

FINAL DRAFT

Review of the way in which physiotherapy services are funded and accredited by ACC

Physiotherapy practice costing and pricing review

KPMG and Deloitte independent response to queries raised during the review

June 2007

Private & Confidential

24 June 2007

David Goddard QC
Maritime Tower
10 Customhouse Quay
Wellington

Dear Mr Goddard

Review of the way in which Physiotherapy Services are Funded and Accredited by ACC (the “Review”)

Deloitte and KPMG have been assisting the Accident Compensation Corporation (“ACC”) and the New Zealand Society of Physiotherapists (“NZSP”) respectively in respect of the costs and pricing of operating a sustainable physiotherapy practice in New Zealand.

Deloitte and KPMG presented independently as expert witnesses to the Review on 16 May 2007. The content of these presentations focused on the Deloitte Financial Model (the “Model”) that was designed based on a sample of physiotherapy practices and the assumptions and methodology adopted to help identify the costs and pricing of operating a sustainable physiotherapy practice.

Deloitte and KPMG have been asked to work together, independently of their clients’ interests, exercising **their** independent professional judgment, to consider the various questions raised during the Review in order to further refine the inputs and assumptions applied within the Model.

This document sets out Deloitte and KPMG’s joint submission in response to further work requested during the Review in accordance with the terms of reference dated 22 May 2007.

Yours faithfully

Andrew Gibbs
Deloitte

Troy Newton
KPMG Corporate Finance

Important notice

This report and the financial analysis undertaken has been prepared for the Reviewer to address the questions raised during the proceedings of public hearings in relation to the Review of the way in which Physiotherapy Services are Funded and Accredited by ACC.

Our instructions have been provided by Mr David Goddard QC and our report conclusions have been made to assist with the costing and pricing assumptions applied in the Model. Our report has been prepared solely for this purpose and should not be quoted or referred to in whole or in part without our prior written consent.

In preparing the responses in our report, our primary sources of information has been financial information supplied by various physiotherapy practices selected during the initial information gathering phase of this assignment. This data has been supplemented by additional information subsequently provided by ACC and NZSP (including subsequent research undertaken and supporting submissions presented during the Review). We have relied on this data and taken into consideration representations made by various experts during the hearing process. We have assumed, without independent verification, the accuracy and completeness of all information provided and research undertaken during the assignment.

We have evaluated the information through analysis and examination for the purposes of forming a view on various costing and pricing assumptions applied in the Model. We have also undertaken some additional research and benchmarking analysis and exercised our own independent professional judgement to support the assumptions adopted where appropriate. However, we have not verified the accuracy of the underlying information provided to us or carried out any form of due diligence or audit.

Our report makes reference to “KPMG/Deloitte Analysis” – this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the underlying data.

Our work commenced on 18 May 2007 and our fieldwork was completed on 24 June 2007. We have not undertaken to update our report for events or circumstances arising after that date. We reserve the right, but are under no obligation, to review our report and modelling assumptions if we consider it necessary in light of information or assumptions which becomes available after the issue of this report.

| | |
|-----------------------------|---|
| Review | Review of the way in which Physiotherapy Services are Funded and Accredited by ACC |
| The Reviewer | Mr David Goddard QC |
| Public Hearing | Public hearing before Mr David Goddard QC, Chairman, held 14 May 2007 to 17 May 2007 |
| NZSP | New Zealand Society of Physiotherapists |
| ACC | Accident Compensation Corporation |
| Deloitte Report | Deloitte ACC Physiotherapy Practice Costing and Pricing Review Final Report – March 2007 |
| Model | Deloitte Costing and Pricing Financial Model |
| Strategic Pay | Strategic Pay Limited |
| Strategic Pay Report | Strategic Pay Report dated 2006 |
| DHB | District Health Board |
| 200X/0Y | Financial year ended 200X/0Y |
| ROI | Return on investment |
| ABP | Activity-based payments |
| ABC | Activity-based costing |
| IPAC Report | IPA Council of New Zealand – Report on Sustainable Costing of General Practice Medical and Accident Services prepared by Deloitte in 2002 |
| EPN | Endorsed Provider Network |

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Introduction

- Deloitte and KPMG have been assisting ACC and NZSP respectively in relation to assessing the costs and pricing of operating a sustainable physiotherapy practice in New Zealand.
- During the Review held before Mr David Goddard QC, Chairman, Deloitte and KPMG were instructed, with the prior consent of their respective clients, to work together, independently of their clients' interests and exercise independent professional judgment to consider the various questions raised during the Review to further refine the inputs and assumptions applied within the Model.
- Further to the terms of reference dated 22 May 2007, this document sets out Deloitte and KPMG's joint submission in response to further work requested during the Review.

Scope of work

- The scope of work has been limited to the areas identified by the Reviewer during the Public Hearing process.
- Our work has been performed in accordance with the instructions and guidance provided with the principal objective of assisting the Reviewer with the task of "working towards identifying a sustainable price for physiotherapy services" – refer Public Hearing transcript page 361 lines 28-33.
- We set out below a summary of the instructions and guidance provided to KPMG and Deloitte in respect of the request for further work and with the objective of providing a sustainable pricing outcome for the physiotherapy profession.
 1. We have considered "how can the Model best be used to shed light on the question of what a sustainable price would be for physiotherapy services?".

2. We have adopted the following guidance on sustainability.

- a) "...a sustainable price would be a price per one hour consultation, say, that would enable a significant proportion of practices to continue to provide those services in the quantity and quality reasonably required by users in the long run." (Refer Public Hearing transcript page 366).
- b) "Given again that this is just one view of the cathedral, the model, it is not a complete answer to what a sustainable price would be, I wonder if on the quality dimension, for example, it isn't most practical to assume that the practices in the survey are providing services at an appropriate quality so that what you have is a snapshot of the cost of providing appropriate quality services." (Refer Public Hearing transcript page 367)
- c) "I am not assuming you should go out and get a whole lot more practice specific data, indeed, any as opposed to looking at the broader population. I think you can proceed on the basis that you don't need to consider whether different structure or size of practice might deliver greater efficiencies and lower costs. The potential for achieving efficiency gains over time can be treated as an issue that sits outside this modelling exercise and would be reflected in some other way in how the output was used." (Refer Public Hearing transcript page 368).
- d) "... if one were looking to set a sustainable price, that wouldn't mean the price necessary to meet the costs of the most expensive practice,...it is unlikely to be as far down to the median to say that half the practices in the country you need to get your costs down to the median level in order to stay in business in the long run." (Refer Public Hearing transcript Pages 368, 369).

Approach

- We have adopted the following approach in relation to addressing the areas identified for further work on an item-by-item basis:
 - Identify areas for further analysis;
 - Consider whether the current methodology is reasonable;
 - Assess the reasonableness of data inputs/sources;
 - Comment on areas in which agreement has not been reached in respect of either the methodology adopted or the data inputs. We describe the basis for, and model the impact of, matters on which we have not been able to reach agreement.

Modelling outputs from changes to the assumptions

- We note that the original Model produced a price per one hour consult of **\$103.51**.
- We have reached a consensus view on a number of the matters raised during the Review (p356) including:
 - Salary adjustments in relation to overtime and additional benefits generally paid in the public sector and not in the private sector;
 - The impact of the Holidays Act 2003 to salary costs;
 - Working capital;
 - Accreditation costs;
 - Treatment of outliers in the sample data;
 - Compliance costs;
 - Regulation consult times;
 - Inflation rates / price indexation;
 - Goodwill assessment; and,
 - Fixed asset values (on a replacement costs basis).
- We have been unable to reach a consensus view on the following issues. As signaled during the Review we describe our views and show the impact on price by way of modelling sensitivities:
 - The cost allocation methodology – ABC and unavoidable cost principles;
 - Base salary levels;
 - Setting the modelling cost point percentile; and
 - The calculation of ROI.

Modelling outputs from changes to the assumptions

- As agreed, we demonstrate the impact of these differences through sensitivity analysis which we set out in the following pages.
- There are limitations with sensitivity analysis generally but particularly when it involves testing multiple input variables, where there are large differences between those alternative inputs and where the order of processing variables affects the output values, i.e. there are non-linear factors affecting the arithmetic.
- These limitations mean that step-wise sensitivity analysis is only meaningful once a starting point of view has been established on the factors upon which KPMG and Deloitte have been unable to reach a consensus view.
- These comments will become clearer to the Reviewer once he compares the sensitivity analysis on page 10 with that presented by Deloitte and KPMG on pages 6 and 8 respectively.

Deloitte view – sensitivity analysis

- The sensitivity analysis undertaken essentially attempts to vary the facts that were provided from the sample practices in an attempt to understand the impact of these changes on a physiotherapy practice. Deloitte does not agree that the outputs from this sensitivity analysis produce a realistic price per hour.
- The use of the midpoint would be sensible if the purpose were to find a price that is between the minimum and maximum suggested prices. The original Deloitte modelling was not designed to find a minimum level of pricing. It was designed to find an appropriate level of pricing based on the inputs from the sample practices. The sensitivity analysis provided, therefore needs to be reviewed with this comment in mind.
- Deloitte do not agree that taking a midpoint view of the sensitivity analysis is appropriate in the situation where KPMG and Deloitte do not agree on the inputs and assumptions in the model. This analysis is not effectively a midpoint given the large number of increases to the actual sample data already factored into the Model.
- Use of a percentile approach would be appropriate the actual costs of a practice and the distribution of those practices was being considered. ACC's previous use of the 87th percentile was based on looking at actual raw consult cost data from sample practices. The model now backs out many of the actual costs and replaces these costs with higher amounts and in some cases arguably near to maximum units. For example business owner salaries (including overtime) are set at consistently higher rates across the practices and the level of capital assets is shown at a rate of approximately \$175,000 per four bed practice. This is considerably higher than the approximately \$57,000 of capital assets per practice from the sample data. This results in prices per hour which are at artificially inflated rates from the data gathered. For this reason we do not believe that the use of a percentile approach is appropriate.
- The results of this work have to be considered in light of what is happening in the wider sector and what is a fair return. We have noted that the number of physiotherapy providers over the past seven years has increased by 37%. If the amount paid by ACC to physiotherapists for consults had not been sustainable over this period one would have expected the number of physiotherapy practices in New Zealand to decline. Further the financial performance of the physiotherapy practice will have a significant bearing on the sustainability of the business over time.

The economic performance of a business varies because of a range of factors, including the market they are operating in and management capability. Ultimately the price should be set at a level that is sustainable and discourages inefficiency and suboptimal performance.

The following table summarises the use of Deloitte’s preferred assumptions together with the impact of the agreed changes. There are four primary areas that we do not agree with KPMG. These are

- The cost allocation methodology – the table opposite applies 67%;
 - Base salary levels – incorporated in the table opposite;
 - Setting the modelling cost point percentile – the table opposite applies the weighted mean; and
 - The calculation of ROI - the table opposite applies 15% et al.

| Modelling Changes | |
|---|--------------------------------------|
| Start Point | 103.52 |
| Agreed Adjustment | Approximate Incremental (\$) Impact |
| Salary Adjustments: | |
| -Salary Rates for Business Owners and Clinical Staff adjusted to allow for overtime rates as applied in DHBs. | |
| Clinical staff base rate of \$50,000 factored into model rather than using salary cost in financials. | \$6.25 |
| -Business owner base rates altered so that metropolitan, urban and rural practices all have a base rate of \$62,930 (including allowance for professional development indirect costs). | |
| Salary costs increased for the impact of additional leave entitlements under the Holidays Act 2003. | \$1.00 |
| An increased allowance in respect of additional benefits generally paid in the public sector and not always paid in the private sector. | \$1.40 |
| Regulation consult times altered to maintain the same ratio of complex and simple consults as for EPN consults. | \$9.75 |
| Asset Base of Practices altered so that the fixed asset base of a physiotherapy practice are equal to the startup costs provided by NZSP for a four bed practice plus initial accreditation costs (note: this impacts depreciation expense, ROI and goodwill calculation) | \$16.55 |
| An ROI on working capital has been factored into the model. | \$1.50 |
| Initial accreditation costs increased to \$20,000 with an allowance for \$3,000 per year of ongoing accreditation costs. | \$0.40 |
| Outliers removed from the model in order to calculate the price per hour. | -\$1.90 |
| Total impact of changes on price for a one hour consult | <u>\$138.52</u> |

KPMG – sensitivity analysis

The table opposite summarises the use of KPMG’s preferred assumptions together with the impact of the agreed changes.

- As noted there are four primary areas KPMG and Deloitte do not agree. These were set out on page 5 earlier.
- The original Model’s starting point for all analysis (i.e. \$103 .51) incorporates Deloitte’s preferred assumptions.
- Therefore the first step in generating a KPMG equivalent base case to the \$103.51 original Model price output is to adjust for KPMG preferred assumptions.
- As we progressively alter the core assumptions in the Model, to effect the changes agreed with Deloitte. This causes the distribution of pricing outcomes to change substantially. This effect is particularly evident in the adjustment to remove outliers.
- Additional comments follow over page.

| Modelling Changes | (\$) |
|---|-------------------------------------|
| Start Point | 103.51 |
| | Approximate Incremental (\$) |
| | Impact |
| KPMG Adjustments | |
| Base salary level for a Business Owner was adjusted to \$90,000 | 10.40 |
| Cost allocation increased to 80% | 21.51 |
| ROI approach was updated to reflect a 20% return on invested capital | 10.37 |
| KPMG Base Case | 145.80 |
| Agreed Adjustment | |
| Salary Adjustments: | |
| - Salary Rates for Business Owners and Clinical Staff adjusted to allow for overtime rates as applied in DHBs. | 22.59 |
| - Clinical staff base rate of \$65,000 factored into model rather than using salary cost in financials. | |
| Salary costs increased for the impact of additional leave entitlements under the Holidays Act 2003. | 1.25 |
| An increased allowance in respect of additional benefits generally paid in the public sector and not always paid in the private sector. | 2.01 |
| Regulation consult times altered to maintain the same ratio of complex and simple consults as for EPN consults. | 13.93 |
| Asset Base of Practices altered so that the fixed asset base of a physiotherapy practice are equal to the startup costs provided by NZSP for a four bed practice plus initial accreditation costs (note: this impacts depreciation expense, ROI and goodwill calculation) | 12.35 |
| An ROI on working capital has been factored into the model. | 1.80 |
| Initial accreditation costs increased to \$20,000 with an allowance for \$3,000 per year of ongoing accreditation costs. | 0.49 |
| Outliers removed from the model in order to calculate the price per hour. | 10.89 |
| Total impact of changes on price for a one hour consult | <u>211.10</u> |

KPMG view – sensitivity analysis

We have strong reservations with the base salary levels adopted in the minimum and Deloitte sensitivity analysis. Selecting any point estimate is unsatisfactory and presents limitations. Our independent view leads us to prefer a business owner salary of \$90,000 p.a. and an average clinical staff salary of \$60,000 p.a.

We do not think that a physiotherapy business owner should expect to recover 95%-100% percent of costs from a single major customer if that owner was also able to generate marginal income that could bear a proportion of fixed overhead costs. On the other hand, the 67% weighting derived under a strict proportional ABC approach seems low.

There are methodological weaknesses with Deloitte's approach of using ABC. Importantly, it ignores matters of economic principle - the ACC is a dominant purchaser and its unique access and service requirements dictate the market. We consider that a reasonable position lies somewhere between the extremes and strongly recommend a point estimate of 80%. In our view failure to set cost allocation at a higher level will heighten the importance of not setting a suitably high percentile.

Unless the price per one hour consultation increases significantly above Deloitte's preferred price point, using the mean will not result in a sustainable pricing outcome.

We have no evidence with which to dispute the 87th percentile adopted by ACC at the outset for EPN pricing. The views of NZSP representatives involved at the time are clear: the use of the 87th percentile was intended to ensure that capability and practice-viability was not put at risk by imposing unsustainably low prices.

In our view then, an appropriate percentile range to determine a sustainable pricing outcome in the long term lies between the 70th and 95th percentile. More importantly the point estimate adopted needs to balance the risk to sustainability that arises from choices as to the other input assumptions.

Selection of input assumptions at the lower end of plausible alternatives should be balanced with a percentile at the higher end. The corollary is also true. Accordingly, our sensitivity analysis adopts a mean point estimate which we consider is more consistent with the salary, ROI and cost allocation assumptions we prefer as set out in Slide 8.

We think that industry participants' expectations for returns are lower than financial investors and consider that a return in the order of 20% pre tax (~14% post tax) may be more appropriate. We are unequivocal that the return should be calculated on the entire investment not just fixed assets.

We dispute the generalised notion that physiotherapy practices have low credit risk. Credit risk will depend on various factors including debt levels, the nature of the cost base and other factors. Credit risk is not directly relevant to ROI which, in this context, more properly relates to the return on both equity and debt capital. The deduction of depreciation from the cost base used to determine ROI is flawed. The cost base should be total cost. The Deloitte approach incorrectly mixes the concepts of return on capital (ROI) and return of capital (depreciation) and results in the understatement of ROI.

Modelling sensitivities

The following analysis provides a view of the combined impact of minimum and maximum assumptions.

Minimum input sensitivity analysis

- The minimum price per one hour consult output from the Model is **\$138.52**.

The following table assumes:

- A 67% cost allocation base.
- Salary bases of \$62,930 (excl overtime) for business owners and \$ 50,000 (excl overtime) for clinical staff.
- Use of the mean rather than a percentile approach.

| Combined minimum effect of the sensitivities | | |
|--|-----------------------|-------------------|
| ROI Approach | Deloitte ROI Approach | KPMG ROI Approach |
| Price Outcome (Price per hour) | \$ 138.52 | \$ 149.96 |

Note: Uses the minimum 67%Cost allocation, base salaries of \$62,930 for business owner and \$50,000 for clinical staff, the mean cost point, and shows the differences in the two ROI approaches.

Maximum input sensitivity analysis

The following table assumes:

- Using a 95% cost allocation base.
- Increased salary bases of \$97,000 (excl overtime) for business owners and \$68,000 (excl overtime) for clinical staff.
- Use of a 95th percentile approach.

| Combined maximum effect of the sensitivities | | |
|--|-----------------------|-------------------|
| ROI Approach | Deloitte ROI Approach | KPMG ROI Approach |
| Price Outcome (Price per hour) | \$ 308.40 | \$ 319.84 |

Note: Uses the maximum of 95%cost allocation, base salaries of \$97,000 for business owner and \$68,000 for clinical staff, the 95th percentile cost point, and shows the differences in the two ROI approaches.

Midpoint sensitivity analysis

- The following tables show the price per hour sensitivity by making the following adjustments:
 - Both tables use an 80% cost allocation base (as opposed to 67% in the agreed modelling changes in the executive summary).
 - Both tables use increased salary bases of \$80,000 (excl overtime) for business owners and \$60,000 (excl overtime) for clinical staff.
 - The first table shows the sensitivity taking an 87th percentile approach.

| Combined midpoint effect of sensitivities at the 87th percentile | | |
|--|-----------------------|-------------------|
| ROI Approach | Deloitte ROI Approach | KPMG ROI Approach |
| Price Outcome (Price per hour) | \$ 219.32 | \$ 230.76 |

Note: Uses the midpoint of 80%cost allocation, base salaries of \$80,000 for business owner and \$60,000 for clinical staff, the 87th percentile, and shows the differences in the two ROI approaches.

- The second table shows the sensitivity taking a mean cost point approach.

| Combined midpoint effect of sensitivities at the mean price point | | |
|---|-----------------------|-------------------|
| ROI Approach | Deloitte ROI Approach | KPMG ROI Approach |
| Price Outcome (Price per hour) | \$ 190.70 | \$ 202.14 |

Note: Uses the midpoint of 80%cost allocation, base salaries of \$80,000 for business owner and \$60,000 for clinical staff, the mean cost point and shows the differences in the two ROI approaches.

- This analysis confirms our preliminary views that cost allocation, salary levels and percentile are the most critical variables impacting cost and price per consult hour.

Issue

1. The appropriateness of the activity-based costing ("ABC") methodology and assumptions currently applied in the Model to estimate costs relating to the provision of EPN/regulation consults.
2. The appropriateness of the mean average (i.e. 67%) cost weighting.

Methodology adopted

An ABC approach has been adopted as the basis for allocating costs. The basic principles of the ABC approach and unavoidable cost were discussed during the Review.

ABC is a costing system that assigns detailed business costs to the products/services based on assumptions about the resources consumed to produce products and services.

The current modelling approach assumes all costs associated with a physiotherapy practice are fully variable and therefore avoidable in direct proportion to the units of output.

Data source

The costing data applied in the activity-based exercise is based on the sample of participating practices included in the initial survey performed in 2005.

The objective of this exercise was to identify the normalised costs relating directly to the provision of EPN/Regulation consults. Some individual practices had difficulty extracting cost data relating to EPN/Regulation consults. The cost allocation basis applied in the Model has therefore been determined on the simplified basis of the weighted average percentage of EPN/Regulation revenue to total revenue.

We note that the revenue and cost split applied in the Model is based on the percentage of EPN/Regulation revenue relevant to each practice. This analysis produced a weighted average of 67%, which was applied in the Model. The same practice data produces a median of 72%, implying a non-normal sample distribution.

The approach provides a factual view based on the sample data collected. The sample was selected to cover a range of types of location and operating circumstances. It remains uncertain whether or not the sample data is representative of the general physiotherapy practices in New Zealand.

KPMG comments

The ABC approach adopted does not take into consideration fixed or unavoidable costs that are primarily related to the provision of EPN/Regulation services.

As noted, this approach assumes all cost data is divisible into bundles of minutes corresponding with appointments, ignoring the impact of demand behaviour on staffing requirements and ignoring fixed and semi-fixed costs that will be incurred irrespective of other revenue generating services provided.

We have, therefore, considered an alternative approach to take into consideration the significant proportion of fixed and semi-fixed costs that are largely unavoidable costs of providing EPN/Regulation services.

The NZSP in its submissions to date has provided some guidance on their view of the proportion of costs it considers to be largely fixed for the provision of EPN/Regulation consults. That data suggests a range of between 95% to 100% of costs are unavoidable. The actual percentage depends on the type of cost being considered.

Activity-based costing

The ABC approach is a fairly common, but not widespread, accounting cost allocation approach adopted across a range of industries (18% adoption rate amongst larger industrial companies in the UK – Innes 2000). The particular approach to ABC adopted by Deloitte assumes that all fixed and semi-fixed costs are fully proportionate and can be allocated to the particular revenue stream that generates the cost.

Prior to the Public Hearing, the Model contained a mixture of historical and forward looking input assumptions. However, to ensure that the sustainability objectives of the Review are achieved, the key financial assumptions adopted in the Model have been revised to ensure that they are consistent with notions of a sustainable outcome for a significant proportion of physiotherapy practices.

ABC requires three conditions be met to ensure the output is not misleading (Noreen 1991). Most importantly, the relevant costs must be proportionate to activity (i.e. linear) and avoidable. Research employing databases of hospital costs found the linear condition was not met (Noreen and Soderstrom 1997). In addition, the avoidability test is not met, the ABC approach should be applied appropriately in conjunction with the unavoidable costs principles. That is, unavoidable costs should be removed from the cost pool.

One of the key assumptions in the Model is that all costs are linearly related to revenue. KPMG has strong reservations about this assumption and prefers an approach which recognises the unique bundle of physiotherapy services funded by ACC and the availability. We consider that there is evidence that certain practice costs are unavoidable in the course of delivering that bundle of services.

There has also been discussion on whether the sample is representative of the general physiotherapy population and how to deal with outliers. We note that a request was made for additional verifiable data from both ACC and NZSP to assist with this process, particularly in relation to the percentage of EPN/Regulation revenue relative to other sources of income.

Unfortunately the further data provided by ACC contradicts earlier information provided to the review and we are reluctant to use that data until suitable reconciliations have been made between the data and its sources.

In relation to the survey data we make the following comments:

The sample data includes a high proportion of practices operating under the activity-based payments ("Non EPN/ Regulation") contract with ACC:

- ABP revenue within the sample data represents approximately 11% of total revenue and 17% of EPN/Regulation revenue during 2004/05;
- The impact of such a high proportion of other Non EPN/ Regulation practices in the sample data is likely to underweight the EPN/Regulation percentage relevant to the entire population compared with the sample data as applied in the Model.

Given the significance of the weighting on the final Model outcomes we have suggested two possible alternatives to help mitigate this issue:

- Perform a subsequent survey of physiotherapy practices targeted solely at addressing this issue to provide further guidance on the percentage of EPN/Regulation revenue to total revenue;
- Rather than rely on a mean, consider use of median EPN/regulation split as the sample is not representative. We note that the sample data is not a normal distribution. The same data produces a mean of 67% and a median of 72%.

KPMG recommendation

In KPMG's opinion a business owner should not expect to recover 95%-100% percent of costs from a single major customer if that owner was also able to generate marginal income that should bear a proportion of those costs. On the other hand the 67% weighting derived under the strict proportional ABC approach seems low. There are methodological weaknesses with Deloitte's approach to use of ABC. Importantly it ignores matters of economic principle - the ACC is a dominant purchaser and its unique access and service requirements dictate the market. We consider that a reasonable position lies somewhere between the extremes and strongly recommend a point estimate of 80%. In our view, failure to set allocations at a higher level will heighten the importance of not setting a suitably high percentile, which could result in an unsustainable price.

Deloitte comments

ABC approaches have commonly been used in determining costs in health settings. In Deloitte's experience, prices for publicly funded health and disability services have tended to be set from an historical base rather than a more subjective zero base. The variation in provider structures makes using a zero-based approach suggested by KPMG inappropriate.

In an efficient market the market sets the price for goods and services. In a monopoly type situation, like the situation with physiotherapists there is no market which sets the price for goods and services. There needs to be a basis to determine the "ball park" let alone set the rules" to play the game. Historical costs is a way to define the "ball park" to negotiate efficient prices.

The principle of ABC is to allocate all costs to specific business activities. It assumes that all costs associated with a physiotherapy practice are fully variable and therefore avoidable. This is an appropriate assumption given that in the long term all costs are in fact variable as there is the ability to size them to fit capacity required to supply volumes to meet demand. From this perspective average cost is the best source of historical data. Second guessing optimal volume in an optimal world is not an appropriate approach.

For the purposes of this exercise the data collected from the sample practices needs to be assumed to be representative of the physiotherapy population as a whole. It would be unfair to treat the sample data as representative on some counts and not on others.

The sample produced a mean average revenue split of 67%. This is a factual number based on the actual data. We have not been able to gather further data to show it is closer to NZSP suggested revenue split of approximately 80% of revenue being generated from EPN and Regulation treatments.

If the factual results of the sample showed that 95-100% of costs were attributable to EPN and Regulation treatments then the rationale for the unavailability argument would be stronger.

NZSP state that private consults earn approximately the same revenue per consult and have approximately the same labour and other content as EPN/Regulation work. Using unavoidable cost principles would therefore load more costs onto ACC related consults instead of allocating these evenly between private and EPN/Regulation work. KPMG's contention that a majority of fixed costs are solely there to service ACC needs can only be justified if they quarantine the assets for ACC only patients. In a multi-purpose facility this is hard to justify. Otherwise one class of patient (ACC) is cross subsidising another class of patient (private). Arguably in order to provide consults to private patients a large proportion of the costs would be considered unavoidable too.

Additional Data from ACC

A request was made for additional verifiable data from both ACC to assist with this process, particularly in relation to the percentage of EPN/Regulation revenue relative to other sources of income. The data we received from ACC did contradict earlier data provided to NZSP. Specifically in relation to the amount of ABP revenue. We understand that the differences are due to the data provided to Deloitte being GST exclusive and based on the service date and not the payment date. The ABP contract was also split into a variety of different ABP contracts over the 05/06 period including: Activity Based Programmes, Activity Based Programmes - Standard and Activity Based Programmes - Work Hardening. The data provided to NZSP only appears to have been provided in relation to the contract called Activity Based Programmes and therefore did not include the other two ABP contracts.

Cost allocation method (continued)

The model shows a percentage of revenue from ACC Contract – ABP. The reference to ABP is one example of the type of ACC contract revenue included in the model. There are other ACC revenue amounts which would fall into this category including revenue related to the ACC Hand Therapy Contract.

The Model has caused some confusion in this regard and we note that the comment that 11% of total revenue from the sample data relates to ABP revenue is incorrect. This 11% represents other ACC contract revenue. This point is supported by the fact that total ACC ABP revenue in 2004/05 represented only \$100,706 from the data provided by ACC and yet the sample practice data for only 23 practice sites showed a total of \$928,476 coming from ACC Contract category.

Deloitte Recommendation

For the purposes of this exercise the data collected from the sample practices needs to be assumed to be representative of the physiotherapy population as a whole. It would be unfair to treat the sample data as representative on some counts and not on others. No further verifiable data has been gathered from NZSP or ACC to counter the use of a 67% EPN/Regulation revenue split. We would recommend that a 67% EPN/Regulation revenue split continue to be used for the purposes of the Model.

Issue

Determine whether the salary assumptions adopted in the Model for business owner-physiotherapists and other physiotherapists/clinical staff reflect sustainable salary levels in the long-term.

Methodology adopted

- Estimated salary levels were benchmarked against public sector salary levels as at December 2004.
 - Business owner-physiotherapists – base salaries were calculated based on the salaries paid to a team/clinical leader within a DHB. An adjustment was made for metropolitan, urban and rural areas.
 - Non-business owner physiotherapists and clinical staff – are based on actual costs but were benchmarked to public sector rates.
- The assumed base salary levels were adjusted for:
 - Time not captured in the sample financial data - based on the average results from the survey data at normal rates;
 - Known increases to pay rates in the public sector as a result of the DHB MECA pay increases; and
 - An allowance for differences between salary benefits generally paid in the public sector and not in the private sector.
- The impact of known future costs have not been included in the Model – such as the impact of Holidays Act 2003 on salary levels.

Data source

- Business owner-physiotherapists – sourced from DHB Salary Survey data dated December 2004.
- Non-business owner physiotherapists and clinical staff – originally this was based on practice sample data but this is now sourced from DHB Salary Survey data dated December 2004.
- The 2006 Strategic Pay Report commissioned by NZSP has not been adopted in the Model.

KPMG and Deloitte comments

KPMG and Deloitte have agreed a number of adjustments that should be made to the Model base salary assumptions to reflect:

- **Overtime**

The cost of additional time worked above standard hours (from the sample data collected) using overtime rates applicable in the public sector. Based on the additional information provided by Ms Campbell during the Public Hearing, additional costs associated with overtime will be as follows:

- Overtime hours for any week are averaged over 5 working days;
- First 3 overtime hours costed at 1.5 times normal standard rates; and
- Double time for any overtime hours worked after the first 3 hours or on Sundays.

- **Impact of Holidays Act 2003**

KPMG and Deloitte have agreed to incorporate an allowance for the impact of the Holidays Act 2003 calculated as 2% of salary costs from 2007/08 onwards. Incorporating such an allowance would increase the price per hour by approximately \$1.00.

- **Additional benefits that are generally paid in the public sector but not always in the private sector**

KPMG and Deloitte have agreed to make a further adjustment for additional benefits paid in the public sector but not always paid in the private sector. This is covered in further detail in item 11 (page 28).

The data from the sample practices showed that a number of the benefits were paid for. Approximately 50% of the 23 practices did pay for some professional development cost and conference fees.

Approximately 25% of the sample practices paid for all or part of the cost of annual practicing certificates. Approximately 50% of the sample practices paid all or part of the NZSP fees. Approximately 33% of the sample practices paid for all or part of the special interest group fees.

The additional adjustment to salary levels for physiotherapists/clinical staff is approximately \$2,500 per annum on average.

- **Geographic location**

As DHB Salary Survey data does not distinguish between metropolitan, urban and rural employment we have removed this distinction in the Model.

- **In addition, there are other costs associated with the mandatory professional development requirements of 40 hours per annum on average (based on 120 required hours over 3 years).**

We have used the incremental costs associated with paying for a locum professional as a proxy for these costs. NZSP has advised that on average locum rates are the same as employed staff. These costs have been captured as additional compliance and business owners' costs. An allowance of 1.5% of senior physiotherapists' salaries has been incorporated to account for locum costs incurred for when staff are on professional development courses.

- **Impact of overtime changes**

Changes have been made to the Model to allow for the payment of overtime rates to business owner physiotherapists and other clinical staff (time and a half for the first three hours and double time for hours above three hours). The impact of providing for overtime on salary rates is as follows.

- Average business owner Physiotherapist salary in the revised Model (including overtime rates): approximately \$110,500 per FTE Business Owner Physiotherapist. In the original version of the Model this was approximately \$72,500-\$78,500.
- Average clinical staff salary in the revised Model (including overtime rates and costs not always paid for in the private sector): approximately \$58,000 per FTE clinical staff member. In the original version of the Model this was approximately \$51,500. Note: The updated version of the Model has now replaced actual clinical salary costs with a base salary of \$50,000 based on DHB data, similar to the approach used for business owners.

- **No consensus on sustainable salaries**

In the absence of directly comparable data, in our view it is extremely difficult to determine the level of sustainable salaries for a physiotherapy practice. This is particularly difficult for business-owners who carry the risks and responsibilities associated with owning a business.

The range of possible salaries, between the DHB survey data and the findings within the Strategic Pay report on sustainable salaries, is so great that, given the absence of any additional information with which to narrow the range, it is proposed that the Model be updated to provide for a range of salary levels to show the impact on price.

Deloitte Comment

We note the point made by Mr Summers of Strategic Pay in answer to questions by the Reviewer during the public hearing that salary levels in New Zealand are almost never lower in Australia than they are in New Zealand (page 414 public hearing).

We understand that ACC has provided separate comment on the applicability of the Strategic Pay report to determining the level of sustainable salaries. We note that using salaries of \$90,000 p.a. for a business owner and \$65,000 p.a. for clinical staff equate to approximately \$150,624 p.a. and \$75,430 p.a. respectively once overtime is also included.

KPMG Comment

For sensitivity analysis purposes we adopt the following:

- Business owner base salary - \$90,000;
- Clinical staff base salary - \$65,000.

Issue

Determining an appropriate percentile or range for pricing purposes to achieve a sustainable outcome for the majority of physiotherapy practices.

Methodology adopted

The costing and pricing analysis in the original Model adopted the mean cost/pricing point (specifically the weighted average cost/price). This corresponded with the 44th percentile of the sample data modelled cost/pricing points.

Data source

- The primary data source is the sample data gathered from the 23 practice sites during the initial survey.
- The sample data has been adjusted or normalised to allow for comparison of cost data and for price setting purposes.

Normalisation and other adjustments include:

- DHB benchmarked salary levels;
- Part-period cost adjustments;
- Identifying other relevant costs not included in the sample data;
- Depreciation and head office cost allocations; and
- ROI allowance.

KPMG comments

We have taken into account the guidance provided during the Public Hearing in relation to achieving a sustainable outcome for the significant proportion of practices in the long run. Prior to the Public Hearing, the Model contained a mixture of historical and forward looking input assumptions. However, to ensure that the sustainable objectives of the Review are achieved, the key financial assumptions adopted in the Model must ensure that they are consistent with notions of a sustainable outcome for a significant proportion of physiotherapy practices.

In our view, the ACC data Deloitte provides in relation to the number of unique providers gives no insight into the question of sustainability. The data may be interpreted various ways including:

- Increasing fragmentation;
- A disconnect between the supply-side, including graduate production, and prospects for economic returns;

- Changing purchaser strategies;
- Market changes associated with the growth of fitness centres; as well as
- Increasing demand regardless of the sustainability of pricing arrangements.

In our view, the use of a percentile (or percentile range) that provides a safety zone should be adopted which ensures the overall sustainability of the profession. In our view there is considerable risk in using a blunt mechanism such as a percentile measure to send efficiency signals particularly when local factors, including geographic-related cost drivers, can vary so significantly.

Deloitte continues to prefer the mean rather than a specific percentile, together with input assumptions which are lower than KPMG's. The use of the Model weighted average implies that approximately half of the practices in the country may need to drive their costs down to this level to operate in the long-term.

Following the removal of outliers, effecting other agreed changes plus the combined effect of Deloitte's other preferred assumptions, Deloitte's mean cost/pricing point now corresponds with the 70th percentile of the sample dataset. It is clear that the non-normal distribution of the sample data will present the Reviewer with considerable challenges.

Unless the price per one hour consultation increases significantly above Deloitte's preferred price point, using the mean will not result in a sustainable pricing outcome.

We have no evidence with which to dispute the 87th percentile adopted by ACC at the outset for EPN pricing. The views of NZSP representatives involved at the time are clear: the use of the 87th percentile was intended to ensure that capability and practice-viability was not put at risk by imposing unsustainably low prices.

In our view then, an appropriate percentile range to determine a sustainable pricing outcome in the long term lies between the 70th and 95th percentile. More importantly the point estimate adopted needs to balance the risk to sustainability that arises from choices as to the other input assumptions.

Selection of input assumptions at the lower end of plausible alternatives should be balanced with a percentile at the higher end. The corollary is also true. Accordingly, our sensitivity analysis adopts a mean point estimate which we consider is more consistent with the salary, ROI and cost allocation assumptions we prefer as set out in Slide 8.

Deloitte comments

Use of a percentile approach would be appropriate if you were considering the actual costs of a practice and considering the distribution of those practices. ACC's previous use of the 87th percentile was based on looking at actual raw consult cost data from sample practices. The Model now backs out many of the actual costs and replaces these costs with higher amounts and in some cases almost maximum amounts. For example business owner salaries (including overtime) are set at a consistent rates across the practices and the level of capital assets is shown at a rate of approximately \$175,000 per four bed practice. This is considerably higher than the approximately \$57,000 of capital assets per practice from the sample data. This results in prices in the Model which are inflated compared to the actual data gathered from the practices. For this reason we do not believe that the use of a percentile approach is appropriate.

When we questioned ACC about the use of the percentile basis in other ACC contracts they informed us that no other contracts between ACC and providers use a percentile basis and that a percentile approach is not a standard approach for ACC.

The 50th percentile does not mean that 50% of physiotherapy practices will not achieve a sustainable outcome and 50% conversely will. The financial performance of the business will have a significant bearing on the sustainability of the business over time. It is a known fact that the economic performance of a business will vary because of a range of factors, some include management capability and the level of revenue and cost management. This issue means that it is particularly difficult to determine a percentile (or even a range).

Setting an appropriate percentile will provide pricing signals for practices to invest or dis-invest in services. Using an average price still drives change. Striking the percentile at a lower price will drive different rates of change. For example, providers exiting. Likewise striking a percentile at a higher than average price will enable more providers to take super-normal profits and potentially reduce their drive for continuous improvements in operational performance.

There are challenges in terms of setting an appropriate percentile. There is no comparable industry data that Deloitte have been able to source to assist in this discussion.

Setting an appropriate percentile needs to ensure that there is a sustainable physiotherapy sector going forward. It is noteworthy to consider the number of physiotherapy providers with New Zealand over the past seven years. If the amount paid by ACC to physiotherapists for consults had not been sustainable over this period one would have expected the number of physiotherapy practices in New Zealand to decline. Data gathered from ACC however, shows the opposite trend.

Information gained from ACC in relation to the number of unique physiotherapy providers (excluding locums and DHBs) who billed ACC from 1999 shows a steady increase of physiotherapy providers as a practice.

| | |
|------------|-------|
| •1999-2000 | 1,286 |
| •2000-2001 | 1,365 |
| •2001-2002 | 1,453 |
| •2002-2003 | 1,557 |
| •2003-2004 | 1,681 |
| •2004-2005 | 1,830 |
| •2005-2006 | 2,051 |

Final modelling adjustments

Refer to the sensitivity analysis.

Issue

Determine whether the impact of the Holidays Act 2003 and proposed Kiwisaver legislation should be included in the pricing analysis.

Methodology adopted

The Model assumptions in relation to holiday pay costs are based on historical data. The impact of the Holidays Act 2003, which increases annual leave entitlements to four weeks from 1 April 2007, has therefore not been considered in the Model.

Data source

The Model assumptions are based on benchmark 2004/05 DHB data for business owner-physiotherapists and clinical staff and 2004/05 sample data for administrative staff.

KPMG and Deloitte comments

KPMG and Deloitte have agreed that the increase in salary costs relating to the impact of annual leave entitlements from 1 April 2007 should be included in the pricing analysis.

We have agreed that the impact should be captured as a 2% increase to salary costs from 2007/08 periods onwards.

KPMG and Deloitte also agree that Kiwisaver will have an impact on costs associated with employing staff. This will include the compulsory employer contribution component, which caps at 4% of gross salary from 2011, together with any increased indirect costs associated with compliance.

Final modelling adjustments

Salary costs should be increased by 2% per annum from 2007/08 onwards. The impact of increasing salary costs by 2% per annum from 2007/08 is an increase in the price per hour by approximately \$1.00.

Issue

Determine an appropriate basis on which to estimate goodwill.

Methodology adopted

Goodwill has been determined based on a goodwill loading factor, or “price to book” ratio, of 1.48 times. Goodwill is amortised over a 10 year period.

Data source

The goodwill loading factor is based on the practice sample data – 14 of 23 practices included in the sample data provided financial data on goodwill.

KPMG comments

The previous modelling approach was not a representative basis for estimating the goodwill of a sustainable business. That approach had the potential to understate goodwill and potentially other intangibles upon which a ROI is also due.

In particular the estimated replacement costs on which goodwill was calculated were understated and did not differ materially from the historic cost of assets.

Deloitte adopts a multiple of revenue approach in their IPAC report (2002) in relation to sustainable costing of General Practices in New Zealand.

We have considered price to book ratios for a selection of medium size listed companies in New Zealand. Our analysis suggests that a price to book ratio of 1.48 times is significantly lower than the implied price to book values before any discounts to reflect small size and relative liquidity. For comparison purposes, in the table below, we convert the IPAC report’s revenue multiple to its price to book equivalent ratio.

| Goodwill analysis | |
|---|-----------------------------|
| | Implied price to book ratio |
| New Zealand listed companies (adjusted for small size and liquidity discount of 10% to 70%) | 0.8x to 2.4x |
| Deloitte IPAC Report – implied ratio based on goodwill estimate as a % of revenue | 2.4x to 2.8x |
| Deloitte Report (NZSP) – implied ratio | 1.48x |

Source: Deloitte Report; PWC Business Valuation – April 2007; KPMG Analysis

If estimating goodwill (which reflects the investment in intangible assets only) is to be estimated based on a ratio of the fixed asset base of physiotherapy practices then we recommend the adoption of replacement costs based on the estimate of practice set-up costs of \$175,000 per practice provided by NZSP included in the appendices of the Deloitte Report. Otherwise we recommend that a revenue based goodwill loading factor, comparable to the revenue multiple approach Deloitte adopted in the IPAC report, should be adopted.

Deloitte comments

The use of a multiple of revenue approach in Deloitte's IPAC report (2002) in relation to sustainable costing of General Practices in New Zealand was used because this was an appropriate industry benchmark to use for GP practices as was stated in the IPAC report.

We note that levels of goodwill in health related practices today are generally at significantly lower levels than were being achieved in the past and are at lower levels than were being achieved in 2002.

The data gathered from sample practices showed an average capital base of approximately \$57,000. The change to a capital base of \$175,000 is based on the assumption that these costs are appropriate costs for the setup of an average physiotherapy practice. We have not tested this assumption with physiotherapy practices or with ACC. We note that the costs provided were for an Auckland based physiotherapy practice and included some optional items such as a Physio room and some optional IT equipment.

The existing goodwill loading factor of 1.48 has then been applied to this adjusted capital base. The Model is therefore potentially overestimating goodwill because if the value of the asset base is increased to reflect new values one would not expect an increased goodwill component.

Because the adjusted capital base represents the costs of setting up a new practice this is not reflecting the reality of having a sample of practices where some assets are old, some are new and the level of goodwill would vary between practices. We therefore have concerns about using a capital base of \$175,000. However, for the purposes of this exercise we have agreed to undertake modelling adjustments based on this capital base to understand what the impacts on price would be.

Final modelling adjustments

Goodwill is now calculated on an adjusted asset base of approximately \$175,000 plus initial accreditation costs and a working capital allowance.

Issue

Determine whether the ROI methodology and the specific calculation provide a reasonable and sustainable return to business owners in the long-term.

Methodology adopted

The Model applies a 15% ROI factor to the estimated replacement cost of fixed assets and goodwill. This is described as an interest expenditure item in the Model.

Data source

- Deloitte has estimated the ROI of 15% based on an assessment of the risk associated with operating a physiotherapy practice.
- Other key sources of information:
 - Deloitte estimate of asset replacement costs; and
 - The sample data is used to estimate goodwill.

Footnote 1: EBIT means earnings before interest and taxes, a common measure of earnings for valuation purposes.

KPMG comments

- We have concerns about the methodology adopted to estimate ROI.
- Potential issues include:
 - Basing returns for a professional services business solely on the fixed assets and estimated goodwill is unrealistic for a business that is extremely reliant on the expertise and experience of the physiotherapists providing the services.
 - 15% pre tax (~10% post tax) is a low return expectation for a small business that lacks investment liquidity and is a price taker for the majority of its services. In valuation terms, this corresponds with an EBIT¹ multiple expectation of 6 to 7 times earnings, which we consider is unreasonably high for a small business in New Zealand.
 - We consider that a financial investor would be seeking a return of 25% to 35% for a business of the size and scope of the notional average physiotherapy practice. In valuation terms, this corresponds with an EBIT multiple expectation of 3 to 4 times earnings, which is much closer to transaction multiples for smaller businesses as observed in the market.
 - However, we think that industry participants expectations for returns are lower than financial investors and consider that a return in the order of 20% pre tax (~14% post tax) may be more appropriate. We are unequivocal that the return should be calculated on the entire investment not just fixed assets.
 - We dispute the generalised notion that physiotherapy practices have low credit risk. Credit risk will depend on various factors including debt levels, the nature of their costs and other factors. We note that these are low across the sample practices.
 - Credit risk is not directly relevant to ROI which, in this context, more properly relates to the return on both equity and debt capital. Equity capital is much riskier than debt capital and accordingly typically demands a significant risk premium over debt.
 - The deduction of depreciation from the cost base used to determine ROI is flawed. The cost base should be total cost. The Deloitte approach incorrectly mixes the concepts of return on capital (ROI) and return of capital (depreciation) and results in the understatement of ROI.
- If a profit and loss statement was prepared for the notional mean average individual practice generated by the original Model, the margin between revenue and costs would be minimal. Based on our analysis of the Model assumptions, total ROI (returns over the 23 practices) is estimated to be around \$139,000. This converts to an average return of \$6,050 per annum per practice for EPN/regulation services which, in our judgement, seems inadequate to provide a sustainable return over the long-term.

Deloitte comments

- A 15% ROI reflects the relatively low credit risk of a physiotherapy practice given that a major source of its revenue is being provided by ACC. This is a reason for having a lower ROI than with other small businesses operating in the New Zealand market.
- Given that the Model is calculating ROI on capital assets, initial accreditation costs and goodwill this is providing a return of over 15% on the actual level of investment in the business.
- The best approach to determining what is an appropriate ROI will be to consider the overall returns to the business owner (combining Salary and ROI) to determine if this is reasonable.
- The current approach to ROI is designed to ensure that the ROI factored into any price reflects the fact that the average level of investment in the business will be lower than the initial investment, as the cost of assets are recovered through the depreciation component of the price.
- That we undertake a reasonableness review of ROI outputs given varying agreed input assumptions including the implied capitalisation rate for a small business operating in the New Zealand market if this capitalisation rate is appropriate to apply to physiotherapy practices.

KPMG and Deloitte agree

- The ROI calculation should take into consideration a return on working capital and accreditation costs – refer to relevant sections in this report for further information.

KPMG and Deloitte do not agree on one element of the ROI calculation

KPMG believes that the ROI calculation should not be calculated on a capital base that is being depreciated annually.

Deloitte disagree and believe that the capital base should be adjusted annually for depreciation.

Final modelling adjustments

The ROI calculation is based on the notional fixed asset setup costs of approximately \$175,000 plus a goodwill loading factor of 1.48 times and also takes into consideration a return on working capital and accreditation costs.

Using the KPMG ROI calculation approach under the Deloitte base case Model the output is approximately \$11 per hour greater than under the Deloitte approach:

| ROI Approach Sensitivity | | |
|--------------------------------|-------------------|---------------|
| | Deloitte Approach | KPMG Approach |
| Price Outcome (Price per hour) | \$ 138.52 | \$ 149.96 |

Deloitte Reasonableness Review of Returns to Business Owners

We have undertaken an analysis of the profit per practice based on the preferred Deloitte assumptions together with agreed changes. The earnings before tax, owner salary and overtime per practice using a price per hour of \$138.46 is \$138,902 on revenue of \$449,983.

KPMG comment

The presentation of the Deloitte analysis of returns to business owners is potentially misleading as it includes base salary and overtime earnings. We have other concerns with the Deloitte analysis but in the time available we have not been able to complete our review.

Issue

The appropriateness of the MS Excel financial function currently used in the Model to calculate ROI.

Methodology adopted

The Model's pricing analysis is claimed to be a 15% required rate of return on the adjusted historic cost of fixed assets and estimated goodwill. This cost is described as an interest expenditure item within the Model. The cost is calculated in the Model using the PMT function in MS Excel. The PMT function determines the cost as the interest expense component of the payments assuming constant payments and a constant interest rate. Next, the formula deducts depreciation. The Model formula is:

$$(\text{Capital base} * \text{ROI} \%) - (\text{Capital base} * \text{depreciation rate}) = \text{ROI} \$$$

Data source

- The Model has applied an estimated 15% ROI factor to the estimated replacement cost of fixed assets and goodwill
- Capital assets – based on practice sample data of historic cost of fixed assets.
- Goodwill – estimated as 48% of the value of the capital assets. The goodwill loading factor is based on the practice sample data – fourteen practices included in the sample provided data in relation to goodwill.

KPMG comments

- The PMT function is not necessary for the purpose it has been used in the review. The simplest approach is to calculate ROI as: Capital base * ROI % = ROI \$
- In our view the deduction of depreciation from the estimated historical cost of capital items to determine ROI is inappropriate. ROI should be calculated on the total investment in the capital base. As noted earlier the Deloitte approach incorrectly mixes the concepts of return on capital (ROI) and return of capital (depreciation) and results in understatement of ROI.
- Based on KPMG's analysis of the Model, total interest (or returns over the 23 practices) is estimated to be \$139,145. This equates to an average return of \$6,050 per annum per practice for EPN/regulation services.
- Given the adjusted historic cost capital base of the 23 survey respondents is \$2.1m, we would have expected a total return of at least \$310,000 (based on a 15% ROI) to be factored into the pricing. This equates to \$13,478 per annum per practice.
- We note that our comments on Item 14 (costs of fixed assets) will also impact this calculation.

Deloitte comments

- The model calculates a price based on operating costs, depreciation and a return on the average level of investment in assets.
- The approach is intended to ensure that the return on investment factored into any price reflects the fact that the average level of investment in the business will be lower than the initial investment, as the cost of assets are recovered through the depreciation component of the price.

Final modelling adjustments

Deloitte and KPMG have shown the impact of their different approaches to calculating an ROI in the executive summary of this report.

Issue

Determine whether a return on working capital is appropriate and the basis for calculating the return.

Methodology adopted

The Model does not currently provide for a return (via ROI) on working capital.

Data source

Not applicable.

KPMG and Deloitte comments

- KPMG and Deloitte have agreed the following:
 - A return on working capital should be incorporated in to the Model;
 - Working capital is based on a 14-day discrepancy between accounts receivable and accounts payable; and
 - The working capital calculation should exclude non-cash items such as goodwill amortisation and depreciation.
- Data which Deloitte obtained from the ACC shows that ACC receives 46% of invoices within the first week of the service date. 61% of the invoices were paid by ACC within the first three weeks of the service date.

Final modelling adjustments

- The Model ROI calculation has been updated to incorporate a return on working capital based on a 14-day discrepancy between cash receipts and payments.
- The calculation estimates total cash costs and multiplies this by 14/365 to produce a working capital requirement. The return on investment is then calculated including this requirement.
- The estimated price impact of the adjustment is approximately \$1.50 per consult hour.

Issue

Determining an appropriate quantum for initial accreditation costs and whether a return on accreditation costs is appropriate.

Methodology adopted

The Model currently makes an allowance for initial and ongoing accreditation costs associated with accredited practices.

No allowance is currently made for a return on investment associated with accreditation costs.

Data source

The estimated initial cost of \$10,000 is based on the estimate provided by ACC.

KPMG and Deloitte comments

- KPMG and Deloitte have agreed the following:
 - The Model should be adjusted to incorporate an allowance for a return on accreditation costs; and'
 - The initial accreditation costs estimates provided range from \$10,000 (sourced from ACC) to \$20,000 plus (estimated by Mr Bruce Monkton).
- We have not received any information to support the \$10,000 estimate provided by ACC. We have therefore relied on the submission provided by Bruce Monkton during the Public Hearing to estimate initial accreditation costs – estimated to be in excess of \$20,000.
- We have also allowed for ongoing accreditation costs of \$3,000 per year.

Final modelling adjustments

- The Model has been updated to incorporate a return on accreditation costs.
- Initial accreditation costs are estimated to be \$20,000 (amortised over 10 years) with ongoing accreditation costs of \$3,000 per year.

Issue

Determine whether the sample of practices included in the initial survey are representative of the overall population of physiotherapy practices in New Zealand.

Consider whether it is appropriate to exclude the outliers from the sample data for costing and pricing purposes.

Methodology adopted

The Model currently includes all of the sample data from the participating practices for costing and pricing purposes.

The sample data has been adjusted in the following areas:

- Salary levels;
- Part-period cost adjustments;
- Identifying other relevant costs not included in the sample data;
- Depreciation and head office cost allocations; and
- ROI allowance.

Data source

The primary data source is the sample data gathered from the 23 practice sites during the initial survey. Of the 23 sites selected, 15 practices were from metropolitan locations, 6 were urban locations, and 2 were rural locations.

KPMG and Deloitte comments

- Deloitte worked with NZSP in order to obtain a representative sample of practices from its members. Unfortunately a large proportion of the practices on NZSP's initial selection list declined to participate. NZSP subsequently identified additional practices in order to get to the original target sample size.
- All agree that the practice survey data is not a statistically random sample of New Zealand practices, in terms of either the manner in which they were chosen, or the sample size. In spite of this, there is an implicit assumption that the data collected is generally representative enough to provide a "rough" estimate of historical costs of a typical physiotherapy practice.
- In our view the task of securing accurate and reliable financial data for costing and pricing purposes across a statistically significant and larger sample group would be difficult given the timeframes for this review.
- We have considered the impact of outliers within the sample data and have agreed with Deloitte to exclude the outliers from the analysis. Note that at present the outliers in the Model relate to data that is more than one standard deviation above or below the mean.
- We have not been provided with any additional sample data subsequent to the Public Hearing.

Final modelling adjustments

- Outliers have been excluded from the Model.

Issue

Determine whether the impact of different geographic locations should be included in the pricing analysis for metropolitan, urban and rural practices.

Methodology adopted

The Model distinguishes between the cost associated with different geographic locations when establishing business owner salaries. No other explicit assumptions are made in the model to reflect geographical cost/price divergence.

The sampling methodology adopted selected a variety of practice types and locations to participate in the survey. The averaging applied in the model collates the cost structures of the different practices to derive one final price representative of the average practice.

Data source

The primary data source is the sample data gathered from the 23 practice sites during the initial survey. Of the 23 sites selected 15 practices were from metropolitan locations, 6 were urban locations, and 2 were rural locations.

KPMG and Deloitte comments

- KPMG and Deloitte agree that, despite the apparent discrepancies in sustainable costs of delivery of services across geographical locations, it is more practical to come up with a single sustainable price for all practices rather than a number of different sustainable prices for different geographic locations.
- Factors we have considered include:
 - The higher costs of delivering services in the more densely populated areas are offset by a number of non-quantifiable benefits including high demand, superior growth opportunities, and greater access to supply of clinical staff;
 - The majority of practices will be urban or metropolitan;
 - Differentiating the price across locations could act as an incentive for relocation of practices out of rural and/or urban areas thus limiting access in these areas and restricting ACC's ability to meet its policy objectives; and,
 - Locational pricing could result in other gaming behaviour with unintended consequences.
- Balancing these geographically driven costs and benefit factors is highly subjective. Accordingly, we believe it is more practical to derive a single sustainable price, but give careful consideration to the spread of locational cost structures when establishing the percentile for appropriate sustainable pricing over different cost points.

Final modelling adjustments

- We have removed the differences so that base salary amounts are the same between Metropolitan, Urban and Rural practices.

Issue

Determine the quantum of direct and indirect compliance costs that should be included in the pricing analysis.

Methodology adopted

Compliance costs are based on historical data.

The direct costs of the mandatory professional development requirements introduced after the survey data was collected are reflected in the Model as a general adjustment to base salaries for non-business owner physiotherapists and other clinical staff. The adjustment reflects additional benefits generally paid in the public sector and not paid in the private sector, such as a professional development allowance, conference fees, annual practicing certificate fees, and NZSP fees.

Data source

Sample data from the initial survey in relation to 2004/05.

Information in relation to additional benefits that are generally paid for in the public sector and not in the private sector has been sourced from the sample data and DHB Salary Survey data dated December 2004.

KPMG and Deloitte comments

- KPMG and Deloitte have agreed:

The Model assumptions should be further adjusted to provide a larger allowance for the direct costs associated with complying with professional development requirements – refer to comments on salary levels.

Other indirect costs associated with the mandatory professional development requirements of ~40 hours per annum on average (based on 120 required hours over 3 years) are not reflected in the Model but should be.

In addition to the direct compensation paid to staff, other incremental compliance costs arise as less time is available to be dedicated to consultations.

These indirect costs should be reflected in the Model by an increase to compliance costs reflecting the employment of locum professionals for an equivalent 40 hour period – estimated as 2% of base salary costs for a senior physiotherapist.

Final modelling adjustments

- Additional direct compliance costs have been added to salary costs in item 2 to reflect the incremental cost associated with meeting the compulsory professional development requirements.

Issue

Consider whether the consult timings applied in the Model to estimate 'cost per hour' for EPN/Regulation visits are reasonable.

Methodology adopted

- ACC costs are divided by ACC Consult hours to derive the reported 'cost per hour' for simple and complex EPN/Regulation visits. Accordingly, the estimated average consult times has a significant impact on the Model outputs.
- There is a large degree of variability in the consult times provided by sample practices. To allow for a consistent approach to the modelling, assumptions have been made in relation to the average consult times.

Data source

- The estimated average EPN consult times applied in the Model are based on assumed average times provided by NZSP. The estimated times are reasonably consistent with the average times provided by the sample data gathered from the 23 practice sites during the initial survey.

KPMG and Deloitte comments

- KPMG and Deloitte have agreed that the estimate of average Regulation Consult timings does not correspond with the breakdown of "initial" and "follow up" visits for simple and complex cases in respect of EPN/Regulation Consults.
- The times / weightings for Regulation Consults (both initial and follow-up) within the Model are calculated using an average of the simple and complex times / weightings within the initial and follow-up categories of EPN. However, there are considerably fewer complex visits than simple visits. This means that the use of an average to determine simple and complex case times for initial and follow up regulation visits may be overstated in the Model, resulting in an understated cost per hour, as costs will be diluted across an incorrectly high number of consult hours.
- We consider that the most appropriate method of identifying composite times for a generic regulation initial and regulation follow-up visit is by applying of the ratio of simple / complex EPN visits to the total number of regulation visits.

Final modelling adjustments

- The model has been amended to reflect NZSP consultation weights for Regulation visits. For EPN consultations the percentage of simple initial (and follow-up) visits (as a percentage of total EPN initial visits) and that of complex initial (and follow-up) visits has been derived from the survey data. From this information, a simple-weighted average initial (and follow-up) consult weight has been calculated which reflects the likely ratio of simple to complex Regulation consults:
 - Regulation: initial consultation weighting 0.510 (31 minutes) – previously 35 minutes;
 - Regulation; follow-up consultation weighting 0.346 (21 minutes) – previously 25 minutes.

Issue

Determining an appropriate indexation rate to apply to costs to achieve a sustainable outcome for physiotherapy practices.

Methodology adopted

The analysis is based on 2004/05 actual costs with the functionality to adjust these costs periodically to reflect inflation.

Data source

- The primary data source is the sample data gathered from the 23 practice sites gathered during the initial survey.
- The individual cost pools in the sample data have been adjusted to reflect an estimated increase based on recognised inflation index statistics.
- The inflation indices were sourced from information published by Statistics New Zealand for the June 2005 quarter as follows:
 - Business owner and clinical staff labour: Labour Cost Index for Health Professionals;
 - Administration staff: Labour Cost Index for Office Clerks;
 - Equipment: Consumer Price Index;
 - Consumables: Medical and Health Supplies Consumer Price Index;
 - Facilities costs: Commercial Rent Producers Price Index.

KPMG and Deloitte comments

- The Model provides a static indication of pricing. It is not clear how future inflation risk will be dealt with. If prices are reset annually by ACC then there will be a short but most likely manageable lag, otherwise practices will be required to carry that risk with corresponding implications for working capital, profitability and ultimately sustainability.
- In terms of the historical analysis, KPMG and Deloitte have agreed that the cost/price adjustments are appropriate and should be applied in the Model on individual cost pools basis.
- KPMG and Deloitte consider that the indexation rates applied in the Model are appropriately tailored to fit best the cost pool category, providing the most accurate approach to assess the change in the level of costs/prices.

Final modelling adjustments

- No adjustments are considered necessary to the Model. However, at each assessment date the inflation index data will need to be refreshed to reflect recent historical price growth experienced in the economy.

Other comments

- Consideration should be given to the mechanism to be used to compensate for future inflation-related cost risk. Annual resets to reflect relevant inflation is one option to consider.

Issue

Determining an appropriate capital base from which to model costs to achieve a sustainable outcome for the majority of physiotherapy practices.

Methodology adopted

The Model adopts a value of fixed assets which is based on arbitrarily adjusted historic cost data. The Model uses this historic-cost based data to determine the value of fixed assets. There is no reference to actual replacement cost or operating capacity requirements.

Data source

- The primary data source is the sample book value data gathered from the 23 practice sites during the initial survey.
- The sample book data has been adjusted or grossed up to allow for depreciation incurred over the life of the assets. This historic asset cost was then rounded to the nearest \$2,500.

KPMG comments

- The Model's use of historic cost based data does not represent the investment required for a sustainable asset base.
- KPMG and Deloitte agreed that a sustainable fixed asset base for operating a physiotherapy practice should be determined with reference to current operational requirements and replacement costs.
- The Model assumptions should be updated to reflect the notional facility and set-up costs provided by NZSP (refer to Appendix 3 of the Deloitte Report). In KPMG's view, these costs provide a better estimate of the capital requirements to operate a sustainable physiotherapy practice for price setting purposes.

Deloitte comments

- Given the guidance provided by the Reviewer in terms of identifying a sustainable fixed asset base Deloitte have adjusted the capital base of physiotherapy practices in the model based on the estimate of practice set-up costs of \$175,000 per practice. This is based on the assumption that these costs are appropriate costs for the setup of an average physiotherapy practice. We have not tested this assumption with physiotherapy practices or with ACC.
- Because the adjusted capital base represents the costs of setting up a new practice this does not reflect the reality of having a sample of practices where some assets are old and some are new. We therefore have concerns about using a capital base of \$175,000. However, for the purposes of this exercise we have agreed to undertake modelling adjustments based on a capital base of approximately \$175,000.
- The average capital base in the original Model was approximately \$57,000.
- The impact of this change is that the depreciation expense being allocated as a cost to each practice has greatly increased.

Final modelling adjustments

- The asset values for each practice have been adjusted to reflect the set-up cost for a new 4-bed physiotherapy practice in Auckland as reported in the Deloitte Report.
- The amount allocated to treatment rooms was adjusted to take into account the number of FTE physiotherapists within the individual practice, e.g. a 6 FTE practice would have 1.5 times the amount of cost attributed to treatment rooms.

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