

## Brief Overview of the HealthDelphi System

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HealthDelphi builds on the structure of HealthMaster to interject the capability to produce projected financial statements (income statements and balance sheets) both for in force business and for new business.

For in force business, modeling rules are defined to reduce the seriatim Valuation Master File (VMF) to a smaller number of projection cells. The Create Projection Cells function uses defined modeling rules to create a Projection Master File (PMF) from the VMF. Each cell of the PMF contains combined records which share common projection assumptions—e.g., model issue age, sex code, risk code, class code, projection plan code and projection assumptions.

For new business, a separate new business utility enables the user to construct a multi-cell model of new business. The new business model allows future volume to be specified by policy count, units or gross annualized premium for a single year or a range of years. Specification of distributions of the specified volumes by factors (such as insurance plan, issue age, sex code and risk code) allows the new business utility to construct a rich multi-cell model.

The actual projection software utilizes the Health coding structure to create cash flow files from the PMFs. The projection is performed for the period specified by the client, ordinarily starting with the VMF valuation date. The resulting cash flow files are organized by projection plan code (the finest level of reporting available from the HealthDelphi system) and contain calendar month-by-month “vectors” of all the essential ingredients of the income statement and balance sheet—projected policy counts, face amounts and reserves as well as projected cash flow items like premiums, benefits and expenses.

The Health system provides an easy-to-use mechanism for producing standardized income statement and balance sheet reports using the cash flow files. In addition, the Cash flow Utilities provide a mechanism for combining cash flow files and for converting some or all of the cash flow files to spreadsheet format. The results of the HealthDelphi projection system can thereby be carried into your own spreadsheet-driven financial reporting processes. Many clients use the HealthDelphi software to produce liability cash flows for asset/liability matching analysis and other sophisticated actuarial assignments.

Most HealthMaster clients are surprised by the ease of extending the valuation applications of HealthMaster to the projection applications of HealthDelphi. Since the same coding structure drives both systems, HealthDelphi start-up builds on the previous work of the valuation assumptions encoded for HealthMaster. Adding projection assumptions and converting VMFs to PMFs can often be accomplished on an accelerated basis for clients with HealthMaster in place.