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## NZSP – Additions to Statement of Philip Brent Wheeler

NZSP has asked me to provide a further short brief addressing the questions of:

“whether providers could fully recover the economic cost of treatment through co-payments, especially where ACC payments were significantly less than the economic price of treatment”.

And

“Given that the majority of treatment is now provided without any co-payment under EPN, what effect would the imposition of a significant co-payment have on the market”.

### Will Copayments Cover the Full Economic Cost if ACC Payments Are Low?

The general processes driving outcomes in this area are dealt with generically (rather than in respect of ACC) in that part of the economic and related literature dealing with game theory and tit for tat strategies. This brief therefore expands on my previous discussion on this theory.

There are two expectations for consumers in the ACC system. These are:

1. General expectations created by the basic ACC scheme in which the compulsory payment of levies to ACC through direct and indirect mechanisms.
2. Specific expectations created in respect of “free services” through specific advertising in relation to EPN and other services.

Taxpayers, who importantly are also consumers, pay ACC levies through a variety of direct and indirect mechanisms. They therefore develop expectations that there will be some equivalent offsetting benefit to them in their obtaining treatment funded by ACC.

This is a compulsory scheme, imposes levies on every worker and employer, and prohibits compensation from any other source (such as the person who may have caused the accident). The expectation reported by physiotherapists is that the consumer consider they have already paid for physiotherapy or other rehabilitation treatment

through their ACC levy. They therefore want services at no charge, or at least with only a token value.

Physiotherapist reports of consumer behaviour do not seem unreasonable or unlikely . The ACC scheme is zealous in its imposition on all consumers, and is a significant targeted contribution, on level footing with general taxation in the direct way it is removed from wages and salaries. There is little or no advertising around the scheme which suggests patient contributions will be required at treatment time, but rather the reverse is generally true.

The IRD website for instance:

**“ ACC earners' levy rates**

All employees must pay an ACC earners' levy to cover the cost of non-work related injuries. It is collected by Inland Revenue on behalf of the Accident Compensation Corporation (ACC).

Employers deduct the earners' levy from wages. It is included as a component of PAYE deductions”.<sup>1</sup>

ACC's pledge is their headline publicity:

**“ACC's pledge**

Our pledge is to prevent injury, to provide the best treatment and care if injury occurs, and to quickly rehabilitate people back to work or independence at a price that offers high value to levy payers and all New Zealanders”.

These both tend to support the consumer expectation noted above. I accept that the ACC website does note that consumers are likely to pay a part charge. However, it is dubious whether this is well publicised, or whether it displaces consumer expectations arising from more general aspects of the scheme. The link then, between paying levies and receiving free or close to free treatment in exchange can be expected to be strong.

If there is then the advertised expectation that treatment will be free or will not carry any surcharge this will reinforce the messages and consumer expectations. The medium and long term importance of this message to consumers, which explicitly confirms their underlying expectation, is not known. To the extent that it builds on general expectations around the scheme it could be important in reinforcing these even if or when the no-copayment policy is reversed.

Adding to this is that the payment of little or no direct service charge by the consumer can also create value perceptions, particularly where a consumer is unaware of the level of ACC payment which subsidises treatment costs. Consumers have little or no means of establishing in their minds what the costs might be. The assumption is likely to be – in the absence of other information – that the levy imposed by ACC covers the costs, and that covering such costs accounts for its level.

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<sup>1</sup> <http://www.ird.govt.nz/how-to/taxrates-codes/itaxsalaryandwage-incometaxrates.html>

In the face of these expectations, the literature tells us that consumers will generally adopt tit for tat strategies which are beneficial to them in keeping services free or at minimal direct cost.

Tit for tat strategies are those in which agents, if unprovoked do not retaliate, but if provoked do. This produces beneficial outcomes where both players have similar resources and face similar constraints because of the mutual benefit which derives from co operation, coupled with the incentive effect that retaliation creates for co operation.

In this case, payment of ACC levies accompanied by provision of offsetting benefits broadly perceived as being of equal value are likely to lead to broadly co operative behaviour. However where one party such as consumer – taxpayers believe that the equation is lopsided, then they retaliate. In this case the consumer perception appears to be that they are paying twice for the same service, once to the Government and once to providers.

This error in a party's interpretation of events, for example interpreting a physiotherapy co-payment as being driven by "greed" leads to escalating conflict which if unaddressed spirals out of control. In this situation, each side perceives itself as preferring to cooperate, if only the other side would. But each is forced by the strategy into repeatedly punishing an opponent who continues to attack despite being punished in every game cycle.

Axelrod<sup>2</sup>, a seminal writer in this field, documenting this effect notes that commonly:

"Both sides come to think of themselves as innocent and acting in self-defence, and their opponent as either evil or too stupid to learn to cooperate.

This situation frequently arises in real world conflicts, ranging from schoolboy fights to civil and regional wars."<sup>3</sup>

It is precisely this situation which has led to NZSP members being cornered in respect of their costs and ability to earn a competitive return on capital. Consumers, having paid ACC levies on the expectation of receiving "free treatment" – the tit for tat – retaliate or are likely to retaliate if NZSP providers increase prices or otherwise act in any way which is perceived as reducing the service already "paid for" by consumers.

Retaliation against ACC by, say withholding levy payments is illegal, and thus a conflict spiral is created with the losers being both the consumer and the provider.

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<sup>2</sup> This material is summarised in:

Axelrod, Robert. (1984). *The Evolution of Cooperation*. New York: Basic Books, ISBN 0-465-02121-2

Axelrod, Robert. (2006). *The Evolution of Cooperation* Revised edition Perseus Books Group, ISBN 0-465-00564-0

Axelrod, Robert. (1981). "The Evolution of Cooperation." *Science*, 211(4489):1390-6

Axelrod, Robert. (1997). *The Complexity of Cooperation: Agent-Based Models of Competition and Collaboration* New Jersey: Princeton University Press, ISBN 0-691-01567-8

<sup>3</sup> Quoted at [http://en.wikipedia.org/wiki/Tit\\_for\\_tat#Overview](http://en.wikipedia.org/wiki/Tit_for_tat#Overview)

The question of what happens in the physiotherapy market when this conflict is driven by ACC payments significantly below the economic price of treatment depends on where the provider and consumer strike a balance in their compromise. If the historic data shows systematically sub-optimal salaries and business investment in the physiotherapy sector, this appears to indicate that physiotherapists have historically made significant compromise on their economic price.

### What Effects Will Arise Moving From a Zero to Significant Co-payment?

A number of studies have been undertaken seeking to establish what the impact of increased prices for health services is in terms of quantity of service demanded and the decision to seek services or not. These are well summarised in the NZIER study and their power point presentation.

All of the studies and the NZIER analysis of those emphasises, wisely, the difficulties in drawing firm conclusions, the problems created by measurement across systems which are not always completely comparable and the provisional nature of some findings. The limitations highlighted are not, in my view fatal to the significant policy conclusions which can be drawn from the work.

The evidence summarised, shows that:

1. On average it is likely that a 10% increase in prices for services will result in a decrease in quantity of services demanded of 2% or less. The one specific study of physiotherapists (van Vliet 2001) suggests that a 10% increase in prices is accompanied by a 1.2% decrease in quantity of services demanded.
2. Impacts of price increases appear to concern number of visits and like components of quantity demanded rather than the decision about whether to visit or not.

Where the increase involves a move from "free" service to a non- zero fee the impact may well be substantial since the literature shows that the greatest elasticity effect (the tendency for quantity demanded to drop as price rises) occurs for increases from a level of 0% (paid by patient) up to 25%. The higher the non-zero fee, the greater the impact.

Given the potentially combative economic relationship between consumers and physiotherapists as a result of the "double payment perception" from consumers, this may have a double effect:

1. There are likely to be demand effects caused by the increase in cost to consumers.
2. Because of the tit for tat strategies employed, and evidence of historic outcomes, there is a real question as to whether the full price differential between economic price and ACC payment would in fact be passed on.

## Conclusion

I would conclude that it is important for ACC to be transparent about the extent of its subsidy and the expectation that patients are required to cover some portion of the full economic cost. This will help to offset the effects of the tit for tat strategy on providers.

Sound policy requires that both at the funding level (i.e. in imposing the levy) and at the claim level (i.e. in covering part of the patient cost) ACC be fully frank and open about extent of cost covered. The economic conflict between consumer and provider is at its highest when communication is not clear, and levies only partially pay for treatment, whilst patients expect fully-funded treatment.

If ACC wishes to levy at a level which only part-funds treatment, then they should be transparent, so that the consumer is aware of the policy regime. Whilst this will not entirely eliminate the conflict and price competition, it will defuse it and place attention back on ACC's policy decisions where it belongs.

The level of subsidy is a policy matter rather than an economic one. The implications of the subsidy level will have an impact on demand which is proportionate to the level of co-payment required, as discussed directly above.



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