Senate Standing Committees on Community Affairs Inquiry

National Disability Insurance Scheme Amendment (Getting the NDIS Back on Track No. 1) Bill 2024 [Provisions]

Supplementary Submission to Submission Number 15

2 June 2024

Submission By
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I would like to provide this additional information as a supplementary submission, to my main submission (number 15).

This additional information constitutes two articles published in the past few days.

The first article is persuasive for the opinions presented by two esteemed scholars, one being Terry Carney AO, whose opinions and articles held weight at the RoboDebt Royal Commission.

The first article is "***Decoding the algorithmic operations of Australia's National Disability Insurance Scheme***" by Georgia van Toorn, Terry Carney AO. First published: 30 May 2024, in the Australian Journal of Social Issues.

Georgia van Toorn is a lecturer in the School of Social Sciences at the University of New South Wales and an Associate Investigator at the ARC Centre of Excellence for Automated Decision-Making & Society (ADM+S).

Terry Carney AO is Emeritus Professor at the Law School University of Sydney, a Fellow of the Australian Academy of Law and a past President (2005–2007) of the International Academy of Law and Mental Health.

Some of my work has been referenced in this article.

I believe the van Toorn/Carney article will become as widely known and as influential as the original Carney article, which was so persuasive in the RoboDebt Royal Commission.

Given the seriousness of the legal and ethical questions raised in this article, I believe that it is incumbent for Members of the Committee to be aware of this article and the potential legal ramifications of the connections being observed between RoboDebt and the NDIA's use of algorithms.

I pose the question: Just how can the NDIS Bill be passed, which is not only non-compliant with the UNCRPD, but rests on such hidden yet-to-be designed algorithms (which I described in my main submission, number 15)? The van Toorn/Carney article refers to these as subterranean systems, "because their workings are neither publicly known nor amenable to legal rectification…"

Abstract
In recent years, Australia has embarked on a digital transformation of its social services, with the primary goal of creating user-centric services that are more attentive to the needs of citizens. This article examines operational and technological changes within Australia's National Disability Insurance Scheme (NDIS) as a result of this comprehensive government digital transformation strategy. It discusses the effectiveness of these changes in enhancing outcomes for users of the scheme. Specifically, the focus is on the National Disability Insurance Agency's (NDIA) use of algorithmic decision support systems to aid in the development of personalised support plans.

This administrative process, we show, incorporates several automated elements that raise concerns about substantive fairness, accountability, transparency and participation in decision making. The

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conclusion drawn is that algorithmic systems exercise various forms of state power, but in this case, their subterranean administrative character positions them as “algorithmic grey holes”—spaces effectively beyond recourse to legal remedies and more suited to redress by holistic and systemic accountability reforms advocated by algorithmic justice scholarship.

"This article reveals that NDIS algorithmic systems, used as supporting inputs in determining the content and funding of participants' plans, risk replicating well-documented instances of algorithmic harm experienced in other areas of social welfare provision. We refer to these systems, and the nature of their decision-making powers, as “subterranean,” because their workings are neither publicly known nor amenable to legal rectification in the way Australia's Robodebt or the Dutch Childcare Benefit harms were rendered accountable

These systems exercise forms of state power, yet their subterranean administrative character positions them in an “algorithmic grey hole” effectively beyond the reach of legal remedies; and one which significantly compromises the delivery of substantive algorithmic fairness by failing to routinely engage the contextual complexities of the disability experience.

A key contribution of the article is to illustrate how barriers to internal and external (judicial or tribunal) review mechanisms and lack of systemic correc- tion, leaves the vast bulk of decision making beyond understanding or prospects of challenge. Excessive reliance on unknowable algorithms empties review of its substantive merit, transforming it into an “algorithmic grey hole.”

The second article is “***Exclusive: Shorten Revives the Coalition’s Failed NDIS Reforms”*** by the award-winning journalist Rick Morton, The Saturday Paper Senior Reporter, published 1 June 2024.

Synopsis
The Rick Morton article is critical for the Committee’s deliberations, for it describes in detail, amongst other things, connections between the NDIS Bill, RoboDebt, debt raising, automated assessments, and the god powers of the CEO.

The article references disability advocates Uli Cartwright and Cat Walker, who told this Committee that this Bill “locks in procedurally unfair processes which echo robo-debt governance”.

Cost-saving reforms to the NDIS will allow debts to be raised against disabled people and give extraordinary new powers to cancel support entirely.

There is now mounting evidence of the connections between RoboDebt practices and the use of algorithms by the NDIA (RoboNDIS), and serious questions of legality including the operation of the access to justice, and unresolved ethical issues including the risk of harm and death.

As examined in my main submission (Number 15), there is a naïveté and a reckless indifference as to what is actually involved in implementation. Compounding this extraordinary risk of the lack of capability to implement, the commentary in the van Toorn/Carney article, presents a clarion warning as to the shifting legal minefield in the era of algorithmic decision making, which cannot be ignored.

Both articles are reproduced in full in the following pages.

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ORIGINAL ARTICLE

WILEY

Decoding the algorithmic operations of Australia's National Disability Insurance Scheme

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Abstract

In recent years, Australia has embarked on a digital transformation of its social services, with the primary goal of creating user-centric services that are more attentive to the needs of citizens. This article examines operational and technological changes within Australia's National Disability Insurance Scheme (NDIS) as a result of this comprehensive government digital transformation strategy. It discusses the effectiveness of these changes in enhancing outcomes for users of the scheme. Specifically, the focus is on the National Disability Insurance Agency's (NDIA) use of algorithmic decision support systems to aid in the development of personalised support plans. This administrative process, we show, incorporates several automated elements that raise concerns about substantive fairness, accountability, transparency and participation in decision making. The conclusion drawn is that algorithmic systems exercise various forms of state power, but in this case, their subterranean administrative character positions them as "algorithmic grey holes"—spaces effectively beyond recourse to legal remedies and more suited to redress by holistic and systemic accountability reforms advocated by algorithmic justice scholarship.

KEYWORDS

algorithm, algorithmic grey hole, algorithmic justice, automated decision-making, disability, NDIS

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1 | INTRODUCTION

In Australia, several recent high-profile scandals have highlighted the risks and challenges associated with the digital transformation and datafication of medical, corporate and social service infrastructures. One of the most egregious examples of data harms is the widely publicised case of robodebt, an automated debt assessment and recovery scheme implemented by Services Australia as part of its income compliance programme (Carney, 2018a, 2018b). The impact of robodebt, in terms of the personal and societal trauma inflicted upon millions of Australians wrongly accused of welfare fraud, has been extensively documented (Braithwaite, 2020; Graycar & Masters, 2022; Nikidehaghani et al., 2023; O'Donovan, 2019), thanks in part to a nation-wide Royal Commission (Robodebt Royal Commission, 2023). These incidents have raised awareness both with the Australian government and among the general public about the diverse risks, harms and injustices arising from the government use of automated decision-making (ADM) systems.

While there is increasing concern about automation's societal consequences, certain areas of social provisioning have received minimal scrutiny. In this article, we examine a different "subterranean" form of automation as an "input" into decision making—the implementation of computer algorithms within the NDIS, which, despite being greatly impacted by the government's digital transformation initiatives, has received limited attention from scholars and the media. The NDIS is one of Australia's largest and most expensive social programmes, providing support to over 630,000 participants at an annual cost of $48.7 billion (Government, 2024). Upon applying to enter the scheme, each participant undergoes an assessment to determine their eligibility, and if deemed eligible, their needs are evaluated to develop a personalised support plan. Algorithmic technologies have become integral to NDIS assessment, planning and review processes (Australian National Audit Office [ANAO], 2020; Taylor-Fry, 2021). However, there is a notable gap in understanding regarding the functioning and consequences of these algorithms. Currently, there is very little publicly available information about the role algorithms play in the National Disability Insurance Agency's (NDIA's) administrative procedures. Important details remain unknown, such as the data used to inform the planning algorithms, how different data points are weighted, and where the line is drawn between automation and human discretion in individual cases. Additionally, it is unclear who is responsible for constructing these algorithms and what types of evidence and data were used in the development process. As highlighted by some critical commentators, it is both surprising and concerning that, despite the significant impact and scale of the NDIS, there remains a dearth of understanding regarding its internal technical operations (Johnson, 2022; van Toorn et al., 2022).

In this article, we consolidate the available public evidence regarding the nature of NDIS planning algorithms, aiming to provide initial insights into this opaque process. Our specific concern lies with issues of fairness, accountability and legality associated with the implementation of algorithmic decision making in the scheme. The academic literature on algorithmic fairness has a rich history, exploring diverse definitions of fairness (Friedler et al., 2021; Hoffmann, 2019; Trewin et al., 2019). Recent research emphasises the need for a shift from formal mathematical models of "fair" decision making to more comprehensive evaluations, assessing whether algorithms can promote or deny justice in practice (Bennett & Keyes, 2019; Green, 2022b). Green, for example, contends that the problem of unfairness extends beyond formal equality in terms of "equal treatment for individuals based on their attributes or behavior at a particular decision point" (Green, 2022b, p. 4). Substantive fairness, he argues, concerns the broader landscape of unjust norms and institutions that shape the nature and consequences of decisions guided by algorithms, resulting in certain individuals having their life chances determined by "a small number of 'zero-sum, high-stakes'" calculations (Fishkin, 2014, p. 131, quoted in Green, 2022b, p. 10).

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Our purpose in this article is to explore whether NDIS planning algorithms satisfy standards of substantive algorithmic fairness. Adopting Green's conceptual framework, our approach involves placing the legal and institutional structures surrounding NDIS planning algorithms at the core of conversations about fairness. The agency overseeing the scheme, the NDIA, has thus far kept the details of its data-driven, algorithmic planning and assessment processes concealed from public view. Due to the restricted availability of information about these administrative processes, we focus on secondary sources, including consultancy and external auditors' reports as well as the limited documentation published by the NDIA.

Through our discussion, we highlight several technical and socio-legal aspects of the scheme's decision-making infrastructure that subvert substantive algorithmic fairness. These include, first, the absence of any policy or legal mechanism to ensure algorithmic inputs are reasonably balanced against the views and preferences of people with disability; second, the manner in which computational processes oversimplify the concept of disablement, imposing on people standardising data categories that can distort their experiences of disability and corresponding support needs; and third, the limited recourse options for NDIS participants to challenge decisions informed by algorithms. In particular, we note the absence of legal constraints governing the use of algorithms in NDIS planning. These findings indicate the presence of what legal scholars term an "algorithmic grey hole" (Solow-Niederman, 2023). In this scenario, the application of algorithms by governments is subject to certain legal limitations, but these constraints are so minimal that they effectively permit government agencies to act without meaningful restraint. A key contribution of the article is to illustrate how barriers to internal and external (judicial or tribunal) review mechanisms and lack of systemic correction, leaves the vast bulk of decision making beyond understanding or prospects of challenge. Excessive reliance on unknowable algorithms empties review of its substantive merit, transforming it into an "algorithmic grey hole."

The argument is developed in three main sections. The following section, Section 2, provides some background to the NDIS, explaining how a combination of financial and administrative pressures have led to the adoption of algorithmic decision support tools within the scheme. In Section 3, we explore the nature and purpose of these algorithmic processes, their role in formulating individual support plans, and issues of human bias, inconsistency, inequity and cost overruns that an algorithmic approach is intended to address. In Section 4, we highlight a number of tensions between the principles established in the NDIS Act and the undisclosed use of algorithms to guide the planning process. Disability experiences and support needs, we argue, are highly unique to each individual, and can be influenced by complex social and cultural factors, making a rigid algorithmic approach inappropriate and potentially harmful. In addition, we explore accountability, legality and procedural fairness aspects of NDIS decision making. Our concluding remarks call for immediate action to ensure clear paths for review, transparency in algorithmic processes and socio-cultural shift that involves the public, particularly people with disabilities, in rethinking the role of technology in alignment with principles of disability justice.

2 | RESHAPING RESOURCE ALLOCATION: THE EMERGENCE OF NDIS AUTOMATION

The NDIS is a creature of the complications of a federal system of government that divides responsibilities between the national and the states/territory levels of government. It was conceived on advice of the Productivity Commission as an additional and generous national "capstone" programme in which funding for individualised support would be targeted to a small group of people with "severe and permanent" disability (Productivity Commission, 2011, esp. 10–21). Known as Tier 3 assistance, this funded support would constitute the majority of

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NDIS expenditure, which for the Productivity Commission signalled the need for robust and nationally standardised tools to evaluate eligibility. Jointly funded by both levels of government (most extensively by the national government), the scheme was premised on retention of state/territory funding of existing services and support arrangements for an estimated 4 million people with "lower level or shorter-term disabilities" (known as "Tier 2" participants). This assumption was fragile because it relied on two dubious mechanisms: federal-state bilateral agreements and successful legislative drafting to confine NDIS expenditures to Tier 3 participants.

Federal-state bilateral funding agreements have proven to be especially weak policy instruments in Australia. This is mainly because of the fiscal imbalance between the wealthier national government with greater revenues and fewer responsibilities and the cash-strapped states and territories with carriage of most services. This means there is usually an additional revenue cost to the national government as a foundation for requiring a level of matching state expenditure, but government-to-government agreements are difficult to draft with any precision as well as being beset by fraught federal-state political tensions (Carney et al., 2019, p. 799). For its part, key provisions of the NDIS legislation are crafted so as to quarantine support to Tier 3 participants. For example, eligibility is framed to exclude people experiencing lower-level impacts from a disability (the eligibility threshold); participants are not funded for supports available in mainstream health and other service programmes or those able to be provided by family or civil society (the boundary provisions); and value for money was written in as a funding guideline (economic sustainability).

While eligibility boundaries proved difficult to incorporate or administer given the greater imperative to honour principles of individualisation and control (Venning et al., 2021, pp. 103–105), those scheme elements have for the most part succeeded in concentrating NDIS resources in the way intended once someone is admitted as a participant (though numbers of participants have exceeded expectations). What failed almost completely in the overall design was not anticipating that states and territories would close most Tier 2 existing disability programmes (banking-associated expenditure savings) and that the neoliberal assumption of a competitive "market" to actualise participant choice and control of supports would prove to be a mirage (Considine, 2022, pp. 113–140; Dickinson & Yates, 2023; van Toorn, 2021). Rectifying these design failures was one key challenge of the Bonyhady/Paul inquiry (Campanella et al., 2023).

The underlying policy drivers of the NDIS are a combination of the familiar (individualisation and client control; preservation of financial viability) and the rarely encountered—namely a philosophy of investing public support under a "life-course" version of the insurance principle. Popularised as maximising financial and other gains, including increasing disabled people's social and economic participation, this principle involves consistently assessing levels of individual support provided within a frame of a (projected) whole-of-life trajectory. In combination with an obligation to ensure scheme viability across all participants, this results among other things in desirable outcomes such as favouring early capacity-building when assessing funding entitlements (Ng & Gray, 2022, pp. 654–655), but at heart poses a fundamental tension that is difficult to resolve (Needham & Dickinson, 2018).

The switch from the previous disability model of take-it or leave-it access to a standard offering of one-size-fits-all government designed and delivered disability services, to the NDIS model of tailored funding packages for the purchase of required supports, called for a radical new form of legislation and administration. Under this ideal, no longer could simple so-called "bright line" eligibility rules be enacted and objectively administered. Scheme eligibility instead had to be cast in more subjective language, and likewise the resource entitlements of participants, resulting in language such as "reasonable and necessary supports."[1] The complexity and unfamiliarity of this legislative architecture (Ardill & Jenkins, 2020) is reflected in difficulties encountered by the Administrative Appeals Tribunal (AAT) on review of NDIS decisions (Venning et al., 2021). Fuzziness of eligibility (numbers and needs of participants)

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and size and cost of individual support plans also made for unreliable actuarial predictions (the problem of cost blowouts), concerns about inequity (under-representation of applicants without access to social capital to negotiate eligibility) and administrative difficulty (uneven treatment of similar cases). Difficulties also emerge from ambiguity surrounding the interpretation of "reasonable and necessary" due to broad legal definitions and inconsistent operationalisation of the concept in case planning (Foster et al., 2016). This is the legal road more travelled by scholarship so far (Carney et al., 2019).

The less-travelled road is the one involved in administering the scheme sustainability policy associated with the previously mentioned infrequently encountered special form of insurance principle. This is the nub of the administrative challenge (of complexity, inconsistency and excessive cost overruns) spawning resort to algorithms and automation as a decision-making aid. As Venning and colleagues observe:

> Unfortunately, both [the] appeal and dilemma of the NDIS relate to the same issue, that is, the imagined rights versus fair and sustainable administration of entitlements. Eligible participants naturally want their choices recognised based on their own perceived needs. Government, on the other hand, wants value for money and a sustainable scheme.
>
> (Venning et al., 2021, p. 98)

It is against this somewhat conflicted mixture of social and economic imperatives, and the tension between equity of treatment and personalisation, that automated or algorithmic decision tools fall to be assessed.

3 | ALGORITHMIC DECISION-MAKING TOOLS IN THE NDIS

From the outset, the Productivity Commission envisaged a significant role for yet-to-be-developed tools, writing that:

> Assessments [sh]ould be designed to be as objective as possible. The people making assessments would need to be independent from the client (unlike treating general practitioners), be properly trained in the use of the tools and be approved or appointed by the National Disability Insurance Agency for the purpose of conducting NDIS assessments. The agency would monitor assessors for their appropriate use of the assessment tools. 'Hard' assessments would be unfair on the client. Assessment 'softness' could jeopardise the scheme…
>
> (Productivity Commission, 2011, pp. 20–21)

In theory, such rating tools could be injected at the application for entry to the scheme or any of the subsequent main stages of NDIS decision making.

Suitable objective tools for determining scheme eligibility were found not to exist at the time of that inquiry (Productivity Commission, 2017). Early NDIS roll-out stimulated interest in developing tools as under-staffing and under-qualified staff with too little time, saw indicative plans imposed and re-used without face-to-face refinement, access decisions favouring some disabilities over others, and both access and package value favouring applicants with good access to social capital of informed family/advocates (Carney et al., 2019; Dickinson et al., 2021, p. 35). From the outset, there were concerns that the absence of objective tools to direct funding allocations could lead to the scheme becoming financially unviable. In the absence of a tool for estimating reasonable and necessary funding for *all* impairment

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types, the Productivity Commission (2011, pp. 338–339) recommended a "transition to a fully-fledged assessment toolbox" drawing on "multiple sources of information." Experts at the time warned against employing "ready made tools" for the sake of expediency (Productivity Commission, 2011, p. 338). Following an initial trial of a functional assessment tool developed internally by the NDIA, however, the agency changed its approach and adopted a set of generic assessment instruments for 11 primary disability types, along with the World Health Organization Disability Assessment Schedule version II (WHODAS II) for people with disabilities not listed (including mental health conditions/psychosocial disabilities) (National Disability Insurance Agency [NDIA], 2015; see also Productivity Commission, 2017, p. 156). The assessments produced a "severity" score to inform calculations for both determining eligibility and allocating funding. These points-based scoring tools essentially convert information about a person's disability into numerical metrics, serving as crucial data inputs for eligibility and planning decisions.

Since the early implementation of the scheme, it was envisioned that these decisions would adhere to a "guided" decision-making process integrated into an overall resource allocation framework supported by actuarial modelling of scheme costs (NDIA, 2016; Productivity Commission, 2011). This process relies on automatically categorising each individual into a "reference group" using a computation that takes into account their level of functioning (the "severity" of their disability), age and type of disability (Productivity Commission, 2017). Once grouped, the person is then assigned a typical support package (TSP) based on their corresponding reference group. The plan is able to be adjusted manually, either adding or subtracting entitlements, if it is judged not to meet specific needs, taking into account what supports the individual already has in place, and whether these are considered sufficient (See Figure 1). As the NDIA explained in 2016:

> The idea is to try to disaggregate the participant population into homogeneous subgroups where each person in a subgroup is expected to have a similar a priori package cost (although there will inevitably be a distribution within each subgroup) but where, at the same time, the subgroups are big enough to have some statistical credibility.
>
> (NDIA, 2016, p. 19)

Use of TSPs is not a rigid requirement (planners can build a plan without using the tool), but the approach is strongly encouraged to establish consistency, enabling the prediction of an individual's potential funding needs, and also aiding in the estimation and control of overall scheme costs. Nonetheless, it relies on a form of circular reasoning: the algorithm generates a standardised plan, which is later modified according to individual situations, and the data from these plans are then used to benchmark future iterations of the algorithm. An issue arises when manual adjustments result in additional supports

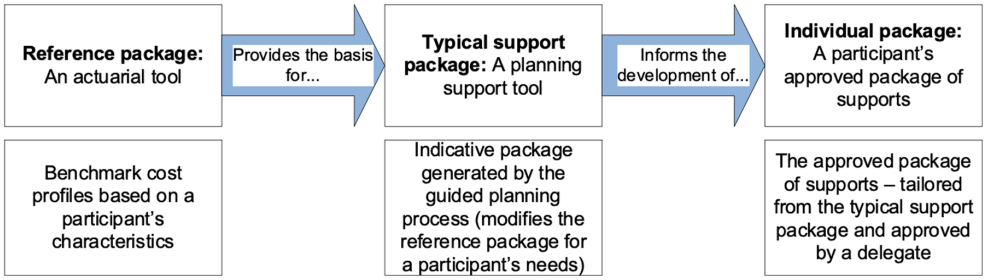

FIGURE 1 Algorithmic inputs into the planning process.
Source: ANAO (2020).

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being added to the support package, leading to an increase in both actual and projected scheme costs. It was precisely this concern that prompted the government to propose outsourcing the assessment process to "independent" private contractors and replacing the TSP with a more data-intensive social profiling process (Joint Standing C'tee on NDIS, 2021b).

Akin to the role of impairment tables in Disability Support Pension and Carer payments assessment since the 1990s (Carney, 2006, Ch. 8; van Toorn & Soldatic, 2024), the proposal envisaged using independent assessors and functional assessment scores in association with other undisclosed data firstly, to ascertain eligibility for NDIS participation (access), and secondly, to automatically match each individual to one of 400 "profiles" (NDIA, 2021). Similar to the existing reference group model, each profile had a corresponding indicative funding package, enabling an automated calculation of "a reasonable and necessary funding amount for participants with similar functional capacity and life circumstances" (NDIA, 2021, p. 16). This approach was touted by government as a corrective for scheme inequities (favouring of some disabilities over others; barriers to access for applicants without access to a good portfolio of recent medical reports), as well as reducing staffing overheads and processing time (Dickinson et al., 2021; Johnson, 2021). Crucially, the automated components were said to address issues of "sympathy bias" in a scheme heavily dependent on "individual public servants' judgement and their natural empathy" (Australian Government, 2021, p. 32). Heavily criticised on a host of grounds (van Toorn & Scully, 2023), including its oversimplification of complex planning (Dickinson et al., 2021), perceived cost-minimisation function and violation of the United Nations Convention on the Rights of Persons with Disabilities (Gooding & West, 2023), the proposals were shelved on 9 July 2021 (Henriques-Gomes, 2021).

While the independent assessment proposal never progressed beyond trial phase, the TSP continues to serve as a reference point for guiding planners when making detailed decisions about the content and funding levels of supports. Their discretion comes into play once functional disability information has placed a participant within a reference group. Due to the significant impact of the TSP on the total cost of the scheme, there is a growing emphasis on its evaluation by external auditors and the NDIA (ANAO, 2023). In 2022, the NDIA initiated a review of the TSP, aiming to address the problem of funding packages being assigned above the value of TSPs. TSPs themselves have experienced inflation over time due to both rising reference package values (resulting from assessments indicating lower levels of function) and manual adjustments made by planners as they assess support needs through guided questions (Taylor-Fry, 2021). To address these "behavioural" aspects, particularly concerning the problem of excessive human discretion in plan valuations, the Auditor-General advised the NDIA to reconsider its decision to remove a rule that previously mandated planners to refer any budgets deviating from the TSP benchmark by over 8 per cent to a higher-level decision maker for approval (Taylor-Fry, 2021, p. 60). The NDIA agreed to "update the ICT system controls" and is currently implementing a new ICT infrastructure, "with the aim of iteratively improving TSP modelling over time" (ANAO, 2023, p. 60).

While falling short of transparency and co-design standards recently affirmed by the Robodebt Royal Commission (2023, Ch. 17), concerns regarding the current application of algorithmic tools as a planning aid highlight other unresolved issues in relation to substantive fairness, including fairness in terms of whether the tools themselves accurately capture the experiences and impacts of disability for effective support planning; whether legal and institutional mechanisms exist to ensure that a human decision maker is sufficiently engaged and accountable; and whether the decision-making process meets standards of legality and procedural fairness.

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4 | FAIRNESS, HUMAN ACCOUNTABILITY AND LEGALITY OF NDIS AUTOMATION

4.1 | Fairness

In computer science research, algorithmic fairness is understood as an approach to developing methods that address biases and discrimination inherent in algorithms (see for example, Bellamy et al., 2019). Researchers explore techniques that pinpoint biases present in the algorithm's training data, aiming for equitable treatment across diverse demographic groups. The formal equality principle, as articulated by Aristotle, emphasises the idea that comparable situations should be treated in a consistent and equitable manner: "treat like cases as like" (Gosepath 2021, n.p., cited in Green, 2022b). As detailed below, this approach delineates the NDIA's actuarial strategy of profiling individuals to predict their support needs, relying on a statistical average of what individuals in that category with similar characteristics typically receive.

Scholars in the social sciences and humanities contend that formal algorithmic fairness hinges on a limited analytical framework focused solely on specific decision points, detached from the broader context surrounding those decisions (Green, 2022b; Hanna et al., 2020; Hoffmann, 2019). Fairness, as outlined by Bennett and Keyes (2019) in their discussion of fairness in the context of disability justice, involves addressing social hierarchies that disadvantage people with disability prior to and beyond the point of decision, suggesting that failure to do so may perpetuate discrimination. This aligns with Green's notion of substantive algorithmic fairness (Green, 2022b). Unlike formal algorithmic fairness, which focuses on equal treatment of similar cases, substantive fairness considers broader social relationships and institutional arrangements. It aims to reduce disparities rooted in social hierarchy upstream from a decision-making process. Additionally, substantive fairness advocates for a structural response downstream, suggesting the renovation of socio-legal, political and administrative structures to limit technologically mediated harm to individuals. In the context of disability, substantive fairness requires an approach that not only comprehensively considers the societal impact of technologies on the opportunities of people with disability but also addresses the social and institutional factors contributing to inequities, rather than focusing solely on technical aspects.

Here, we employ a substantive algorithmic fairness perspective, directing our focus toward the legal framework governing the use of NDIS algorithms (a topic we revisit later) and whether, in this case, algorithmic decision making reproduces social/administrative processes that hamper equal participation and self-determination for people with disability. In relation to fairness, a major concern expressed by scheme participants is that the use of algorithmic processing of participant data to create a reference package runs counter to the core principles of person-centred planning and the fundamental values of individual choice and self-determination, which underpin the scheme (Joint Standing C'tee on NDIS, 2021b). Data-driven approaches claim to offer personalised solutions, but often fail to live up to this promise. These methods rely on clustering techniques to understand individuals and predict their needs and preferences for service delivery. However, their effectiveness depends on the quality of the data they receive, as the accuracy and utility of the insights generated are directly influenced by the data's completeness and, in this case, how well they capture lived experiences and impacts of disability. Reference packages use demographic and diagnostic information to categorise people and predict their support needs. This process assumes specific needs and support preferences derived from the reference package, neglecting crucial factors such as environment, social relationships, gender, sexual orientation, cultural characteristics and social/class disadvantage, all of which play a significant role in shaping experiences of disablement. While both functional assessments and guided questions are supposed to incorporate these

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factors into the planning process, research indicates that for many people this does happen in practice (van Toorn & Scully, 2023). The complexity of these social and cultural factors, intricately linked to lived experiences of disability, is not adequately considered in the algorithmic process, which can result in unsuitable plans or inadequate funding.

These concerns were raised in testimonies during a parliamentary inquiry focused on independent assessments. Testimonies included remarks from one of the early architects of the scheme, Bruce Bonyhady, who highlighted that algorithmic approaches "put people in boxes before they have had a chance to outline what they would like to achieve or the ways in which they hope their lives change" (Bonyhady, 2021, p. 15). Furthermore, a parent voiced their concern that such approaches remove the human element from the planning process and revert to a medical model of disability, placing excessive emphasis on functional capacity (Joint Standing C'tee on NDIS, 2021a, p. 39). A more recent criticism highlighted in a submission to another parliamentary inquiry, examining the culture and capability of the NDIA, points out that despite the NDIS legislation stressing the individualisation and participant-directed nature of plans, "the application of statistical averages in automated roboplanning eliminates the individual person and their needs, transmuted instead to a fictional average, a fictional 'persona'" (Johnson, 2023b, p. 8). The lack of transparency in the planning process and the use of algorithmic tools without full or detailed disclosure make it difficult to determine whether planners indeed overly rely on reference plans over the input and preferences of NDIA participants themselves. However, at the very least, it is problematic if participants *perceive* a lack of agency in decision making, as this can lead to a loss of trust and disengagement from the process. The key concern in this context is whether there exists enough "statistical credibility" to justify using reference packages as templates, considering the known issues with the underlying data on which they rely (van Toorn & Scully, 2023). Indeed, equity in the form of treating statistically "like cases alike" based on simplistic or inaccurate data (simple standardisation) is a poor substitute for deeper engagement with what substantive fairness and justice require in this area of high-stakes decision making (Gooding & West, 2023).

For instance, significant fairness issues arise concerning the way the NDIA's algorithmic infrastructure codes disability as a single impairment. When individuals apply for the scheme, they are obliged to specify a "primary" disability and differentiate it from any other disabilities or health/mental health conditions they experience. They must fulfil the eligibility criteria for each of these conditions independently. This process has been criticised for its "dangerous and arbitrary splitting out of diagnosis," disregarding the full circumstances of the person (Johnson, 2023b, p. 13) and its legality is questioned (Johnson, 2023a). The likely reason for it relates to the construction of the reference package, wherein the algorithm lacks the ability to accommodate more than one category of impairment. Consequently, the potential interaction of multiple disability or health/mental health conditions is not taken into account. This has consequences for the nature and degree of entitlement.

The concept of defining an individual's support needs solely based on a "primary" disability is not only ableist in its reductionism but also heavily gendered (Charitsis & Lehtiniemi, 2023, p. 12). For instance, women with disabilities experience multiple and gendered forms of disability, some intertwined with chronic illness, pain, violence-related injury, psychosocial disability and mental health issues (Yates et al., 2021). These disabilities may overlap and change over time, making it difficult to designate a single "primary" disability. Unfortunately, it may not come as a shock that women have a 26 per cent lower chance of qualifying for NDIS supports (NDIA, 2019), as the scheme's algorithmic architecture fails to adequately capture the complex interplay of gender and disability. The problem with this data-driven approach is that it is impossible to extrapolate from a generalised profile what supports a person needs to flourish in life, especially if that person doesn't conform to the statistical "norm." People with disability represent a highly diverse group, with various patterns of impairment intersecting with gendered, ethnic, racial, religious, sexual and class identities, adding layers of complexity

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to the disability experience. Assessing individuals based on their "primary" disability perpetuates a reductionist and simplistic view of disability. It raises the bar for access for those with intersecting health and mental health conditions and physical and intellectual disabilities. But it is not only these groups affected, for as Charitsis and Lehtiniemi argue, when social benefits and public services become increasingly conditional on individuals conforming to rigid data categories that belie their multifaceted identities and life situations, "almost anyone can fail to access services and end up at the receiving end of disciplinary and control mechanisms" (Charitsis & Lehtiniemi, 2023, p. 12).

4.2 | Human decision makers and accountability

As the Robodebt Royal Commission observed, human engagement is critical for many citizens unaccustomed to dealing with government or experiencing vulnerabilities, leading it to recommend "[m]ore 'face-to-face' customer service support options should be available for vulnerable recipients" (rec. [13.3]). Because of well-known local and international fiascos with algorithms and automation in welfare (Bouwmeester, 2023), heightened scrutiny of algorithms and automation in the NDIS is certainly called for. Across diverse areas of automation, this scrutiny often centres around ensuring adequate human involvement in decision making to ensure accountability.

The concept of the "human in the loop" is seen as an important oversight mechanism and risk mitigator for medium and high-risk systems (Jones, 2017), aligning with a broader trend in the automation literature that scrutinises and emphasises the role of human agency, especially in areas of high-stakes decision making (Gillespie, 2014; Kitchin, 2017; Pasquale, 2015; Wagner, 2019). Accountability is closely tied to the presence and participation of human decision makers, aiming to ensure that human judgement plays a *meaningful* role in the decision-making process (Wagner, 2019). This idea is expressed in the Productivity Commission's recommendation that disability assessments should not merely be accepted without consideration ("rubber stamped"), and any plans that deviate from the established "benchmark" of assessed needs for individuals with similar characteristics must undergo review by a more senior NDIA administrator (Productivity Commission, 2011, pp. 20–21).

Hence, the decision process most certainly involves human discretion, as an NDIA planner is responsible for making adjustments and approving the final plan. Nevertheless, this casts doubt on whether having a human in the loop is adequate to guarantee fairness and accountability (for a critical examination of policies requiring a human in the loop, see Green, 2022a). Reuben Binns (2022, pp. 205, 208) argues persuasively that in the case of individualisation, algorithmic input undermines and is incompatible with exercise of the required human discretion, particularly with lower-level decision makers. While "statistical credibility" might be thought to be achievable in this context, external review mechanisms like the AAT provide some insight into the practical *adequacy* and *acceptability* of decisions. The increasing number of AAT appeals in recent years suggests that despite human involvement, decisions are being made in an inconsistent and, some argue, unfair manner, neglecting the specific needs and preferences of individuals involved (Collings et al., 2016; Henriques-Gomes, 2022; Perry et al., 2019; Smith-Merry et al., 2023; St Guillaume et al., 2021). In this case, as in numerous other domains employing decision support tools, the issue of accountability becomes complex due to administrators' enmeshment within algorithmic processes, making it unclear where the line lies between human discretion and automation.

Because planners are closely enmeshed within algorithmic processes, it makes little sense to attribute flaws in decision making solely to either the human or machine components, following the traditional binary liability model (Marchant & Lindor, 2012). As Wagner (2019,

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p. 116) argues, "this model of social blame translated into binary legal liability is unfit for a world of human-technical systems in which both equally contribute to decision making." Rather than oversimplifying the problem as a mere absence of human involvement, a more nuanced approach and further research is required to understand the collaborative interaction and systemic design features influencing the decision-making process in such integrated systems. The presence of human involvement in NDIS decision making should not exempt the semi-automated process from legal and political scrutiny.

4.3 | Legality, procedural fairness and review on the merits

At first blush, it appears perverse to argue that the use of algorithms in NDIS decision making constitutes an "algorithmic grey hole" in the sense of providing the appearance but not the substance of rights of legal redress (Solow-Niederman, 2023). Australia rightly prides itself for its robust judicial avenues for testing whether decisions are legal and whether affected parties received a fair and unbiased hearing (once called "natural justice" now procedural fairness). And citizens have ready access to an independent tribunal (currently called the "AAT" until renovated in 2024) whose task is to "step into the shoes" of the original decision maker to review the decision afresh and on its merits to impose (unless overturned on appeal) its own assessment of what is the "correct and preferrable" decision. AAT merits review is conducted not in a passive but instead in a more "inquisitorial" manner. The hearing is more flexible, free of unduly technical rules about evidence or procedure applying in courts, but nevertheless is obliged to accord procedural fairness. For example, it was a denial of procedural fairness for the AAT to doubt, without hearing from an NDIS applicant in person, that funding his mother was the only acceptable way of providing overnight care and management of his seizure risk, and thus the only "effective and beneficial" form of reasonable and necessary support (Klewer, 2023, esp. para [113]).

As we seek to show, all of these avenues *in theory* are open as a check on NDIS decision making. Yet, all three avenues are quite illusory in practice, constituting classic examples of algorithmic grey holes. Consideration of legal accountability, procedural fairness scrutiny or AAT merits review of the role of algorithms in NDIS decision making is only possible because the NDIS Act does not contain a provision validating a decision *made* solely by computer. Consequently, all NDIS decisions are open to judicial challenge or AAT review (Ng & O'Sullivan, 2019). However, neither courts nor the AAT can consider a case until a "final" decision has crystallised—preliminary inputs, such as the contribution of TSPs toward a final NDIS plan, do not qualify as a "decision" (the High Court ruling in Bond, 1990). Use of algorithms as an aid to decision making is expressly legitimated by NDIA operational guidelines (the Supports Rule, 2013), and no suggestion has been made that this is unlawfully in excess of the rule-making powers of the Act (it is not suspect as being ultra vires).

As now discussed, however, few if any of the remaining avenues hold prospects of meaningful restraint on NDIS use of algorithms. In non-technical terms, this is because: (a) the contribution of NDIS algorithms toward typical budgets (including nomination of a primary disability) is too preliminary to qualify for judicial review and any contribution toward ultimate legal error too difficult to prove, with any unlawful fettering of caseplanner's discretionary decisions being too subtle or remote, and there is no way of knowing or evidencing any fettering; (b) it is not possible to establish any breach of the duty to fully fund "reasonable and necessary supports"; and (c) while AAT merits review itself is never affected by earlier algorithmic contributions to primary decision making because it is a de novo reconsideration, rectification of an individual case provides no *systemic* recourse to substantive fairness for those in a similar position unless each also exercises their appeal rights.

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4.3.1 | The legality of NDIS "typical budget" planning

Concern has been expressed by Parliamentary committees and others that NDIS practice of requiring applicants to nominate their primary and any secondary impairments is contrary to law (Johnson, 2023a), or that the typical budget generated by the algorithms constrains or leads to miscarriage of planners' ultimate decision making.[2] With regard to the distribution of responsibility (or "division of labour") between an algorithmic input and the role of NDIS planners, the legal position is that the decision maker must not be subject to a "fetter" that takes away the choices (or "discretions") legally required to be considered (Chiam, 2019). However, an administrative arrangement that gives an initial case planner authority to manually vary the presumptive TSP by a given percentage (in either direction) and refer larger variations for consideration by a more senior planner would not breach that rule. The same is true of purely human systems: a "blanket" administrative directive insisting that planners always choose one of several legally available options *would* breach the rule, but gross under-resourcing and overworking of administrators—such as that experienced during the early transition of the scheme up to mid-2017 as the volume of work resulted in perfunctory telephone "planning" (Carney et al., 2019, p. 786, 794)—would not do so. Likewise for concerns that planners are incentivised by Key Performance Indicators to conduct planning meetings quickly, with limited interaction with participants, leading to the use of automated reference packages to reduce caseload burden, and prioritising efficiency over customising support plans (Johnson, 2023b). Even where decisions are subject to human review, algorithmic systems and the surrounding organisational environment will still "nudge and influence the judgement of overworked [case] workers, as well how they justify their discretion to themselves and others" (Hong, 2023, p. 6).

4.3.2 | The "reasonable and necessary support" test

For individual NDIS participants, what matters is what is included as a funded support in their plan and how adequately it is funded. The legislation frames this as a judgement about what are "reasonable and necessary supports" (NDIS Act s. 34). The rules made under the Act elaborate the meaning of the phrase (NDIS Supports Rule, 2013) and their inclusion in a plan (NDIS Plan Management Rules, 2013, Pt 6). So, can legal recourse be obtained on the basis that algorithmically generated typical plans are incompatible with this obligation to ensure "reasonable and necessary supports," such as by expecting families or mainstream services to meet the portion of the costs (so-called NDIS "boundary issues")?

The most definitive guidance on the phrase came from Mortimer J at first instance in *McGarrigle*, writing that it takes its meaning from its context, "especially … s 4(11), which sets out what reasonable and necessary supports should enable and empower people with a disability to do, read with s 14 which sets out the purposes for which funding for reasonable and necessary supports is provided" (McGarrigle, 2017a, para [41]). However, this does not mean that *alternative* sources of support—such as from mainstream health and welfare services, Tier 2 state and territory services, or voluntary family and civil society supports—may not be more appropriate in a given case. The Full Court, in endorsing referral back for reconsideration by the AAT, merely remarked that "[g]iven the potential systemic importance of the issues sought to be raised" a three member AAT panel headed by a Presidential Member might be appropriate (McGarrigle, 2017b, para [8]). Mortimer's ruling stands. Simply stated it is that once a decision is made that an item is a reasonable and necessary inclusion in a plan, this serves as a "gateway" into *fully* funding that item of support. It would be a legal error to then *reduce*

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funding on the basis of, say, a capacity for family contributions (McGarrigle, 2017a, para [95] (Mortimer J)).

Recourse to the courts on the basis that the contribution of TSPs to the final funding decision contravenes this ruling is not in any practical sense open, because those algorithmic inputs generate no *legally relevant* errors in the ultimate funding decision either with respect to the "boundary" issues, or the full funding of reasonable and necessary supports.

4.3.3 | Remedying algorithmic injustice through AAT merits review

External review by the AAT of access or planning decisions grapples afresh with the merits or otherwise of the factual and legally relevant dimensions of the decision. The review is in no way constrained by any preceding unfairness or other discriminatory impacts of NDIA algorithms; the algorithms are not relevant to or in play in AAT review, but nor would it be practically possible to interrogate their role in the primary decision being reviewed.

AAT merits review necessarily includes reconsidering the "weight" to be given to competing factors, such as operationalisation of the "Goldilocks" tension in NDIS design between personalisation and sustainability under the lifecourse "insurance principle"—a balance between planning decisions that are overly hard (inflexible/arbitrary, ousting personalisation) and overly soft (idiosyncratic, erratic and lacking consistency) (Productivity Commission, 2011, pp. 20–21). That tension is reflected in the two arms of NDIS *Supports Rule* (2013, r 3.1(b), (c)), that:

> in calculating whether proposed supports are 'reasonable and necessary' under the scheme, the decision-maker must consider, amongst other matters: 'whether there is evidence that the support will substantially improve the life stage outcomes for, and be of longterm benefit to, the participant'; and 'whether funding or provision of the support is likely to reduce the cost of the funding of supports for the participant in the long term'.
>
> (Ng & Gray, 2022, p. 654)

However, all that is legally required is consideration of both factors, not that any particular weight be given to either.

Recourse to the AAT as a response to NDIA algorithms is an illusory (grey hole) remedy beyond justice for that individual, because unlike a judicial ruling, AAT review does not result in any systemic change in the way algorithms are used. It currently offers no more than normative guidance reconciling conflicting values and principles of the NDIS. Despite manifold other concerns detailed earlier, algorithmic inputs into NDIS case planning do not speak at all to "boundary" questions at the AAT. Nor do they *disadvantage* applicants when developing an evidence-based case for additional or better-funded reasonable and necessary supports being sought on review.

Instead, for a more "vulnerable" participant such as someone lacking the social capital to advocate strongly for their needs, or the socioeconomic resources to come to the NDIS armed with a suite of recent medical and other reports, it is the inequity and unfairness of being short-changed by NDIS *primary decision making*. Putting it another way, the unfairness lies in needing to apply to the AAT *at all*. Substantive *un*fairness stems from the way, *in the absence of other documentary/evidentiary material* or avenues for obtaining it, undue weight given to algorithmic inputs (uncorrected for by information elicited by human case planners with adequate time and expertise) deprives those participants from obtaining their just entitlements under the personalised planning process.

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5 | CONCLUSION: TOWARD ACCEPTABLE NDIS ALGORITHMS?

This article reveals that NDIS algorithmic systems, used as supporting inputs in determining the content and funding of participants' plans, risk replicating well-documented instances of algorithmic harm experienced in other areas of social welfare provision. We refer to these systems, and the nature of their decision-making powers, as "subterranean," because their workings are neither publicly known nor amenable to legal rectification in the way Australia's Robodebt or the Dutch Childcare Benefit harms were rendered accountable (Bouwmeester, 2023). These systems exercise forms of state power, yet their subterranean administrative character positions them in an "algorithmic grey hole" (Solow-Niederman, 2023) effectively beyond the reach of legal remedies; and one which significantly compromises the delivery of substantive algorithmic fairness by failing to routinely engage the contextual complexities of the disability experience.

Subterranean systems present significant threats of algorithmic harm in various social services, including Australia's use of the Job Seeker Classification Instrument used in employment services (DEWR, 2020). Further research is needed to develop a deeper understanding of the many dimensions of subterranean risk to the realisation of substantive fairness, whether within the NDIA's administrative procedures or more generally, and how best to address that risk. In this context, "formal" algorithmic fairness, which focuses on treating individuals equally based on their attributes, seems insufficient in meeting the standards of "substantive" algorithmic fairness (Green, 2022b), which instead seeks to address social injustices, specifically the exclusion or marginalisation of people with disabilities from decision making. The as yet nascent concept of "algorithmic justice" offers insights into what might be entailed in realising that ideal (Marjanovic et al., 2022). Algorithmic justice broadens consideration in at least three ways: (i) in its focus on ADM harms and an accompanying theory of justice going beyond traditional formal equality of distributional access to "social goods"; (ii) in its concentration on systemic as distinct from merely individual impacts (picking up not only economic but socio-cultural and political dimensions of ADM); and (iii) in its interest in the algorithmic *process* rather than just various distortions in data sets, and in restoration of the full human subject to counter "datafication" of subjects (ibid, 281).

Three preliminary conclusions about the way algorithmic justice and substantive algorithmic fairness might be advanced for NDIS participants can tentatively be drawn from our scoping inquiry in this article. Our first conclusion is that immediate action is required to ensure that primary decision-making processes *at minimum* reflect the precepts laid down in the Robodebt Royal Commission (2023, rec [17.1]) and since accepted by the government, namely that: there should be a "clear path" of review for those affected by ADM; that agency Websites "contain information advising that automated decision-making is used and explaining in plain language how the process works"; and that "business rules and algorithms should be made available, to enable independent expert scrutiny." The path for obtaining AAT merits review of NDIA decisions has been available from the inception, and access to it is now a "clear" route following the removal of previous barriers.[3] However, more could be done to ensure easy, accessible and effective *internal* NDIA review. Our examination shows a close to zero compliance with the second and third of these standards. NDIA Websites do not currently apprise readers that automation is used in decision making, or the processes involved, much less in "plain language." The complete veil of secrecy around NDIS "business rules and algorithms" is another serious deficiency, giving rise to actual and perceived bias and discrimination, particularly against people with multiple marginalised identities (van Toorn & Scully, 2023).

Second, given the lack of any, much less any genuine "co-design" (Dickinson & Yates, 2023) in the development of existing NDIA algorithms and the credible claims that tailoring NDIS participants' support to their unique and diverse circumstances can *only* be accomplished by

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skilled *human* case planners (Binns, 2022), precautionary measures are warranted. NDIA operational guidelines should be reviewed to ensure retention of adequate human decision making, and independent research should urgently be commissioned into the inner workings of current arrangements, and the findings made public as a basis for public debate on continued use of such algorithms.

Third, scrutiny of algorithms alone is unlikely to affect meaningful change if it neglects the socio-bureaucratic context in which they operate. The NDIS functions as a large, bureaucratic infrastructure, guided largely by principles of standardisation and efficiency in its approach to technological innovation. While human planners do retain some discretion, NDIS processes and systems essentially conform to a well-established technocratic logic where the pursuit of fairness is simplistically equated with straightforward standardisation in how individuals are processed (or treated equally) by algorithms. It is essential, we argue, to spotlight these subterranean operational aspects, with a specific focus on involving the public, especially people with disability, in rethinking the role of algorithms. This goes beyond surface attempts at co-design. Rather, it necessitates people with disability having a meaningful say in negotiations around NDIS resources and frameworks governing their distribution. It is only in such circumstances that systems of resource allocation, whether algorithmically augmented or otherwise, can genuinely align with the principles of disability justice.

Due to the subterranean and pervasive character of NDIA algorithms giving rise to algorithmic grey holes, we conclude that they are less suited to redress through traditional judicial or tribunal accountability reforms and are more adequately rendered accountable under rendered accountable through the structural changes advocated by algorithmic justice scholarship.

AUTHOR CONTRIBUTIONS

Georgia van Toorn: Conceptualisation; writing – original draft; writing – review and editing.
Terry Carney: Conceptualisation; writing – original draft; writing – review and editing.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to declare. All co-authors have seen and agree with the contents of the manuscript and there is no financial interest to report.

ENDNOTES

[1] As expressed in the Explanatory Memorandum to the 2012 Bill: 'The criteria listed in clause 34 balances what support is 'necessary' to assist the participant to pursue their goals (in accordance with the participant's statement of goals and aspirations) and to facilitate their social and economic participation, with what is 'reasonable', including whether the cost of the support represents value for money and is reasonable, the efficacy of the support, whether it is not reasonable to expect families and carers to provide the support, and whether the support would be more appropriately provided by other mainstream services': Explanatory Memorandum, *National Disability Insurance Scheme Bill 2012* available at https://www.legislation.gov.au/Details/C2012B00230/Explanatory%20Memorandum/Text.

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[2] A 2015 ruling of the Federal Court in Mulligan in a loose sense does insist that supports be assessed on the basis of how the NDIS "finds" the participant. This obligation, however, applies to later stages of the planning process in which the case planner assesses the functional impacts of disability for each participant. To establish legal error, it would be necessary to show that an initial nomination of a primary impairment results in a TSP and ultimate funding package that fails to consider impacts in all relevant functional domains (communication; social-interaction; learning; mobility; self-care; self-management) or unlawfully narrows consideration of how the impairment 'affect[s] the person's capacity for social or economic participation'. In other words, the nomination of one impairment for the purpose of running the algorithm (or for any other purpose) must be shown to detract from/impact on the ultimate responsibility for crafting an assessment package that meets all the legally relevant functional dimensions laid down in Mulligan. In a lay sense, this may appear achievable, but proof to the legal standard is doubtful, in part due to the opacity of the process.

[3] A key barrier in this respect was the inability to review a plan superseded by a later one on its expiration.

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The Saturday Paper

JUNE 1 – JUNE 7 2024

NEWS

Court-saving solutions to the NDIS will allow others to be seized against disabled people and give extraordinary new powers to court support entirely. By Rob Sherman.

Exclusive: Shorten revives the Coalition's failed NDIS reforms

Minister for Government Services Bill Shorten. CREDIT: AAP IMAGE / MICK TSIKAS

Bill Shorten's reform of the National Disability Insurance Scheme, forecast to cost $14.4 billion in growth over the next five years, would establish a new "tier" of support for participants in the scheme's failed overhaul of the system – originally drafted by the government's front row of the architecture of schedule.

The $400-million reforms would give a hyena-style disabled people with duties, even after they have accessed support – a measure Shorten previously opposed when proposed by the Coalition. It also gives the court of the agency delivering the scheme extraordinary powers to cancel support entirely.

At the end of March, Shorten accepted disability advocates with new legislation despite promising they would be given an opportunity to "co-design" schemes publicly.

Nobody had seen the bill.

Many were told to sign non-disclosure agreements and, even then, were only briefed on the bill half an hour before the ministers' secretaries and the NDIA rose in the House of Representatives to speak to it. Members of the government's NDIS Review Independent Advisory Council (IAC), which Shorten had established, has had also signed confidentiality agreements, received it briefed and the following day.

Since then, the bill's implications have slowly become clear. While the disability community has cautiously welcomed the opportunity for people to appeal decisions, it has condemned many other parts of the issue of concern.

Whether NDIS reforms succeed or fail, this moment represents a key turning point in the life of the landmark scheme. Shorten's substantial prospects also depend on it, as the May budget papers disclosed NDIS spending will grow by $57.6 billion, or 51 per cent, over the next five years, instead of $38 billion. This reduction was predicated on the bill and "subsequent changes to NDIS rules and other legislative instruments" being passed by the parliament.

"I can proudly say that this government and myself have worked every day with disability sector stakeholders to get this reform over the line for the NDIS and for people with disability in Australia better," Shorten told reporters on March 21.

"We promised to make the NDIS a priority and we will make people with disability for wanting to feel fulfilled lives. And we have promised to restore trust in the scheme."

The bill, however, has been introduced before the government has even responded to its own NDIS review, led by the late Australian "grandfather", Bruce Bonyhady, and top public servant Lisa Paul. Bonyhady's review, delivered in December, made more than 170 recommendations from the review but on, July 1, it will be with what was recommended. Some are pre-ided, dating back to a wish list of amendments from the Coalition era.

After weeks of pressure, the federal government has already had to [backflip on its plans to change the definition of disability](#). The House of Representatives, because a new definition of "NDIS supports" was to badly worded it would have pulled funding from eligible participants.

Shorten told *The Saturday Paper* that "never in the modern history of the scheme has government listened to and worked more closely with people with disability".

"There will be more amendments to come," he said. "I'm only interested in the best outcomes for participants and the scheme. There is zero ego here. If further changes are needed, we'll make them."

Legal rights groups, disability advocates and administrative law specialists say there are other flaws with the bill, and some are significant. At its core, the amendments to the National Disability Insurance Scheme Act 2013 would, in effect, create a "court" for the agency, make it easier for the agency and government to declare what kinds of support will be funded, and create extraordinary new powers for the agency chief executive to revoke funding plans.

All of this would be baked into the law, while the detail of what will actually be funded will be left to the rules. The bill would also give the full-in-house governments to determine via the creation of rule-making and legislative instruments that need only be waved through the Senate.

The promised ecosystem of "foundational" supports, which has been [delayed repeatedly](#), would be left to the rules. It would also be left to rules. And that would be jointly funded by all states and territories and the Commonwealth, has never eventuated. Now there is a new promise to deliver these sprawling arrangements, however, there is no word of funding to those who need support but do not qualify for the scheme, which is also left to the rules.

To date, the promise of the NDIS review will be a new and better, uncertain date, but the portals swing more central to the agency and government will be passed within weeks of the bill's passage, following its consideration by the Community Affairs Legislation Committee at the end of this month.

National Legal Aid said the majority elements of Shorten's reforms go "far beyond the scope of the review" and would establish a system of independent assessments that were backed by the Gruen-Nation Reform.

Shorten is introducing a new "needs assessment" that, says Legal Aid, "appears to be only determinant of the supports a person will receive, regardless of their goals and it limits scope for review of the needs assessment report".

This needs assessment has not been further fleshed out in the legislation. There is no explanation for how it will be conducted, whether participant will even be involved or whether they can see the NDIA's assessment. It will be a key determinant of what is, and is not funded, although the participant will not have the option.

The respected Villanueva Disability Rights Legal Service has issued a blistering [critique of the legislation's drafters](#), arguing the administrative "efficiency" is the "NDIS-equivalent of Robo-debt".

"Collectively, this raises the very real possibility that the needs based assessment is simply using the category of disability recorded in the person's database (assigned by the Agency) as a basis for their decision to the participant, entering it into a formula, and generating the funding budget," the group's submission to the review said.

These assessments would also reinforce a longstanding but murky practice of the NDIA's, which is to fund only "reasonable" supports which it will fund support for people in the NDIS, which appears to deal with "secondary" conditions that may also be disabling.

A separate parliamentary inquiry found in November last year the arbitrary distinction likely had "no in… governing legislation or the reality of participants' lives".

> *"It passed in its current form, the Bill will create a horrific maze of red tape, extreme administrative burden, and excessive checks and balances for people with disability, with no rights to targeted review of decisions."*

While Shorten told the parliament "your needs assessment will look at your circumstances and your goals", the bill's explanatory memo has removed secondary disabilities no longer", the bill contains provisions that repeatedly and explicitly state "only" requirements for which a person receives the eligibility requirements under the scheme.

Taken together, the changes proposed in the new legislation create a system in which the NDIA will be able to fund only supports that it says will be expected to navigate. They will do so under the specific threat of being punished.

"The proposed amendments, including the introduction of flexible budgets, make it significantly more likely that debts will be raised against participants who have not spent their plans," Villanueva Legal Aid said.

"In particular, section 40(1A) has the effect of deeming a support a person made to a third party as an NDIS support that can be recovered from the participant under section 142."

Section 42 NDIS participants has received support funding and paid for a service, the agency can decide it was not an appropriate support and refuse to debt from the participant, even though they have already paid for the money.

In a statement, a DSR spokesperson said this section was "intended to support and safeguard participants".

"It would only be in extreme circumstances such as where a person has deliberately misused NDIS funding that consideration of raising a debt under section 142 may occur, which is rare," the spokesperson said.

In 2021, when Bruce Bonyhady was attempting to run through similarly far-reaching legislative changes to the NDIS, The Saturday Paper obtained a leaked draft of the proposed changes alongside the government's response worked on by National Disability Insurance Agency employees.

One of those was a former compliance director from the then Department of Human services, who helped construct early iterations of the cost and illegal schedule schemes in 2014 and 2015. The former DHS compliance director told *The Saturday Paper* that he viewed the bill inconsistent with social security legislation and "far less" than a set a lawyer and therefore did not appreciate the legal problems.

Like his manager at the time, the compliance director was keen to work in the senior management of the National Disability Insurance Agency, with the NDIA dismissing emphasis.

His comments on the 2021 internal redraft of the NDIS legislation indicated he and the compliance division were particularly enthusiastic about creating a link between a 4A of the act and the existing eligible provisions in s 142. It would also "strengthen" language in the bill.

The provisions in 40(1A) have the effect of deeming a support a person made to a third party as an NDIS support that can be recovered from the participant under section 142.

Section 42 NDIS participants has received support funding and paid for a service, the agency can decide it was not an appropriate support and refuse to debt from the participant, even though they have already paid for the money.

In a statement, a DSR spokesperson said this section was "intended to support and safeguard participants".

"It would only be in extreme circumstances such as where a person has deliberately misused NDIS funding that consideration of raising a debt under section 142 may occur, which is rare," the spokesperson said.

In 2021, when Bruce Bonyhady was attempting to run through similarly far-reaching legislative changes to the NDIS, The Saturday Paper obtained a leaked draft of the proposed changes alongside the government's response worked on by National Disability Insurance Agency employees.

One of those was a former compliance director from the then Department of