Policy Objectives
Given the fact that there is a lag between the time period when a medical service is rendered to the time that a claim is fully settled in payment, it is prudent for a self-funded plan to set aside funds for an IBNR (Incurred But Not Reported) Reserve. An IBNR reserve, otherwise known as an operating reserve, is an estimate of the unpaid claims liability for run-out claims. In order to accurately project the self-funded plan’s outstanding claims liability, the HSB’s actuary will estimate the cost of claims rendered but not yet paid based on past experience.

Policy History
The Board adopted this policy on March 12, 2008 and amended it on March 14, 2013.

Review
The Board shall review this policy at least every three years

IBNR Reserve Policy
This policy standardizes the IBNR Reserve setting methodology for the Health Service System’s (HSS) self-funded health plans. The IBNR Reserve policy is specific to the self-funded plans for which HSS maintains reserves, i.e. the following plans:

- The Self-Funded PPO City Plan
- The Self-Funded Employee PPO Dental Plan
- The Flex-Funded HMO Plan (non-capitated costs)

The methods specified in this document will be applied for IBNR Reserve estimation as of June 30th of each year at the end of each fiscal year.

Definitions
*IBNR Reserve*: Reserve(s) calculated to pay for the outstanding liability of estimated run-out claim costs that have been incurred before a given date but have not paid as of the given date.

*Developmental Method*: the method by which the IBNR liability is estimated based on claim run-out patterns which are assumed to remain stable over time.
Projection Method: the IBNR liability estimate produced by the Developmental Method is adjusted for months where data is considered non-credible using the Projection Method based on the change in costs per exposure unit over time. The IBNR liability is further adjusted to reflect actuarial assumptions related to a number of factors/contingencies which could impact reserve adequacy. Such factors/contingencies include: change in claim payment cycles, plan design, insurance carriers, large dollar claims, emerging claim trends, provider contract changes, seasonality, and other factors.

IBNR Reserve Methodology

The reserves at the end of each plan year will equate to the sum of the estimated future cost of incurred but not reported claims (IBNR) as of that date and the estimated cost of administering these claims.

The IBNR reserves will be based on the historical claims experience of each plan. An actuarial analysis of this experience will be completed to develop factors that are applied to paid claims data to estimate the potential run-out of these claims post-fiscal-year-end. Where plan specific claims data is deemed less than fully credible, additional normative claims data can be utilized to supplement the analysis performed.

HSB’s actuarial consultant firm applies the Developmental Method and the Projection Method to set the IBNR Reserve(s).

The estimated cost of administering the run-out claims will reflect the terms and conditions of the plan administrator responsible for settling the relevant plan’s claims.

The actuarial consultant firm presents IBNR Reserve recommendations and supporting analysis to the HS Board for approval.
SAN FRANCISCO HEALTH SERVICE SYSTEM

Health Service Board

Reserving and Contingency Margin

IBNR Reserve Policy and Methodology

Policy Objectives

Given the fact that there is a lag between the time period when a medical service is rendered to the time that a claim is fully settled in payment, it is prudent for a self-funded plan to set aside funds for an IBNR (Incurred But Not Reported) Reserve. An IBNR reserve, otherwise known as an operating reserve, is an estimate of the unpaid claims liability for run-out claims. In order to accurately project the self-funded plan's outstanding claims liability, the HSB’s actuary will estimate the cost of claims rendered but not yet paid based on past experience.

Policy History

The Board adopted this policy on March 12, 2008 and amended it on March 14, 2013.

Review

The Board shall review this policy at least every three years

IBNR Reserve Policy

This policy standardizes the reserve and contingency margin IBNR Reserve setting methodology for the Health Service System’s (HSS) self-funded health plans. The IBNR Reserve policy is specific to the self-funded plans for which HSS maintains reserves, i.e. the following plans:

- The Self-Funded PPO City Plan
- The Self-Funded Employee PPO Dental Plan
- The Non-Capitated Flex-Funded HMO CostPlan (non-capitated costs)

The methods specified in this document will first be applied for reserve and contingency margin IBNR Reserve estimation as of June 30th of each year at the end of each plan fiscal year thereafter.

Definitions

IBNR Reserve: Reserve(s) calculated to pay for the outstanding liability of estimated run-out claim costs that have been incurred before a given date but have not paid as of the given date.
Developmental Method: the method by which the IBNR liability is estimated based on claim run-out patterns which are assumed to remain stable over time.

Projection Method: the IBNR liability estimate produced by the Developmental Method is adjusted for months where data is considered non-credible using the Projection Method based on the change in costs per exposure unit over time. The IBNR liability is further adjusted to reflect actuarial assumptions related to a number of factors/contingencies which could impact reserve adequacy. Such factors/contingencies include: change in claim payment cycles, plan design, insurance carriers, large dollar claims, emerging claim trends, provider contract changes, seasonality, and other factors.

IBNR Reserve Methodology

The reserves at the end of each plan year will equate to the sum of the estimated future cost of incurred but not reported claims (IBNR) as of that date and the estimated cost of administering these claims.

The IBNR reserves will be based on the historical claims experience of each plan. An actuarial analysis of this experience will be completed to develop factors that are applied to paid claims data to estimate the potential run-out of these claims post-fiscal-year-end. Where plan specific claims data is deemed less than fully credible, additional normative claims data can be utilized to supplement the analysis performed.

HSB’s actuarial consultant firm applies the Developmental Method and the Projection Method to set the IBNR Reserve(s).

The estimated cost of administering the run-out claims will reflect the terms and conditions of the plan administrator responsible for settling the relevant plan’s claims.

The actuarial consultant firm presents IBNR Reserve recommendations and supporting analysis to the HS Board for approval.

Methodology

In order to develop recommended contingency margins, an actuarial analysis of City Plan and Employee Dental Plan claims experience, supplemented by additional normative data, was completed in June 2007.

The contingency margin for each plan is an aggregation of two components:

1. A margin that protects against shortfalls in reserve estimates, i.e. that actual post-year-end claims run-out and corresponding administration costs are higher than estimated
2. A margin that protects against shortfalls in funding estimates, i.e. that actual claims incurred over a plan year are higher than projected when developing premium
equivalents and hence there is a shortfall between actual expense and revenues collected

The detailed steps followed to developing each margin are set out below. The description below relates to developing the margin that protects against shortfalls in reserving estimates. An analogous analysis was completed to develop a margin that protects against shortfalls in funding estimates. Separate analyses were completed for the City Plan and the Employee Dental Plan.

1. Collect and collate additional normative claims data to supplement HSS specific data
2. Apply the same reserving and projection models used to estimate HSS’s self-funded plans’ experience
3. Compared actual (A) vs. expected (E) experience, e.g., actual claim run-off vs. historic IBNR estimates
4. Derive statistical distributions of Actual/Expected (A/E) to generate **confidence intervals** applicable to the reserving and projection model
5. The ratio of the difference between the mean of the distribution and the upper bound of a 90% confidence interval to the mean provides the load factor to be applied to the best estimate amount.