

## **PolySystems First Principles LTC Solution**

PolySystems offers a comprehensive first principles LTC solution that is available for both existing clients, as an upgrade to PolySystems HealthMaster valuation and HealthDelphi projection software, and new clients as a best-in-class solution that will greatly enhance their ability to accurately model and manage their blocks of long term care insurance.

## **First Principles LTC Modeling**

Our HealthMaster valuation and HealthDelphi projection calculation engines have been enhanced to:

- Compute projected cash flows and reserves using the first principles assumptions and methodology.
  Projected reserves (GAAP, statutory, and tax) can be calculated using traditional claim cost or first principle methodologies.
- Model guaranteed purchase options, return of premium riders for death and lapse, waiver of premium, non-forfeiture options, and benefit reductions.
- Model up to five distinct benefit states, which can be based on sites of care, with separate assumptions for incidence, mortality, recovery, and utilization.
- Reconcile between claims cost and first principles at the policy level.
- Track active lives separately from disabled lives.
- Support future rate increase filings.

## **HealthMeasure Experience Studies**

PolySystems HealthMeasure experience study program has been enhanced with the following capabilities:

- Studies all assumptions, including, but not limited to mortality, lapse, claim incidence, claim termination, and benefit utilization. Mortality studies provide the ability to study all lives, active lives only, or disabled lives only. Lapse studies provide the ability to study voluntary and shock lapses due to a rate increase. Claim termination studies provide the ability to study claim terminations due to death, recovery, or in total.
- Generates results over several expected bases and data groupings, including calendar year studies, quarterly studies, and policy year studies.
- Captures transitions between care sites, benefit reductions, rider and special feature coverage changes, and guaranteed purchase options.

## LTC LDTI Functionality

PolySystems LDTI HealthHorizon history-building, HealthDelphi projection, and Projections Reports software offer a fully enhanced platform to support FASB's new ASU, due for reporting January 1, 2022.

- Supports attribution analysis by automatically performing additional calculations when assumptions change
- Includes disclosure requirements that are built into the base system.
- Reflects different modeling cohorts for TI net-to-gross purposes and for company analysis.
- Supports policy level reporting.
- Updates net-to-gross ratios at every valuation date and retains them for additional use.
- Automatically calculates additional reserves when net-to-gross ratios exceed 100%.
- Automatically tabulates unlocking amounts under two different views and separates each unlocking amount into mortality and lapse components.
- Computes Deferred Profit Liability amounts according to TI input parameters.
- Supports coverage-level historical transaction data.
- Imputes transaction payments and actual true-up amounts at a cohort level.