Intelligent automation improves underwriting results

Case study

Multi-site health insurer needed to do more with existing underwriting staff

Evaluating large group medical plan risk can be an intensive task, requiring a large staff of underwriters. One insurer knew that they needed to assess risk better but without adding staff.

Challenge

- Need more accurate and efficient risk assessment for large group medical plan
- Establish greater consistency for underwriting decisions and adjustments
- Reduce highly clerical underwriting process
- Improve alignment to financial metrics

Our approach

With deep data resources, sophisticated modeling approaches and advanced machine learning techniques, we implemented 4 underwriting process improvements:

1. More efficient prospective risk scores using Group Risk Analytics
2. Improved efficiency and maximized group renewal increases using Portfolio Optimization
3. Streamlined prospective underwriting through auto underwriting
4. Increased breadth and accuracy of large claim assessment, including modeling member claim probability distributions through Underwriting Cost Predictors

All built on the StepWise platform.

+18% productivity

StepWise® provides configurable experiences to drive improved underwriting decisions, workflow and automation, resulting in increased productivity.

Best-in-market predictive models driven by machine learning, optimized for underwriting purposes

Better predictions + Rich data

Machine learning coupled with software features and cost-tuning delivered significantly improved predictive value and underwriting results.
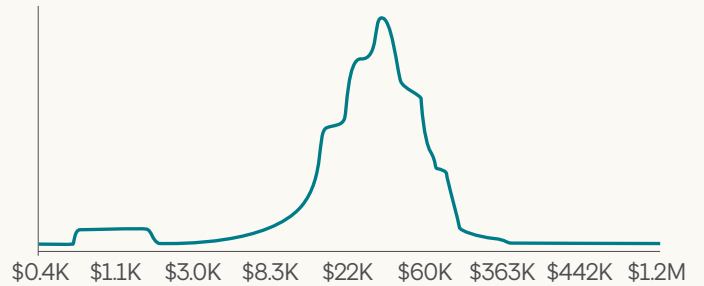
Group R^2 predictiveness
50–100 sized groups, $100k individual pooling

| Manual rate (with risk adj) | Experience rate | Credibility blended | UW cost predictors |
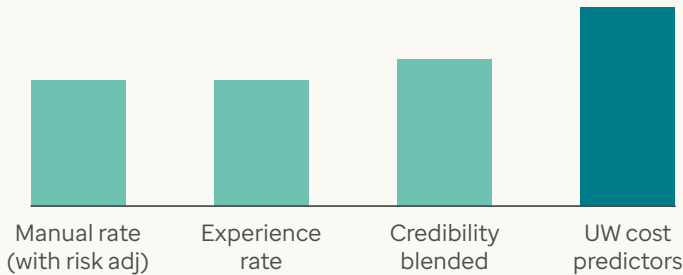
Individual probability distribution
Sample individual predicted cost: $43K

$0.4K $1.1K $3.0K $8.3K $22K $60K $363K $442K $1.2M

Results

- Productivity increase through automated underwriting and other efficiencies
- Margin improvement via lower cost prospective risk scores
- Margin improvement through increased renewal revenue
- Close ratio improvement due to reduced turnaround time of quoting and more precise rate setting
- Reduced medical loss ratio through better prospective risk classification for both new business and renewal

Learn how Optum® Advisory Services can help evaluate and partner with you on implementing solutions related to your market position and strategic and financial goals:

1-800-765-6807
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optum.com/advisoryservices

170%
internal rate of return on investment — generated from margin and loss ratio improvement and increased sales compared to system development cost

3%
close ratio improvement due to reduced turnaround time of quoting and more precise rate setting

1.4% and 1.0%
margin and medical loss ratio improvement due to better risk classification for new business and renewal

Optum