

A Quest Diagnostics Company

# Oral healthcare indicators

Empowering life insurers to detect potentially undisclosed smoking status, cancers, and chronic diseases that may impact mortality





### **Executive Summary**

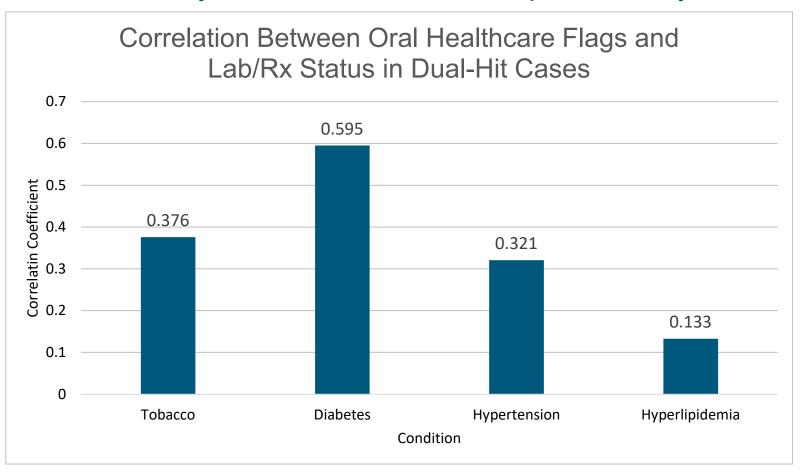
- The moderate to strong correlations between oral healthcare condition indicators and independent confirmatory data establishes the general validity of the flags
- Oral healthcare data can identify conditions not otherwise detectible in existing data sources

### Study Overview

- Purpose: to determine the accuracy (based on other data sources) of oral healthcare data and the lift it provides for underwriters
- Production data and large-scale pilots
- Cases in which both oral healthcare flags and independent confirmation (LabPiQture or ScriptCheck) were available

## External Validity of Oral Healthcare Condition Flags

#### Confirmation by Clinical Lab and Prescription History

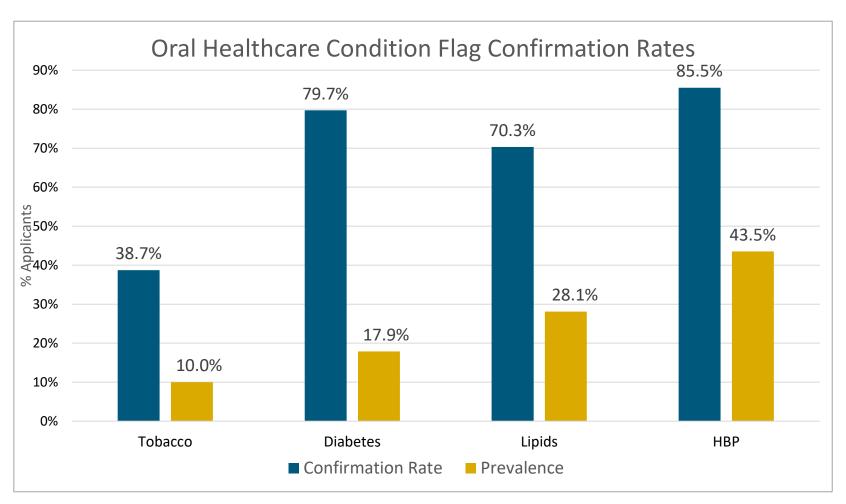


### **Correlation** is strongest for diabetes possibly because this condition is somewhat less correctable through medication or lifestyle changes than tobacco, lipids, or hypertension.

Source: ExamOne internal data - ExamOne compared Sikka flags to laboratory and prescription data in orders with hits for all data sources. A correlation of 1 would imply perfect agreement, while 0 would indicate no relationship.

## Confirmation Rates for Oral Healthcare Flags

High degree of confidence with Oral Healthcare flags against Clinical Lab and Prescription History



For diabetes, lipids, and HBP, confirmation rates exceed 70%, and are 2-5X higher than the background prevalence rates.

While Tobacco confirmation is lower in absolute terms, it is still roughly 4X above background.

Source: ExamOne internal data - ExamOne compared Sikka flags to laboratory and prescription data in orders with hits for all data sources.

### Reliability of OHI Condition Flags

#### OHI creates a lift in tobacco indicators

