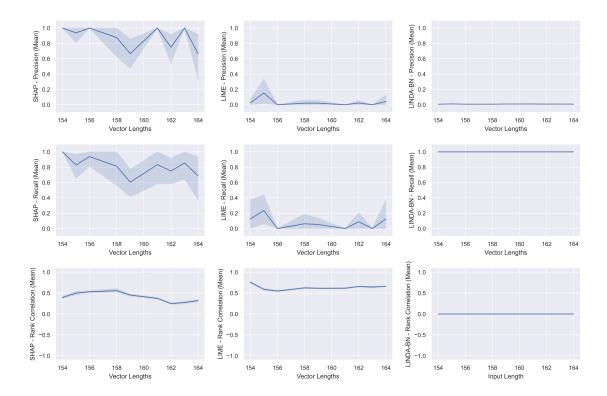


Figure J.28: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and aggregate encoding.

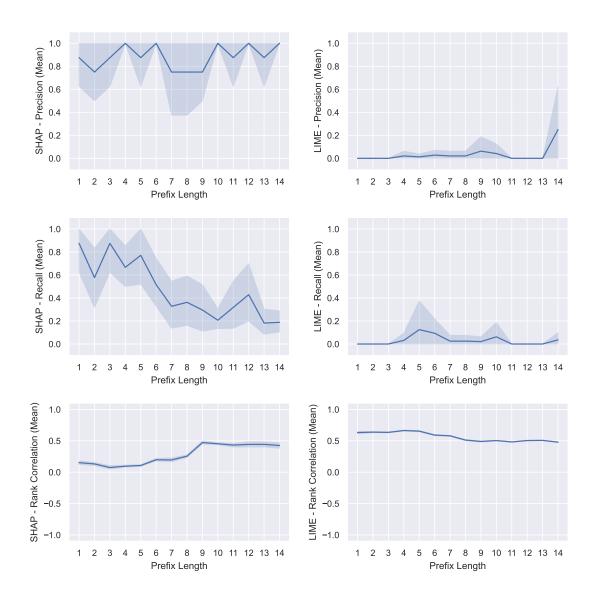


Figure J.29: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

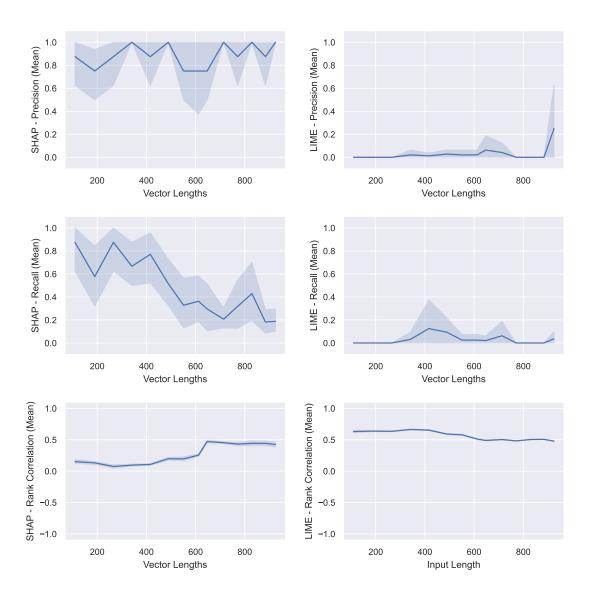


Figure J.30: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Production with prefix-length bucketing and index-abased encoding.

### J.3 Sepsis Cases

#### J.3.1 Decision Tree

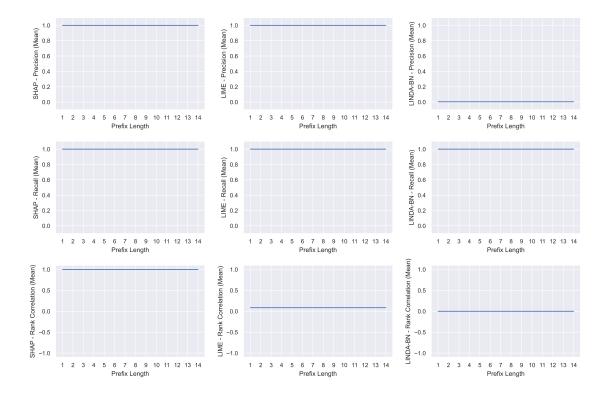


Figure J.31: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

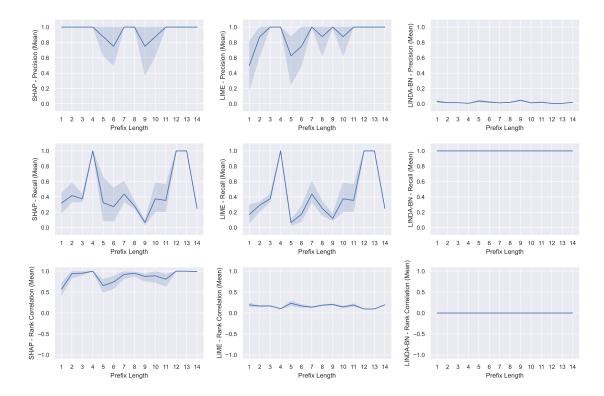


Figure J.32: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

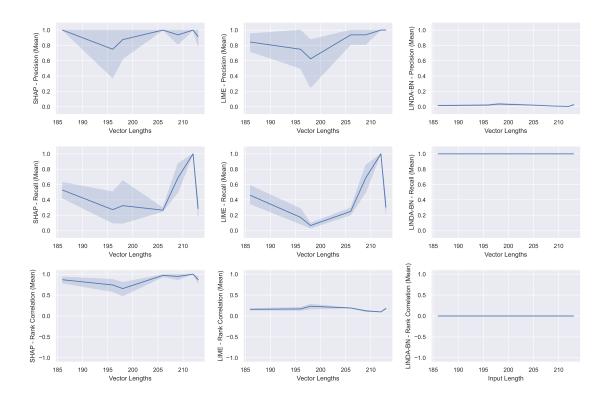


Figure J.33: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding.

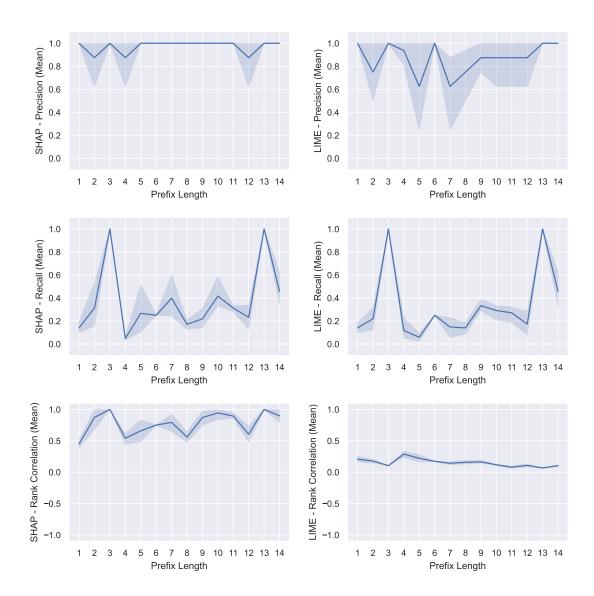


Figure J.34: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

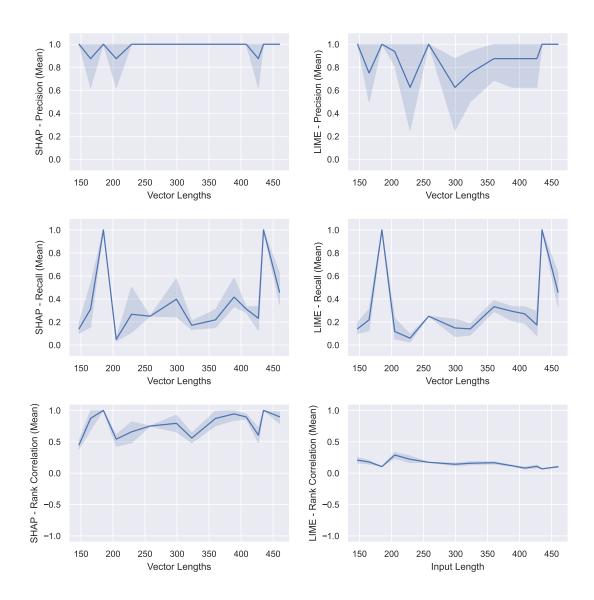


Figure J.35: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-abased encoding.

#### J.3.2 Logistic Regression

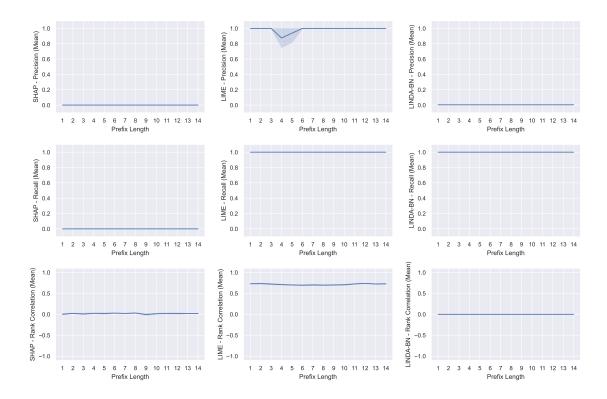


Figure J.36: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

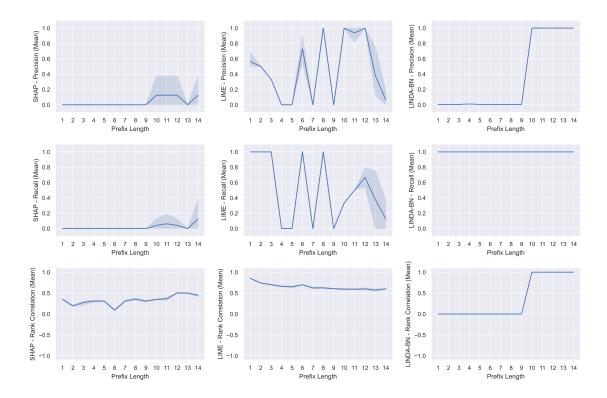


Figure J.37: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

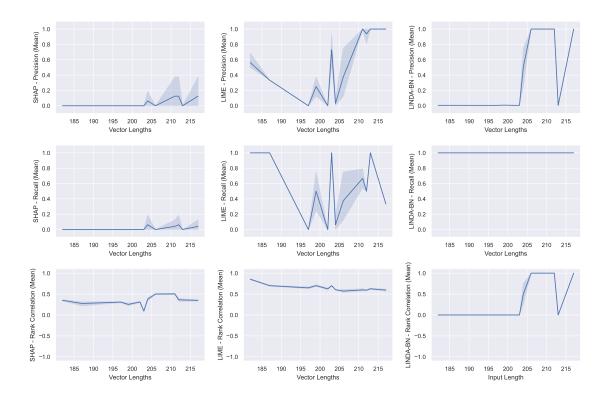


Figure J.38: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding.

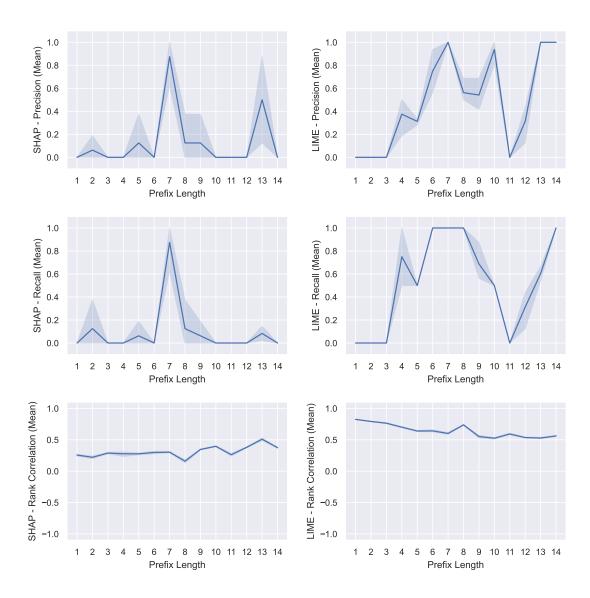


Figure J.39: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

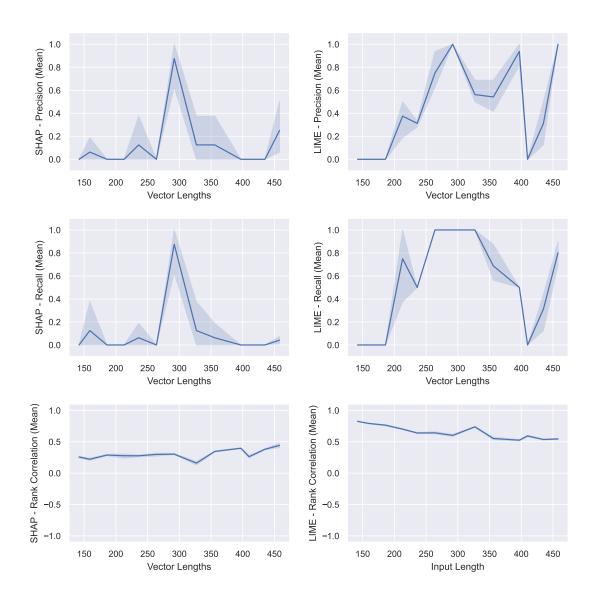


Figure J.40: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-abased encoding.

#### J.3.3 Naïve Bayes

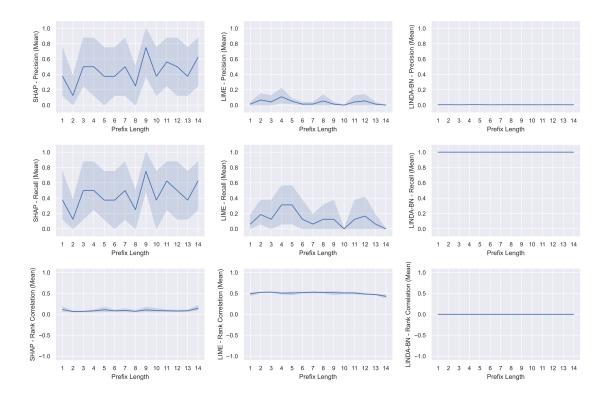


Figure J.41: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with single bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

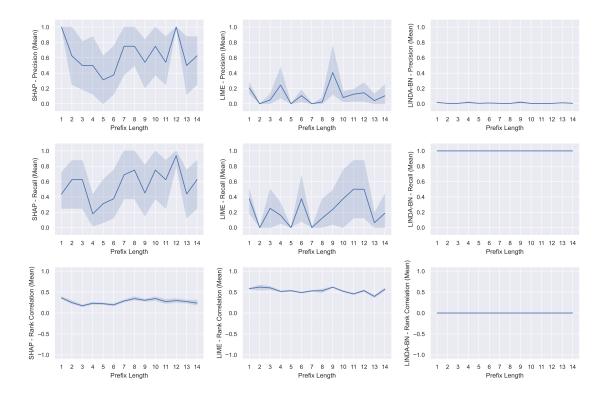


Figure J.42: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding. Internal correctness appears to be related to model accuracy.

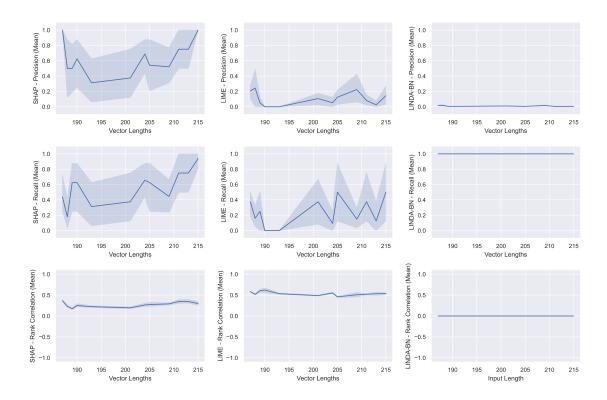


Figure J.43: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and aggregate encoding.

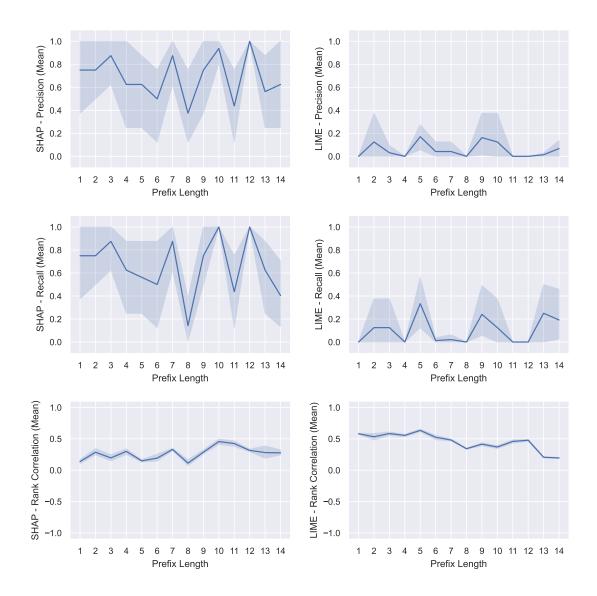


Figure J.44: Correctness at each prefix length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-based encoding. Internal correctness appears to be related to model accuracy.

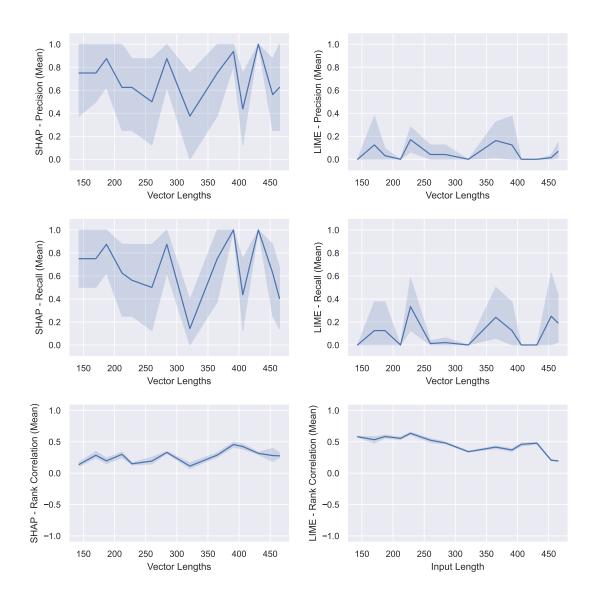


Figure J.45: Correctness at each input length of SHAP, LIME and LINDA-BN explanations using Sepsis Cases with prefix-length bucketing and index-abased encoding.