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Making markets work for disability services: The question of price setting

Gemma Carey[1] | Eleanor R. Malbon[1] | Megan Weier[1] | Helen Dickinson[2] | Gordon Duff[3]

[1]Centre for Social Impact, University of New South Wales, Sydney, Australia

[2]Public Service Research Group, University of New South Wales, Canberra, Australia

[3]National Disability Services, Melbourne, Australia

Correspondence
Eleanor R. Malbon, Centre for Social Impact, University of New South Wales, Sydney, Australia.
Email: eleanor.malbon@unsw.edu.au

Abstract

Personalisation schemes and associated markets for social care have been a growing trend in industrialised countries over recent decades. While there is no single approach to marketisation of social care and personalisation, often funds are devolved to clients of care services to be used to purchase services directly from market. Such arrangements are vulnerable to market failures and 'thin' markets, causing the need for stewardship of the social care markets. We present findings from a 2018 survey of 626 care service providers in the Australian National Disability Insurance Scheme market on their experience of market conditions. Over 46% of respondents listed 'addressing pricing' as their top action for addressing market problems. Qualitative findings show that central price setting is detached from service delivery realities, affecting service quality and capability building potential. We argue that devolution of price setting to, or at least flexibility and discretion at, the local level is likely to be a key to solving pricing dilemmas in personalisation schemes.

KEYWORDS

health and social policy implementation, personalisation, quasi-markets

1 | INTRODUCTION

Recent decades have seen a growing trend within industrialised countries towards personalisation schemes in social care. In particular, disability care arrangements have shifted towards personalised models in countries such as the UK (Needham & Glasby, 2014), Germany (Junne, 2018) and Australia (Needham & Dickinson, 2017). These schemes emerged out of a demand from communities for more empowerment and choice, as well as the growth of quasi-market arrangements established under New Public Management – a paradigm that dominated mid-1990s to mid-2000s emphasising the use of business practices in the delivery of government funded services (LeGrand & Bartlett, 1993). Quasi-markets were advocated on the basis of efficiency gains, whilst ensuring choice for citizens (LeGrand & Bartlett, 1993). While no single model exists, personalisation puts greater emphasis on citizen choice. Funds are devolved directly to service users to purchase services from the 'market' (sometimes through direct transfer of funds, in other cases through voucher systems, Glasby & Littlechild, 2009; Needham & Glasby, 2014).

Various degrees of such 'market failures' exist in personalisation schemes for disability, including market gaps (where no providers are available) or thin markets (where there are too few providers to enable choice) combined with issues of quality (Carey, Dickinson, Malbon, & Reeders, 2017a; Gash, 2014; Girth, Hefetz, Johnston, & Warner, 2012). As a result, there is a growing interest in how governments can best address these market issues (Carey, Dickinson, et al., 2017a; Institute of Public Care, 2016; Needham et al., 2018).

Price is a key organising determinant of markets (Slater & Tonkiss, 2001). In many personalised markets, and quasi-markets more broadly, prices are fixed by government in order to constrain cost blowouts, and to create national consistency (Epstein & Mason, 2006; Productivity Commission, 2011). There is growing criticism of centralised price setting, with research suggesting that prices set in this way are often at the wrong levels to support market growth

(Gash, 2014), and that different prices are appropriate in different geographical contexts or for ensuring markets meet niche care needs (Allen & Petsoulas, 2016; Schmidt, Winkelmann, Rodrigues, & Leichsenring, 2016). In this paper, we explore the experiences of service providers transitioning into a centrally priced personalisation scheme for disability care – the Australian National Disability Insurance Scheme (NDIS). We draw on a national survey of provider experiences to examine how central price setting is affecting the sector and the services it offers.

International evidence suggests that there is no perfect way to accurately calculate and set prices, particularly regarding regional variability. One alternate approach, which we develop in this paper, is to focus on where in the system prices are set, and less on the level of price itself. This approach is consistent with the literature that conceptualises markets as complex systems, whereby a care market is made up of many sub-markets that operate under their own rules (Ostrom, 2009). This branch of economics challenges the centralised approach of tariffs, suggesting that 'price setters' are too far removed from local knowledge about market rules to be adequately responsive (Hayek, 2007).

What is known about this topic

- While there is no single approach to marketisation of social care and personalisation, often funds are devolved to clients of care services to be used to purchase services directly from market.
- Such arrangements are vulnerable to market failures and 'thin' markets, causing the need for stewardship of the social care markets.
- There is growing criticism of centralised price setting, with research suggesting that prices set in this way are often at the wrong levels to support market growth and that different prices are appropriate in different geographical contexts or for ensuring markets meet niche care needs.

What this paper adds

- We present findings from a 2018 survey of 626 care service providers in the Australian National Disability Insurance Scheme market on their experience of market conditions.
- Over 46% of respondents listed 'addressing pricing' as their top action for addressing market problems.
- Qualitative findings show that central price setting is detached from service delivery realities, affecting service quality and capability building potential.

2 | THE AUSTRALIAN NATIONAL DISABILITY INSURANCE SCHEME AND THE CHALLENGES OF PRICING

Personalisation is a key feature of the NDIS, a scheme that covers Australians born with or who acquire a severe and permanent disability. The scheme began implementation in 2013 in eight trial sites, and as of 2017 was expanded nationwide (Carey, Malbon, Olney, & Reeders, 2018). At full implementation, it is anticipated that it will encompass more than 450,000 participants across diverse geographical areas and disability types (Productivity Commission, 2011).

Each participant receives a personalised budget (known as a 'plan') from which services are purchased from registered providers, forming a quasi-market (Australian Productivity Commission, 2011). The scope of the budget, and the care it can be used to buy, is determined annually with an NDIS 'planner', the participant and potentially another advocate (i.e. family, friend). Plans can be administered by the participant (self-managed), NDIA managed, or a combination of both. Importantly, self-managed participants have greater freedom to negotiate prices with service providers using NDIS price guides, but NDIA-managed participants must pay according to prices set by this organisation. Just 7% of the participants self-manage (NDIA, 2017a), meaning the majority of the scheme functions under centrally set pricing. It is anticipated that prices will be centrally set until the market is 'mature' (Productivity Commission, 2017), though according to policy workers in the Australian Commonwealth Government this 'maturity' (defined as individuals exercising choice and control freely from a robust market place) may not be reached for a decade (Carey, Malbon, Reeders, Kavanagh, & Llewellyn, 2017b).

There are currently two forms of price control used within the NDIS: price limits, maximum prices that providers can charge for a particular support; and, price benchmarks, which indicate the cost of 'efficient service delivery' that should achievable by most providers (NDIA, 2017b; Productivity Commission, 2017). Price controls are part of a broader set of pricing arrangements within the scheme, which includes definitions of the services subject to price controls and payment rules. While the NDIA sets prices, they are informed by scheme actuaries who calculate limits to scheme spending based on projected financial sustainability, rather than outcomes for participants (Carey, Malbon, et al., 2018). A recent critique of the scheme notes that actuarial principles has led to a scheme evaluated mostly on financial terms, rather than inclusive of outcomes for individuals (Carey, Malbon, et al., 2018). The way that prices are set structures both the administration of the scheme and network connections between providers, government and third parties themselves (Malbon et al., 2018a).

Pricing is a perennial challenge within health and social care systems (Epstein & Mason, 2006). While pricing in disability, outside its effects on employment (Cortis, Macdonald, Davidson, & Bentham, 2017; Cunningham, 2015; Hussein & Manthorpe, 2012), is not addressed in the academic literature, the fixed-price approach within the NDIS is comparable to funding mechanisms in acute care through the use of diagnosis related groups (Epstein & Mason, 2006; Mihailovic, Kocic, & Jakovljevic, 2016; Oostenbrink & Rutten, 2006). In such systems, each activity of care is allocated

a code which related to diagnosis, procedure, age, sex and so forth. Providers are then reimbursed according to these fixed tariffs. Experiences with fixed tariffs indicate that aligning prices with actual costs is highly challenging and likely to be imperfect (Allen & Petsoulas, 2016; Epstein & Mason, 2006; Gash, 2014; Oostenbrink & Rutten, 2006). Moreover, they introduce challenges for providers beyond potential gaps between operating costs and income. A key risk for providers is that there are unpredictable shifts in demand, while the tariff can limit ability for supply to match this (Epstein & Mason, 2006). None-the-less, some degree of price control is important to prevent cost blowouts. International evidence suggests that price setting is ongoing issue in social care markets (Allen & Petsoulas, 2016; Gash, 2014; Oostenbrink & Rutten, 2006), suggesting that we need to re-think how and where price setting occurs.

3 | METHODS

Data for this paper are drawn from National Disability Services' (NDS) 2018 annual market survey of the disability sector. NDS is the peak body for the disability sector and the survey seeks to understand the financial sustainability of the sector, future trends and pressures. Ethics approval was obtained from the University of New South Wales HC180636. The survey is administered through the NDS membership list and advertised across the disability sector more broadly through organisational networks. With major changes to the sector, the total number of organisations providing disability supports is unknown. Moreover, within the NDIS specifically many organisations have registered but are not providing services. Hence, while the survey attracted a high number of participants (and more than previous years), there is no way to determine if it is a representative sample.

While the survey is hosted by NDS, the research team designed the survey questions in collaboration with the NDS. NDS staff and the research team worked together to interpret the quantitative findings, while the qualitative analysis was conducted independently by the research team. It is worth noting that the administration of the survey could be influenced by NDS branding, and seen as an opportunity to 'lobby' the peak body.

The survey was hosted online on Qualtrics, and completed by one representative member of the organisation, which is generally the CEO or senior manager. The survey covers multiple topics that are relevant to disability service providers: their views on the current NDIS operating environment, their organisation's strategy, and organisation logistics such as discussions about mergers and profit/loss margins. Quantitative survey items assess attitudes to NDIS policy and rollout by using five-point Likert scales (disagree strongly–agree strongly, with an 'I don't know' option), as well as cost of service provision estimations using a three-point Likert scale (costs will not grow as fast as growth in service volumes–costs will grow at a rate faster than growth in service volumes, with an 'I don't know' option).

A total of 626 organisations took part in the survey. This paper presents data from the 400 text comment responses. The qualitative findings are drawn from two open-ended questions: 'Do you have any comments on the operating environment of disability services'? and a 'Further comments' field at the end of the survey. Descriptive frequencies are presented to complement the qualitative analysis. Qualitative data collected from these open-ended questions analysed using a thematic approach (Blaikie, 2010). 'Like' data were grouped together to form categories and subcategories. These categories were developed into more substantive themes by linking and drawing connections between initial categories and hypothesising about consequences and likely explanations for the appearance of certain phenomena (Strauss, 1987).

4 | FINDINGS

Pricing is a significant concern within the sector; 122 of the 280 providers who answered the question on current operating environments noted pricing troubles. Moreover, when asked what the top five actions were that governments should take regarding the sector and disability services over the next year, 46% ranked 'addressing pricing' as their top action (302 providers responded to this question). Two major themes emerged from the data – the disconnect between pricing and service delivery realities, and subsequent loss-making operations leading to a threat of market failure. Here, pricing was seen as being set too low to cover service costs, with many organisations operating at a loss. A related sub-theme is the lack of capacity building within the sector to help adjust to reform. Arguably, with greater capacity building in the sector, providers would have been better equipped.

4.1 | Central pricing is detached from service delivery realities

Providers were found to be grappling with a range of issues that place financial burden on their organisations but were seemingly not accounted for in price setting. As a result, pricing is seen as disconnected from the realities of service provision. The process through which estimated prices are generated, and used to set prices within the scheme, was seen as out of step with the real costs:

> The current pricing in the NDIS is based on unrealistic estimations of providers' performance and costs. It will be unviable to remain a provider unless there are substantial improvements in price structures. [P4]

Similarly, another provider commented:

> It is challenging to continue to conduct a profitable enterprise when the [NDIA] sets the fee for our company's services - particularly without any prior

> knowledge of the services we provide and associated costs involved. Not all services are created 'equal'. [P2]

This concern was reflected in attitude towards a question that asked how providers felt the implementation was progressing and if they could provide quality services under the current prices. Fifty-eight percent of those who responded to the question (N = 400) said that they agreed or agreed strongly they are worried they will not be able to provide NDIS services at their current prices.

Respondents explained that current price setting fails to take account of the activities that sit around service delivery and make personalised schemes function. Services are stretched at the top and bottom – with compliance (e.g. registration, accreditation and so forth) activities not accounted for in the price, nor hands-on work supporting families and clients beyond the service transaction:

> It costs money to be able to meet all the requirements of government, but we aren't able to set the actual pricing to be able to recover the true cost of support. We are a price taker, and government set all the rules and processes that are administratively burdensome. [P17]

The planning meeting is challenging and requires much preparedness on the part of the participant (Joint Standing Committee on the NDIS, 2018, Hansard, Commonwealth Government of Australia, 2018; Warr et al., 2017). Providers have often provided unfunded support to participants prior to, or throughout the planning process, seen as crucial due to the de-funding of advocacy in some jurisdictions (Michael, 2017):

> There is too much reliance on disability organisations to do the work of the NDIA in terms of upskilling the participants, the public and their families. There is too much reliance on the goodwill of disability organisations to support participants when things go wrong with the planning process. [P6]

These sentiments were reflected in quantitative responses: over half of those who responded to this question (54.1%, total response N = 400) said they either agreed or agreed strongly that in order to provide services at the prices being offered by the NDIA, quality of care would be reduced.

Administrative burden was particularly problematic and considered higher than under pre-NDIS arrangements:

> There is a significant increase in the administrative load and no remuneration under the NDIS pricing schedule. The backlog in processing has created a stagnated marketplace and increased the vulnerability and lack of viability for small to medium sized service providers. [P4]

> There is a disparity between what is expected … and the funding in people's plans. The gaps range from something simple such as ensuring admin time for documenting case notes and/or incidents to the training of staff. [P3]

When asked about costs in relation to growth in service volumes, half of the organisations who responded said they expected cost of administration to grow at a rate faster than the services they could offer. This is particularly significant when compared to estimates for costs of direct labour expenses and capital expenditure: 42% of organisations (N = 382) who responded said they expect costs of direct labour expenses to increase faster than growth in service volumes.

4.2 | Organisations operating at a loss and the threat of market failure

Prices were regarded by many as being too low to be financially sustainable for the sector. The following quotes outline organisations operating at deficit:

> In the current market our organization will not be operating in the years to come as we continue to run at a deficit. We have recently had a unit costing completed and most of the services we provide are running at a loss. [P12]

> The prices mean that many services are simply not able to be delivered by trained staff within an organisation that prides itself on great quality services - it is under the cost of service delivery. [P9]

> … almost impossible to make a profit. We need more time to cover overhead cost. There is so much that is not covered that providers are having to fund…leading to loss making services. [P15]

This is consistent with the government's recent review of prices, which found 75% of providers within the scheme are operating at a loss (Productivity Commission, 2017), creating significant risks for market failure. Indeed, service providers are acutely concerned with this issue:

> Market failure is a current reality. We are already having to restrict certain community access services delivered one on one, even though demand is growing. Some participants are only being offered supports delivered in groups with a 1:5 support ratio, even though they could benefit from supports delivered in smaller groups or 1:1. This is undermining the NDIS' intent to offer participants choice and control. [P11]

> [We have] a lot of uncertainty about the future of the NDIS funding and our ability to adjust well financially

> to the prices being paid - especially [one on one services] which has seen many operators opt out of service provision. This concerns us for creating a thin market and little to no choice for consumers. [P8]

Service providers noted that this poses a particular threat for groups with complex needs:

> The [price-setting agency] does not appear to understand that they may inadvertently be creating the conditions for market failure for services to some populations - in particular to those with high support needs or complex needs. Unfortunately, there is a danger that a significant cohort of people for whom the scheme was intended may become its collateral damage. [P13]

This is consistent with ongoing concerns about equity within the scheme (Carey et al., 2017b). Perennial problems with pricing in the NDIS and the potential to lead to thin markets, suggests that central price setting potentially cannot reflect the diversity of local markets and the various supply and demand factors.

4.3 | Capacity building

Exacerbating price concerns within the sector is the need for capacity building for service providers. Organisations need to re-organise and re-skill, not just in relation to NDIS-specific rules, but also to operating in a 'business-like' environment more broadly (Green, Malbon, Carey, Dickinson, & Reeders, 2018; Malbon et al., 2018a). Survey respondents noted a lack of training and capacity building:

> There is a lack of training and engagement from NDIS to service providers to ensure comprehensive understanding and communication of changes. [P18]

> There's no funding given for staff training. We need to train our staff on NDIS and other areas related to their work, so they can be better equipped in order to fulfilled all the requirements set under the Certification/ Verifications and work on continuous improvement for the services that we provide. [P10]

However, broader training and capacity building could also help organisations to manage the financial challenges associated with transitioning to the scheme:

> There has been too much emphasis on organisations understanding the processes for clients to access the NDIS, and not enough emphasis on organisations understanding and knowing how to operate in the changed environment. [P14]

> There has been no training for registered providers in our region - this has made service provision unnecessarily inefficient and expensive. [P2]

While some efforts at training and communication on the NDIS were offered by government, offering broader capacity building around financial sustainability and practices may also help providers manage the cost-price balance.

5 | DISCUSSION

It has been argued that care markets need price controls to ensure providers are not driven out of the market, or service quality drops (LeGrand & Bartlett, 1993; Struyven & Steurs, 2005). Many quasi-markets have set prices to limit overspend, and this is the major feature that distinguishes them from other markets (LeGrand & Bartlett, 1993). This literature suggests that matching prices and costs is a constant tension. Hence, while providers in this research argued prices were set too low, the literature on markets as complex systems encourages us to think about how prices function within the market and where price decisions are made (Hayek, 2007; Ostrom, 2009). We argue that some degree of price flexibility is crucial to protecting against market failure and to uphold the vision of choice and control, but equally important is local discretion in price decision-making.

Survey responses suggest that prices within the NDIS are too low to cover the true costs of providing a service, specifically for the more personalised services such as community access, social inclusion and respite services. This is likely to reflect the limitations of devising prices for the scheme – in many cases they were set on the basis of previous block-funding prices and therefore may not reflect 'true costs' (Productivity Commission, 2017). An earlier report on pricing in the scheme found that disability support work in particular is under-priced within the NDIS (Cortis et al., 2017). Based on a document analysis of policy documents, Cortis et al. (2017) argue 'reasonable cost model' does not enable industrial award rates to be met, with significant flow on effects for the quality of services. Hence, prices within the scheme may truly be set too low. Yet, as noted previously, aligning prices and costs is a perennial challenge in health and social care thus while some pricing adjustments could be made, these tensions are likely to persist.

While it was envisaged, the NDIA would undertake planning activities with scheme participants, carers and their families (Productivity Commission, 2011); our research suggests a great deal of unfunded preparation for planning is being done by providers and participants. This is consistent with international experiences of personalisation (Dickinson & Glasby, 2010). Arguably, much of the administrative cost of service provision has been shifted out of government onto providers and participants. This has been exacerbated by an implementation agency that is significantly understaffed (ANAO, 2016; Joint Standing Committee on the NDIS,

2018). Hence, a reinvestment in the capacity of the NDIA might also be a way to alleviate some of these pressures. The introduction of the NDIS has created enormous flux and uncertainty for the sector. A review by the Productivity Commission noted that government needs to slow down the implementation of the scheme to allow the sector to adjust (Productivity Commission, 2017). Our findings suggest that more investment in capacity building may also help providers cope with the financial implications of the reform. While some initial investments were made, there was little systematic assistance available for organisations to repurpose for the scheme (NDIS, 2016; NDS, 2017).

While there are clearly scheme-specific interventions which could address the challenges experienced by the Australian disability sector (McKinsley & Company, 2018), we suggest that sustainable solutions require us to take a more complex conceptualisation of how markets function. Such an approach challenges us to think less about the precise level of pricing, and more about how prices function within the scheme and who is best placed to make pricing decisions.

Temple (2006) offers an important warning about centralised steering of quasi-markets, with central price settings and incentives creating perverse market effects. This research suggests that central governments are too far removed from service delivery, local market rules and supply and demand knowledge to steer them. This is consistent with market theorists such as Hayek (1960), who argue that effort and time is required to convey 'knowledge of all the particulars' to a central agency, which is then faced with the task of integrating vast amounts of information to make decisions. This is an issue that is likely exacerbated within the NDIS because of the vast geographical diversity of the scheme – covering a wide range of needs across urban, rural and remote areas of Australia.

Allen and Petsoulas (2016) observed of the NHS that where commissioners had flexibility in pricing (despite tariffs), it enabled them to help organisations shift in response to demand and prevent market failure. In the context of disability care, a more flexible approach may prevent organisations filling important or niche market functions from operating at a loss. Flexible pricing can also allow for innovation, enabling incubation of smaller providers or incentivising innovative services (Institute of Public Care, 2016).

An interrelated concern is *where* pricing decisions occur in the system. Central authorities are too removed from the detailed knowledge of sub-markets to make effective decisions in a timely manner. Rather, if pricing decisions were devolved to lower levels, it may enable a more responsive approach to market management/stewardship. This is consistent with the international literature, which suggests that adaptability and flexibility is needed to effectively steward quasi-markets (Gash, 2014). The nuances of local conditions – particularly in remote areas – are impossible to detect or determine using a centralised pricing system. Local discretion in pricing can also boost innovation, allowing seeding of innovative ideas and incubation of service providers (Azimi, Franzel, & Probst, 2017; Destler & Page, 2010). This is not to say, however, that there should not be oversight of the spending of the scheme overall, but there should be more flexibility in funds to allow them to be responsive to local variations in costs and/or needs. For example, transport costs are higher in rural and remote areas yet pricing within the scheme does not take account of the time it takes for providers to travel to clients. Flexibility in pricing could possibly address these market failures.

Recent reviews of the NDIS have noted that it is unclear who is taking responsibility for market stewardship (Joint Standing Committee on the NDIS, 2018; Malbon, Carey, & Reeders, 2018b; Malbon, Carey, & Dickinson, 2016). This appears to reflect an international trend, with Gash's (2014) inter-country comparative research finding "repeated uncertainty about whose job it was to perform important market stewardship functions" (Gash, 2014, p. 31). Persistent lack of clarity in this area may reflect a disconnect between access to information and authority – where those with information of local market nuances do not have the resources or authority to enact stewardship activities, while those 'at the top' with authority do not have the information. Hence, better aligning authority, resources and information with regard to decision-making at different levels of the system could result in more adaptive and effective responses to market challenges.

6 | CONCLUSION

Drawing on a national survey of providers within the NDIS, this research examines the issue of pricing within personalisation schemes. We argue that the persistent disconnect between prices and costs in quasi-markets and personalisation schemes behoves a re-think of how markets are conceptualised in this space. More attention needs to be given to where prices are set within the system and what access to knowledge actors have, in addition to allowing a degree of flexibility in price setting. In particular, we argue that where possible pricing decisions should be devolved, to allow those who have the most information about market dynamics to make decisions regarding how to support the market to meet policy aims.

ORCID

Gemma Carey https://orcid.org/0000-0001-7698-9044
Eleanor R. Malbon https://orcid.org/0000-0002-6840-498X

REFERENCES

Allen, P., & Petsoulas, C. (2016). Pricing in the English NHS quasi market: A national study of the allocation of financial risk through contracts. *Public Money & Management*, *36*, 341–348. https://doi.org/10.1080/09540962.2016.1194080

ANAO. (2016). *National disability insurance scheme—Management of transition of the disability services market*. Canberra: Commonwealth Government of Australia.

Australian Productivity Commission. (2011). *Disability care and support: Productivity commission inquiry report*. Melbourne: Productivity Commission.

Azimi, T., Franzel, L., & Probst, N. (2017). Seizing market shaping opportunities for vaccine cold chain equipment. *Vaccine*, *35*, 2260–2264. https://doi.org/10.1016/j.vaccine.2016.12.073

Blaikie, N. (2010). *Designing social research* (2nd ed.). MA, USA: Polity Press.

Carey, G., Dickinson, H., Malbon, E., & Reeders, D. (2017a). The vexed question of market stewardship in the public sector: Examining equity and the social contract through the Australian National Disability Insurance Scheme. *Social Policy & Administration*, *52*(1), 387–407. https://doi.org/10.1111/spol.12321.

Carey, G., Malbon, E., Olney, S., & Reeders, D. (2018). The personalisation agenda: The case of the Australian National Disability Insurance Scheme. *International Review of Sociology*, *28*, 20–34. https://doi.org/10.1080/03906701.2018.1425084

Carey, G., Malbon, E., Reeders, D., Kavanagh, A., & Llewellyn, G. (2017b). Redressing or entrenching social and health inequities through policy implementation? Examining personalised budgets through the Australian National Disability Insurance Scheme. *International Journal for Equity in Health*, *16*(1), https://doi.org/10.1186/s12939-017-0682-z

Cortis, N., Macdonald, F., Davidson, B., & Bentham, E. (2017). *Reasonable, necessary and valued: Pricing disability services for quality support and decent jobs (SPRC Report 10/17)*. Sydney: Social Policy Research Centre, UNSW Sydney

Cunningham, I. (2015). Austerity, personalization and the degradation of voluntary sector employment conditions. *Competition & Change*, *19*, 228–245. https://doi.org/10.1177/1024529415580261

Destler, K., & Page, S. B. (2010). Building supply in thin markets: districts' efforts to promote the growth of autonomous schools (Working Paper). Western Washington University, Western Political Science Association Annual Meeting Paper.

Dickinson, H., & Glasby, J. (2010). *The personalisation agenda: Implications for the Third Sector*. Birmingham, UK: Third Sector Research Centre.

Epstein, D., & Mason, A. (2006). Costs and prices for inpatient care in England: Mirror twins or distant cousins? *Health Care Management Science*, *9*, 233–242. https://doi.org/10.1007/s10729-006-9090-4

Gash, T. (2014). *Making public service markets work. Professionalising government's approach to commissioning and market stewardship*.

Girth, A. M., Hefetz, A., Johnston, J. M., & Warner, M. E. (2012). Outsourcing public service delivery: Management responses in noncompetitive markets. *Public Administration Research*, *72*, 887–900. https://doi.org/10.1111/j.1540-6210.2012.02596.x

Glasby, J., & Littlechild, R. (2009). *Direct payments and personal budgets: Putting personalisation into practice*. Bristol, UK: Policy Press.

Green, C., Malbon, E., Carey, G., Dickinson, H., & Reeders, D. (2018). *Competition and Collaboration between Service Providers in the NDIS*. Centre for Social Impact, UNSW Sydney.

Hansard, Commonwealth Government of Australia. (2018.) Joint Standing Committee on the National Disability Insurance Scheme: Market readiness for provision of services under the National Disability Insurance Scheme. Hansard, Commonwealth Government of Australia.

Hayek, F. (1960). *The constitution of liberty*. Chicago: Chicago Press.

Hayek, F. A. (2007). The theory of complex phenomena. *E:CO*, *9*, 143–165.

Hussein, S., & Manthorpe, J. (2012). Structural marginalisation among the long-term care workforce in England: Evidence from mixed-effect models of national pay data. *Ageing & Society*, *41*, 21–41. https://doi.org/10.1017/S0144686X12000785

Institute of Public Care (2016). *Market shaping to support individual purchasing of care, market shaping review*. Oxford: Oxford Brookes University Press.

Joint Standing Committee on the NDIS. (2018). Market readiness for provision of services under the NDIS. Commonwealth Government of Australia.

Junne, J. (2018). Enabling accountability: An analysis of personal budgets for disabled people. *Critical Perspectives on Accounting*, https://doi.org/10.1016/j.cpa.2018.01.001

LeGrand, J., & Bartlett, W. (1993). *Quasi-markets and Social Policy*. London: Macmillan.

Malbon, E., Alexander, D., Carey, G., Reeders, D., Green, C., Dickinson, H., & Kavanagh, A. (2018a). Adapting to a marketised system: Network analysis of a personalisation scheme in early implementation, Health & social care in the community. *Health & Place Online First*. https://doi.org/10.1111/hsc.12639

Malbon, E., Carey, G., & Dickinson, H. (2016). Accountability in public service quasi-markets: The case of the Australian National Disability Insurance Scheme. *Australian Journal of Public Administration*. https://doi.org/10.1111/1467-8500.12246

Malbon, E., Carey, G., & Reeders, D. (2018b). Mixed accountability within new public governance: The case of a personalized welfare scheme in early implementation. *Social Policy & Administration*, *53*(1), 156–169. https://doi.org/10.1111/spol.12446

McKinsley & Company. (2018). *Independent pricing review*. Victoria, Australia: NDIA.

Michael, L. (2017). *Disability advocacy groups fight to restore state funding*. Probono News. https://probonoaustralia.com.au/news/2017/11/disability-advocacy-group-fights-restore-state-funding/ [last accessed 4 June 2019].

Mihailovic, N., Kocic, S., & Jakovljevic, M. (2016). Review of diagnosis-related group-based financing of hospital care. *Health Services Research and Managerial Epidemiology*, *3*, 233339281664789. https://doi.org/10.1177/2333392816647892

NDIA. (2017a). *NDIS annual report 2016-17*. Canberra: National Disability Insurance Agency.

NDIA. (2017b). *2017 Price controls review: Consultation on NDIS pricing arrangements*. Canberra: National Disability Insurance Agency, Australian Commonwealth Government.

NDIS. (2016). *Sector Development Fund*. Canberra: Department of Social Services, Australian Commonwealth Government.

NDS (2017). *Australia's Disability Services Sector 2017. Financial Performance Summary of Key Findings* (National Benchmarking Project). National Disability Services.

Needham, C., & Dickinson, H. (2017). 'Any one of us could be among that number': Comparing the Policy Narratives for Individualized Disability Funding in Australia and England. *Social Policy & Administration*, *52*, 731–749. https://doi.org/10.1111/spol.12320

Needham, C., & Glasby, J. (2014). *Debates in personalisation*. Bristol, UK: Policy Press.

Needham, C., Hall, K., Allen, K., Burn, E., Mangan, C., & Henwood, M. (2018). *Market-shaping and Personalisation, A realist review of the literature*. Birmingham, UK: Third Sector Research Centre.

Oostenbrink, J. B., & Rutten, F. F. H. (2006). Cost assessment and price setting of inpatient care in the Netherlands. The DBC case-mix system. *Health Care Management Science*, *9*, 287–294. https://doi.org/10.1007/s10729-006-9096-y

Ostrom, E. (2009). *"Governing the Commons". The evolution of institutions for collective action*. Cambridge: Cambridge University Press.

Productivity Commission. (2011). *Disability care and support: Productivity commission inquiry report*. Canberra: Commonwealth Government of Australia.

Productivity Commission. (2017). *NDIS Costs*. Canberra: Commonwealth Government of Australia.

Schmidt, A. E., Winkelmann, J., Rodrigues, R., & Leichsenring, K. (2016). Lessons for regulating informal markets and implications for quality assurance – The case of migrant care workers in Austria. *Ageing and Society*, *36*, 741–763. https://doi.org/10.1017/S0144686X1500001X

Slater, D., & Tonkiss, F. (2001). *Market society: Markets and modern social theory*. UK: Polity Press.

Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.

Struyven, L., & Steurs, G. (2005). Design and redesign of a quasi-market for the reintegration of jobseekers: Empirical evidence from Australia and the Netherlands. *Journal of European Social Policy*, *15*, 211–229. https://doi.org/10.1177/0958928705054083

Temple, P. (2006). Intervention in a higher education market: A case study. *Higher Education Quarterly*, *60*, 257–269. https://doi.org/10.1111/j.1468-2273.2006.00320.x

Warr, D., Dickinson, H., Olney, S., Karanikolas, A., Kasidis, V., Katsikis, G., … Wilcox, M. (2017). *Choice, control and the NDIS Service users' perspectives on having choice and control in the new National Disability Insurance Scheme*. Melbourne: Melbourne Equity Institute.

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