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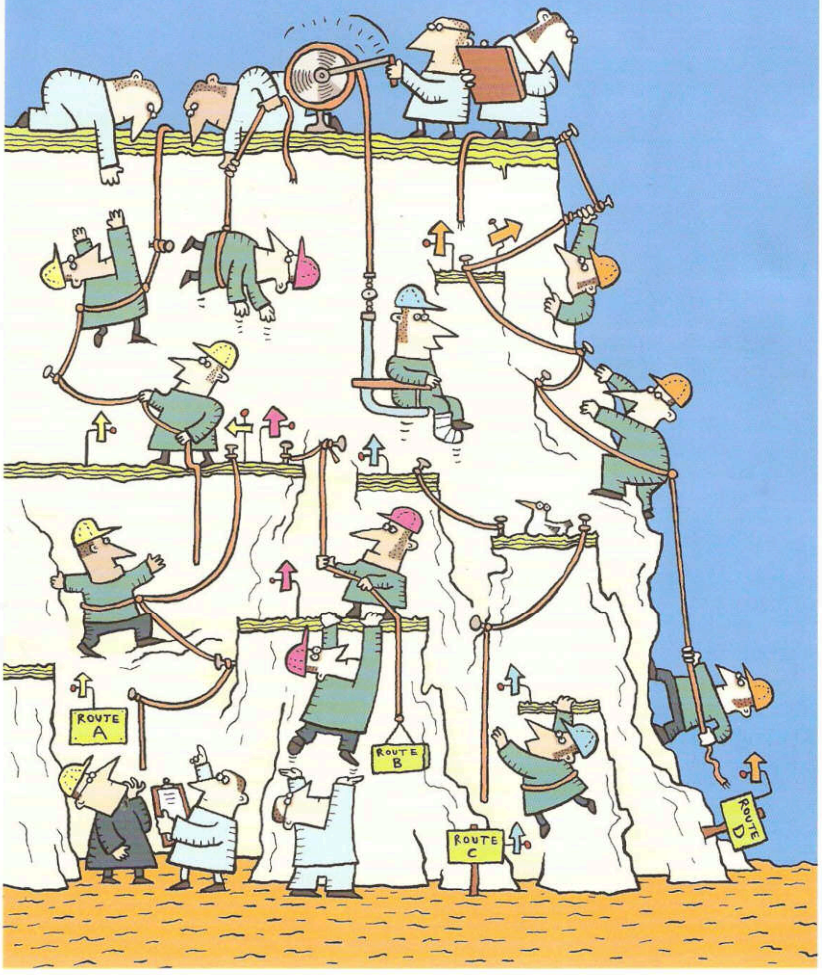

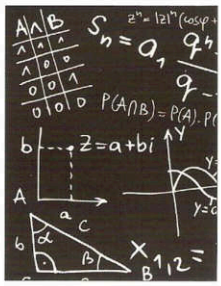

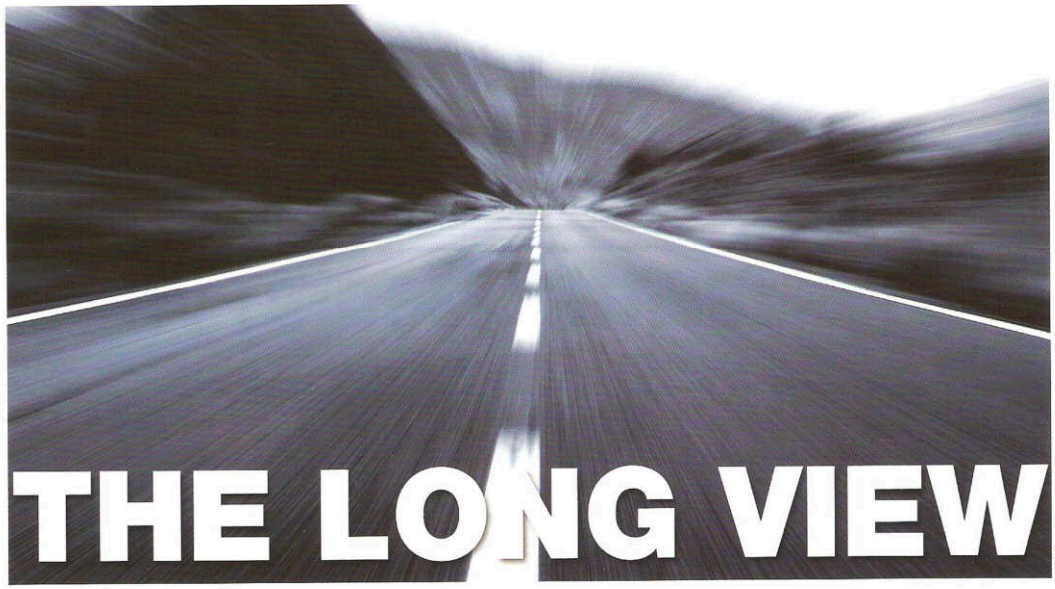

THE LONG VIEW

FOTOLIA

Finance consultant James Wilson looks into Monitor's financial planning crystal ball and sees some powerful long-term benefits

MONITOR'S LONG-TERM financial model (LTFM) is a key part of the foundation trust application process. But it is more than just a hurdle to be cleared to become an FT; it is increasingly being used as a planning tool, both by existing and aspirant trusts.

Veterans of the FT process will recall hours spent chasing imbalances through the model or tracing calculations around the voluminous spreadsheet tabs. However, having worked on at least 15 FT applications, we have found that, with time and patience, the LTFM can be an extremely useful planning tool.

Twenty input sheets and 12 output sheets can be intimidating to a novice user, but the heart of the LTFM is an integrated five- to 10-year income/expenditure balance sheet and cash flow projection. The model's power lies in showing the interactions between surplus, cash, capital, financing and risk ratings.

Finance information management system (FIMS) forms focus attention on budgets and variances and reinforce the traditional public sector mindset of concentrating on short-term targets. By contrast, the LTFM requires trusts to plan in a more long-term and business-like manner.

Developing an LTFM requires a significant investment in time. Most important, an underlying model of the relationship between income, activity and cost is needed to complete the base model. The approach taken varies depending on the organisation and needs.

The simplest approach might use a broad marginal cost assumption for each point of delivery. While helpful in developing quick forecasts, such an approach would not be acceptable for an FT application. A more useful and detailed approach would involve the development of linked feeders from the trust's costing systems or the attachment of cost calculation sheets to the model. Because the LTFM uses separate sheets for major service developments, the output sheets and bridge analysis can be used to check the credibility of cost movement relative to income and activity.

Holistic understanding

Traditionally in the NHS, balance sheet and cash flow modelling have been undertaken separately from income and expenditure forecasting. Management accountants may be tempted to regard the completion of the LTFM balance sheet as a tiresome technical issue. However, many models we have seen have shown healthy surpluses but financial risk ratings (FRR) of 2 due to liquidity issues driven by the balance sheet. LTFM modelling experience enables both financial and management accountants to gain a holistic understanding of the interactions between balance sheet, cash and (hopefully) surplus.

The trickiest aspect of the LTFM is getting the model to balance. This is not helped by 'false' flags being generated by rounding errors too small to appear on the face of the model.

The most common causes for these are profiles not adding to 100% and inconsistencies between the inputs on balance sheet history and forecast. Experience shows there are common errors and quick reconciliation checks that can be employed to track them (For

MODEL OF SENSITIVITY

The long-term financial model is useful for quick sensitivity analysis. Examples include:

- Entering an inflation case to model the effect of a tariff or pay rate change
- Modelling the difference between inflation assumptions based on standard 'implied efficiency' requirements and local assumptions
- The effect of capital spend profiling on liquidity
- Cost improvement percentage required to reach a financial risk rating (FRR) of 3 or 4
- Gap analysis to establish the amount of headroom before dipping below FRR 3
- Testing capital spend and borrowing plans against the prudential borrowing code limits

example ensuring the year-to-date loan repayment figure on 'I-BS-Hist' is consistent with the amount profiled to that month in 'I-BS-For'). Sometimes the LTFM will not balance or cannot replicate forecasts because of internal inconsistencies in the trust's figures.

The creation of a robust, complete and balanced LTFM is likely to take weeks – much longer if the underlying models of costing or service developments need to be developed. The financial model needs to reflect both the internal business plans of the trust and the external environment in which the trust operates. Key questions will be the extent to which the trust's activity matches commissioner expectations, and how to reflect cost inflation and pressures.

A starting point would be Monitor's own economic assumptions. There are legitimate reasons and local circumstances why these may not apply for a particular organisation. But trusts should look to explain any assumptions that deviate from these figures. Many keep the LTFM refreshed and use it as the underlying model for all financial forecasts.

Most usefully, the LTFM lends itself to quick sensitivity analysis. The model can keep two additional scenarios of differing inflation assumptions and cost/income adjustments. Changing assumptions such as the cost improvement plan (CIP) percentage on the base model sheets is quick and easy. Sensitivity analysis is used to create the risk modelling chapter of the integrated business plan, but the LTFM can be useful in other ways (see box).

Testing the effect of inflation changes takes only a few minutes and on a robustly established LTFM relatively complex alternative scenarios can be modelled in an hour or two.

It must be conceded that the LTFM has many annoyances, such as the differing inputs for staff and non-staff on the cost sheet, the complexity of the balance sheet forecast, irritating rounding errors, inflexibility and some minor bugs. But it is no more strenuous to complete than many of the existing NHS templates – and a planning tool that produces a common currency of outputs is preferable to home-grown spreadsheet models.

Action plan

From our experience of modelling across trusts, we would recommend the following actions when using the model:

- Procure training in the model for key staff from other experienced users. This could save many hours – for example, in tracking imbalances.
- Ensure that key finance and information staff are involved in the process and understand the model and its purpose. And ensure activity and other forecasts are consistent.
- Concentrate on the key model drivers such as inflation, CIP, activity change and service developments rather than the minutiae.
- Create replica input-focused 'I-income' and 'I-cost' sheets on underlying activity and cost models for easy linkage or cutting and pasting. However, links slow the model considerably, so only use them on variable inputs.
- Allow the model to generate its output based on realistic inputs rather than force it to show a particular desired surplus. Use the modelling to drive a debate on the realism of the financial projections and underlying assumptions.
- While a complete and balanced model is needed for FT submissions, rougher versions can still be used for scenario modelling and quick forecasts.
- Use the model to generate an analysis of the impact of key assumptions. For example, how much does the surplus go down if CIP slips by a certain percentage?

The 'garbage in, garbage out' adage applies to all financial modelling. The LTFM can demonstrate just how sensitive five-year results are to changes in CIP, inflation, tariff and other long-term assumptions.

The ability to easily perform this analysis justifies the development work, even outside the context of an FT application. ■

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