Save Our Sons Duchenne Foundation (SOSDF) Submission to the Federal Parliamentary Inquiry into Approval Processes for New Drugs and Novel Technologies

13 October, 2020

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"DMD currently has no cure, it progresses quickly, and there are no disease modifying clinical trials currently available in Australia. Clinical trials bring hope, but our sons and daughters with DMD do not have time to wait. We need these trials in Australia, open to a broader cohort of people with DMD, and ideally using non-invasive outcome measures and natural history data instead of placebo groups. Clinical trial information also needs to be made more accessible to ALL families with DMD so that no-one is disadvantaged by their limited experience with, or knowledge of, the health system. Working together, we can make a difference and create a brighter, more hopeful future for our children".

Julia, a mother of a child with Duchenne muscular dystrophy from South Australia.

Executive Summary:

The Save Our Sons Duchenne Foundation (SOSDF) welcomes the opportunity to provide a submission to the House of Representatives Standing Committee ('the Standing Committee') on Health, Aged Care and Sport which is currently conducting this Federal Inquiry ('the Inquiry').

This submission was drafted after extensive consultation with the Duchenne and Becker muscular dystrophy community in Australia. It is instructive to note that debate and consultation on the issues which are the subject of this Inquiry has been ongoing in the Duchenne and Becker community for many years as these remain the issues of highest priority and concern to this community.

SOSDF and the Duchenne and Becker community more widely, believe this Inquiry to be long overdue and we remain hopeful that some lasting and far reaching outcomes can be achieved through this bi-partisan and constructive political process.

More ready, equitable and enhanced access to clinical trials and new medicines and treatments remains the core concern and driver of the Duchenne and Becker communities in their pursuit of a cure to the devastating and debilitating disease of Duchenne and Becker muscular dystrophy - a disease which will inevitably cut short both the lives and the quality of life prospects of those who suffer from it.

To that end, SOSDF commissioned the landmark report from the Mc Kell Institute '*Living with Duchenne and Becker in Australia: Supporting Families Waiting for a Cure* (a full copy of this report is attached to this submission - please also refer to https://www.saveoursons.org.au/introductory-video-save-our-sons-duchenne-foundation-keynote-report-into-duchenne-and-becker-in-australia/).

This report, which was launched in Canberra on 1 September 2020, highlights many of the issues and concerns which are the subject of the Terms of Reference ("ToR") for the Inquiry and pinpoints a number of current flaws and impediments in the current approval processes for clinical trials and new medicines and treatments. SOSDF has utilised key relevant information from that report, in conjunction with subsequent consultations directly with the Duchenne and Becker community, for the purposes of this submission.

Time is of the Essence

Numerous parents and carers reminded SOSDF during this consultation, that Duchenne and Becker are "time sensitive" and degenerative diseases. Moreover, that they are diseases which will not simply wait around while new technologies and medicines navigate their way through the current bureaucratic and regulatory maze (and gridlocked timeframes) which appear to characterise our existing health technology and approval processes. They are killer conditions, which with the passing of time, progressively destroy every muscle function in the human body and inevitably culminate in the untimely and premature deaths of too many young people.

On that basis, and with any safety considerations/concerns satisfactorily addressed, our community firmly believes that everything must be done to further improve, streamline and expedite our approval processes to ensure that Australian families with Duchenne and Becker are on an equal footing (and have an equivalent fighting chance) as families in other parts of the first world – where approval of new medicines and technologies does not appear to be subject to the same levels of regulations and bureaucratic inertia and where more options for medicines/treatments appear to be readily available to those that need them.

Overwhelmingly, our Duchenne and Becker community believe our current approval processes do not serve them well with many contemplating relocating their

families overseas in order to more readily access clinical trial options and specific medications and treatments. Many expressed real frustration about a health system which they say fails to deliver medications and treatments in a timely and accessible fashion (if at all), especially when they have already (and successfully) run the gamut of offshore health technology approval processes such as the Food and Drug Administration (FDA) or the Medicines and Healthcare Products Regulatory Authority (MHRA).

Many in the community are dismayed by the scarcity of clinical trials in this country, (typically rationalised as a consequence of our small population size and the limited commercial benefits/value arising for the pharmaceutical companies) and the general limitation/restrictions that are present where trials do exist (age factors, cost prohibitions, geographic factors, requisite need to be on steroids, the cognitive barriers to participation on many trials, placebo requirements etc.).

Without question, Governments of all persuasions and at all levels can be seen to be doing more. Whether that be through ensuring greater coordination and collaboration between different tiers of Government in relation to the research effort, or through the direct provision of taxation incentives, inducements and other subsidies to attract the pharmaceutical companies to invest in clinical trials and other research in this country.

Further, Government can also be doing more to ensure the streamlining and simplifying of current regulations and approval processes to ensure there remain no disincentives to discourage research into Duchenne and Becker muscular dystrophy in Australia - nor the prevalence of any impediment to the distribution of medications/treatments to the Duchenne and Becker community which have satisfied clinical trial and approval processes in respected overseas jurisdictions.

Rebeka, a mother of three boys with Duchenne from Victoria, stated when asked her views on drugs being approved overseas yet not available in Australia:

"This is the most frustrating part of all. I see no reason why drugs can be approved overseas but not here, especially if they've shown promise. ***Why are our boys lives worth less than in other countries?"***

Finally, it was clear throughout our consultation process, that Governments and the health system generally, can do more by way of disseminating/coordinating information on the availability of clinical trials and new medicines/treatments to **all** families impacted by Duchenne and Becker. Too often it appears it is only through the individual vigilance, advocacy, resourcefulness, assertiveness and research capacity of particular parents and carers, that the whereabouts or prevalence of particular trials or new treatments becomes known. Hospitals were not seen as talking with each other and there was a perceived disconnect between the health system, pharmaceutical companies, Government agencies and other key stakeholders.

Without this information being made readily available and accessible to all families, connectedness on social media platforms such as Facebook becomes a critical source of information for many families in relation to advances in new medicines and technologies, and this method of communication and information-sharing is fraught with danger.

Many families were only aware of such advances and developments through the contacts, friends and membership of global Duchenne organisations that they had formed on-line. Further, it is also perceived by many that where good ongoing relations have been established between families and particular medical professionals or institutions, that access to trials, information and medications will increase. Says a mother from Victoria:

"***We should make it fair so that everyone gets the same access****. It needs to be fair to all boys so that everyone can get involved. Some just accept what medical people say and don't push harder. There are real fairness issues around where trials are located".*

And this from Jacqui from Queensland, a mother of 2 boys with Duchenne:

"*It was me pushing and looking at clinical trial websites overseas. We are keen to do whatever we can and I'm on the PPMD Registry. I feel very educated and I'm proactive.* ***No-one is going to do it for you. No-one is going to be an advocate like me".***

Consistent, therefore, with the recommendations of the McKell Report (refer to page 41), SOSDF believes the Australian Government should establish a national clinical

trial coordinating agency to support a centralised and nationally consistent approach to the delivery of clinical trials in this country.

Where there is a will there is a way

The COVID-19 example, more than anything else, has demonstrated that where there is a convergence of political and research will, resources can be found (over $2.3 [1]billion for COVID-19 treatments and vaccines announced in the most recent Federal budget) with clinical trials fast tracked and regulatory and bureaucratic hurdles overcome to best ensure that health outcomes to the community are maximised (without compromising safety issues or standards). Such an approach (and urgency) should now be mirrored by the Federal Government in relation to rare diseases such as Duchenne and Becker muscular dystrophy.

Some parents and carers also contrasted the situation of Duchenne and Becker with the emphasis, prioritisation and resources given to ongoing cancer research – to again highlight what can be done when there is a political will and resources/funding and to demonstrate just how marginalised rare diseases such as Duchenne and Becker are on the health agenda.

SOSDF notes, for instance, the recent Federal Government announcement on 3 October 2020 that $230 million dollars will be provided in the 2020 budget to fund a new combination treatment for a deadly form of liver cancer (Sydney Morning Herald Article "*New Liver Cancer Treatment to be fast-tracked in $230 budget Boost*" (https://www.smh.com.au/politics/federal/new-liver-cancer-treatment-to-be-fast-tracked-in-230m-budget-boost-20201003-p561n7.html?btis)

While the Duchenne and Becker community support increased health expenditure on more common diseases such as cancer, they would nonetheless welcome a greater investment into treatments for muscular dystrophy and other rarer diseases.

"If we can come up with all these cancer treatments why can't we do more for Duchenne? ***I'd love to see something for the rare diseases community"***

(**Courtney a mother of a Duchenne boy from regional Victoria**).

[1] Medicines Australia Press Release "***Federal Government makes bold commitment to the Health of Australians".*** 6 October 2020[1]

As we make clear in the following analysis, there have been some interesting and highly welcomed announcements in the recent Federal Budget which will give some hope to our community and, importantly, suggest that the "tide is finally beginning to turn" to the benefit of rare diseases including Duchenne and Becker.

Who we are?

SOSDF was founded in 2008 and is the peak body for those living with Duchenne and Becker muscular dystrophy (around 1,000 younger people) across Australia. Our vision is to find a cure for Duchenne and Becker muscular dystrophy whilst actively working to ensure enhanced quality of life (including quality of educational, employment, and social opportunities) for those young people and their families affected by this condition. Advocacy and community engagement work are crucial to achieving this vision along with ongoing fundraising and events management designed to raise funds for essential research, service delivery and the provision of critical resources and equipment to the Duchenne and Becker community.

Along with the funding of a critical neuromuscular nurses program in some of our major children's hospitals across Australia, SOSDF also delivers a telehealth nursing service, scholarship programs, critical equipment and resources (such as wheelchairs, scooters, cough-assist machines, and portable ventilators) and a number of initiatives and programs such as music therapy which are designed to enhance the quality of life, skills and social development of young people suffering from Duchenne and Becker. We are also currently in the process of recruiting an NDIS Support Coordinator to assist the Duchenne and Becker community navigate the current NDIS system. For more information on SOSDF and the (cruel) Duchenne and Becker conditions please refer to the attached web link www.saveoursons.org.au.

SOSDF is also responsible for major research projects such as the aforementioned McKell report which aside from identifying issues around the lack of clinical trials and new medical/treatment options for the Duchenne and Becker community in Australia, provided a comprehensive summary of issues impacting the Duchenne and Becker community including but not limited to:

- the astronomical financial, personal and psychological costs involved with supporting a child/ren with Duchenne and Becker;

- lost wages/income as a consequence of carer responsibilities;
- issues with the National Disability Insurance Scheme;
- the (un) timely diagnosis of Duchenne and Becker; and
- the importance of coordination of care.

As was made clear in this keynote report, Duchenne and Becker carers and families already contend with enormous additional care responsibilities and issues. Given this reality, this community should not have to contend with the continuing agony, uncertainties and distresses arising from a Federal health system which presently seems incapable of delivering any hope in the form of clinical trial options and potential treatments and medications. **Yet sadly, this is very much the current case.**

SOSDF Consultation Process:

SOSDF determined to consult as widely as possible with the Duchenne and Becker community in the preparation of this submission. Social media posts were initially organised encouraging the community's participation and feedback to the Inquiry. Following this, a series of individual Zoom consultations of 30-45-minutes duration were held with parents/carers and some allied health professionals across Australia.

A series of questions were posed to those involved in the consultation, a copy of which appears at **Attachment One** at the conclusion of this submission. These questions attempted to go to those key issues which were identified under the ToR, especially as they pertained to access to clinical trials and medications.

In addition to this consultation on the Standing Committees' ToR, extensive consultation with the Duchenne and Becker community had already been undertaken by the McKell Institute as part of their research on behalf of SOSDF. An extensive survey targeting the Duchenne and Becker community had been launched on 4 December 2019 and closed on 23 December 2019. There were a total of 173 responses, a sizeable sample of the estimated population living with Duchenne and Becker in Australia. 77.05% of this sample were parents of children with Duchenne and Becker and grandparents and siblings made up the rest (McKell Report, page 14/15).

Our submission is structured to address each/or part thereof of the four ToR's for the Inquiry. In doing so, we recognise there appears to be some overlap across the ToR's and some issues (such as lack of clinical trials) will be given more emphasis.

Moreover, we will not be attempting to address all areas covered under the ToR's of the Inquiry – rather, only those matters identified by our community as being of most concern to them. SOSDF will subsequently make a series of **recommendations** at the conclusion of this response which in large part will reflect the core recommendations of the extensive McKell Institute research.

Finally, as an addendum to this submission we have attached some videos and other materials which we would urge the Standing Committee to review and consider as they provide invaluable insights into the "lived experience" of those who are suffering from Duchenne and Becker.

The wonderful documentary on Kieran Dix (the 6th of 9 brothers and the one with Duchenne) demonstrates the terrible impact of this disease on families but also highlights the great strengths, resilience and tenacity of this particular community. Unfortunately, it also highlights the little that has been achieved since the turn of the Century in relation to Duchenne and Becker muscular dystrophy,although it does appear that some real and meaningful inroads are starting to be made of late.

ToR 1 - The Range of New Drugs and emerging novel medical technologies in development in Australia and globally, including areas of innovation where there is an interface between drugs and novel therapies.

Christian and Nita McGauran, parents of a boy with Duchenne from NSW, wrote the following letter to SOSDF as part of our consultation for the Parliamentary Inquiry:

"Our son was diagnosed with DMD in 2016, just before his 5th birthday. Without any treatment options available, we immediately started looking into clinical trials. It soon became clear that most options were not available in Australia, and we would have to look overseas, particularly the USA.

There are many clinical trials currently in progress, but it is gene therapy that is our biggest hope to give our son the best possible quality of life. We have applied for countless trials, most of which are being held in the USA or the UK. The majority will not consider international patients and/or our son does not meet the age requirement to take part. We were considered for a gene therapy trial, but our family would have had to relocate to the US for at least 12 months to take part. Although this would have been an enormous financial burden on our family, it was a chance we were willing to take, as it is unlikely these trials will ever take place in Australia. Unfortunately, due to the trial's strict criteria, a blood test proved our son to be ineligible.

We eventually made it onto a trial here is Australia - at best, this drug would have only slightly slowed the progression of DMD, but it was the only option available. After taking part for 18 months, the trial was terminated due to lack of efficacy. Currently, there is no other DMD trial running in Australia that our son is eligible for.

I can't stress how important clinical trials are to the future of our son, a successful gene therapy trial could add many years to his life expectancy. ***Currently, living in Australia is a massive disadvantage when it comes to rare genetic diseases. It is devastating to think our son's life may be shortened because of a delay in accessing these groundbreaking trials and treatments".***

The McGauran's letter highlights numerous issues which are covered by ToR 1.

First, the very real dearth of gene therapy trials and options in Australia which are the "real game" for the Duchenne and Becker community - as most clinical trials in this country have been designed around researching steroid substitution which represents the "holding pattern" and not a cure for the disease.

Second, the contrasting availability of these gene therapy trials in the US and the UK and the extreme lengths contemplated by Duchenne and Becker families to get access to them – in this instance, the McGauran's were actively contemplating a move to the United States for a 12 month period to get access to a gene therapy trial. The preparedness of families such as the McGaurans to leave the country in order to access a clinical trial overseas or to access medications not available in Australia, was a common theme amongst many of the families we spoke to.

Patricia, a mother of a boy with Duchenne in NSW, spoke about the extraordinary lengths her family have undergone in order to access Translarna/Ataluren, a medication for Duchenne which has been conditionally approved by the EU.

"When *the EU granted conditional approval of Translarna/Ataluren in 2015 for some European nations, our family made the appropriate arrangements to access this medication in Italy.* ***We have travelled to Italy with our son for clinical review and assessment 4 times a year for the last 5 years, that's 20 times, at a significant financial cost and mental health cost, not to mention the physical toll it takes on each trip for a child with a progressive muscle disease to travel over 24 hours.*** *The school isn't pleased that our son misses 4 weeks a year. It's just not right that we have to do this.*

*It feels as though Australia isn't a desirable place to have clinical trials. Perhaps our incidence figures are low or that we are too far away from the US and Europe. It always feels like Australia is last to be considered for a clinical trial***".**

Finally, the McGauran's letter highlights how delays in accessing trials and treatments in Australia can mean all the difference in terms of life expectancy and quality of life for those with Duchenne and Becker. These delays will be discussed further under ToR 3.

Not surprisingly, the Mc Kell Report, at pages 28/29, recommends that the Australian Government include clear funding mechanisms for gene therapies as part of its 2020 review of the National Health Genomics Policy Framework. This recommendation was made in lieu of the fact that by 2025 it is estimated by the US Federal Drug Administration that between 10-20 gene therapies will be added to the market each year. Gene therapies are hugely expensive (estimated to cost up to $2 million per patient) and will be beyond the reach of individual families without public funding through the Pharmaceutical Benefits Scheme.

SOSDF notes the announcements made by the Commonwealth Government in the recent Budget pertaining to the Health portfolio and measures to enhance clinical trial capacity, making medicines more accessible and affordable, and funding towards research programs. It is hoped that these measures, to be implemented over the four-year period of the Forward Estimates, coupled with any genuine and meaningful actions, with attached funding, arising from addressing the recommendations from this Inquiry, will lead to impactful and positive outcomes for all affected by rare diseases.

ToR 2 - Incentives to research, develop and commercialise new drugs and novel medical technologies for conditions where there is an unmet need, in particular orphan personalized drugs and off-patent that could be repurposed and used to treat new conditions; AND,

ToR 3 - Measures that could make Australia a more attractive location for clinical trials for new drugs and novel medical technologies.

"We were a part of the GSK Exon skipping trial run out of Westmead. We participated for almost 3 years. This involved leaving home just before 6am every Monday, driving 45 mins to the airport, flying to Sydney, 1 hr taxi to the hospital for drug injection, bloods etc then taxi back to the airport to fly home. If we were lucky, we could catch at 2pm flight home, otherwise it was 6pm. ***It can show parents will do anything to get their kids the access to treatment they deserve".***

(**Debra, mother of a boy with Duchenne, from Victoria**).

There is considerable overlap between ToR 2/3, so they will be addressed together.

The Duchenne and Becker community are acutely aware that on a global scale Australia is a small nation and that their community is just one of many rare (approximately 7,000) disease communities in this country - each with their own unmet needs and legitimate demands. That said, however, the Duchenne and Becker community is still dismayed by what they see as the lack of real Government action and prioritisation in ensuring pharmaceutical companies and other research institutions are incentivised (or have the capacity) to run clinical trials and other research in Australia - and without running the full gamut of bureaucratic and other approval measures.

During the course of our consultation process, we heard over and over again from parents concerning their dismay and frustrations with the lack of clinical trials which were available to their boys. At the extreme end was one mother in Toowoomba with two boys with Duchenne (aged 37 and 29) who stated her family had never been afforded a single opportunity to participate in any clinical trials. Then there were the (heart-breaking) cases we heard of clinical trials being terminated unilaterally by pharmaceutical companies with no explanations or outcomes provided to participating parents. We also heard stories of the "discrimination"

faced by parents who were denied access to trials because they had chosen not to utilise steroids for their child/ren or boys with Becker who appeared to be overlooked for many trials. There was also the constant frustration expressed by the parents of older boys who were not able to access any trials.

"Clinical trials are a lottery. It feels like there is a "use by" date when kids are available for trials. ***There is nothing for the older boys****".*

(**Donna, mother of a Duchenne boy, from Victoria**).

Finally, there are the heartbreaking stories of parents who have been forced to make the choice of which sibling was able to participate on a particular clinical trial when only the one place was reserved for the family.

"The biggest criticism I had was it was the oldest twin or no-one. The Drug company wouldn't allow the other sibling to be on it. I had to choose. Riley scored two points higher on the North Star Assessment"

(**Rebekah from Victoria, with twin boys suffering from Duchenne**)

A Great Place to Do Business

Unlike many parts of the first world, Australia is a relatively COVID-19 safe place to undertake clinical trials and research. In addition, we have many outstanding local researchers and muscular dystrophy specialists such as those currently based at the Royal Children's Hospital in Melbourne. Furthermore, we have 38 public Universities with many of these institutions currently ranked in the world's top 200 universities (refer Times Higher Education World University Ranking). We therefore have a plethora of research and high medical intelligence/capacity which could be deployed in the pursuit of more clinical trial research and medical technologies.

There is a clear role for Government to ensure:

- greater subsidies, seeding funds/grants and incentives (e.g. tax breaks) are provided to attract pharmaceutical companies to undertake clinical trials and other research in Australia – currently these "incentives" and enticements are typically delivered by charities and foundations like SOSDF through various fundraising and lobbying/advocacy activity;

- the removal of bureaucratic and other approval impediments (for example, the prolonged and separated ethics and research governance processes) to the conduct of clinical trials and research in Australia and which are currently working as a disincentive to companies seeking to invest in clinical trials and medical research;

- streamlining, and where appropriate, fast tracking the approval processes for drugs and medications which have already been subject to rigorous clinical trial testing overseas and approved by bodies such as the FDA in the USA;

- coordination between all tiers of Government to not only ensure the harmonisation of regulatory requirements, but to ensure incentives/facilities/resources etc. are provided equitably across the country to give all members of the Duchenne and Becker community (irrespective of geographical location) equivalent opportunities to participate on clinical trials;

- increase support/subsidisation of clinical trial participants (airfares, accommodation, living away from home expenses) to ensure that members of the Duchenne and Becker communities (inclusive family members) can afford to participate in trials - currently pharmaceutical companies only meet some aspect of these costs. This will also help to ensure that sufficient numbers of participants can be recruited by the pharmaceutical companies for purposes of the clinical trials. Alternatively, funding the participation of Australians with Duchenne and Becker to participate in overseas trials;

- utilising the power and influence of Government and Government agencies to broker and foster relationships and negotiations to attract more pharmaceutical companies to run trials in Australia;

- establishing more facilities and specialist services which can be utilised by companies and researchers undertaking clinical trials;

- greater levels of research funding for research into novel treatment options; and,

- assistance with the establishment of national patient databases which will assist with recruitment to trials and improve the attractiveness of Australia to the pharmaceutical companies (SOSDF were integral in the establishment of the Australian Neuromuscular Disease Registry).

Governments should not abrogate roles such as those described above. At present, too much is simply left to the not-for-profit sector to set much of the pace in relation to facilitating, the (part) funding of, and brokering arrangements with the pharmaceutical companies and other important stakeholders such as hospitals and medical professionals. In addition, not-for-profits such as SOSDF are relied upon to fund a specialist neuromuscular nurses' program in a number of children's hospitals around Australia. These nurses not only help to facilitate bringing clinical trials to Australia but are responsible for coordinating the Australian based clinical trials for the Duchenne and Becker community as well as undertaking the important role of care coordination for patients. Without the role and funding of SOSDF, it is arguable whether the majority of the trials we do have for the Duchenne and Becker community in Australia would be possible.

Unfortunately, the current levels of Government involvement appear to do very little for the morale and well-being of the Duchenne and Becker community or any rare disease community for that matter. In the words of some mothers with boys suffering from Duchenne.

"*The Government needs to do more to get more promising trials to Australia.* ***Get Rid of the Barriers"*** (**Julia from Victoria**)

"*Our blood tests all got sent to America. There needs to be more facilities down here so companies can send people here.* ***What Government needs to understand is that if trials work, the boys become less of a burden on the health system, so we should invest***." (**Jacqui from South Australia).**

"*The majority of trials are in Melbourne. None if any are in Queensland. There are more specialists in Melbourne and more specialty nurses.* ***A key coordinating body is needed and more of a Federal approach.*** *Currently its more about the individual hospital and*

specialist. There is a fragmentation of services between different states" **(Carly from Queensland).**

"*The Government should invest more money.* ***How are we meant to find hope?"*** **(Mary from Victoria).**

Some Good news out of the Federal Budget

SOSDF had been concerned by growing reports of a funding crisis in our University research community with University research budgets and research staff slashed as a consequence of COVID-19 (and the decline in foreign student income). The Sydney Morning Herald recently reported for example on October 4, 2020 that "*research on cures for heart disease, stroke, cancer, brain injury and motor neurone diseases are being paused or cancelled, and key researchers are losing their jobs, as the university revenue crunch starts to bite into science"*

https://www.smh.com.au/national/heart-disease-stroke-cancer-mnd-research-hit-in-uni-cash-crunch-20201001-p560z0.html?btis

SOSDF believes the funding of University research to be a critical component in the fight to find a cure for rare diseases such as Duchenne and Becker muscular dystrophy. Further, we recognise that many University researchers have a critical role to play in supporting clinical trials and providing ongoing support to our community. We were therefore heartened to learn that in the 2020 Federal Government an additional [2]$1 billion has been secured for the University research community.

SOSDF is also heartened by a range of other funding announcements in the most recent Federal budget including but not limited to:

- [3]an additional $2 billion and other revisions to the Research and Development Tax Incentive;
- an investment of $1.3 billion in the modern manufacturing strategy, of which medicines manufacturing has been identified as a key industry.

[2] Research Australia "Budget Update 2020"
[3] Medicines Australia Media Release "Federal Government makes bold commitment to the health of Australians".

On the flip side, the largely unchanged budgets for the NHMRC and MRFF are disappointing with [4]Research Australia highlighting the fact that researchers are dealing with extra costs due to the delays and disruptions caused by COVID-19. Further, that there is no research program support for researchers in Medical Research Institutes, and NHMRC funding continues to decline in real terms.

It goes without saying that SOSDF is keen to ensure that a component of any new funding is targeted towards and does contribute to advances in medical research for Duchenne and Becker muscular dystrophy.

Lack of National Coordination in Relation to Clinical Trials

Amongst the key issues identified in the McKell Report (page 40/41) was the lack of a coordinated national infrastructure agency to facilitate the making, assessment and progression of applications for clinical trials – clearly a major disincentive for companies seeking to undertake research and develop medicines and new technologies in this country.

According to the report, in order to ensure that Australians are better able to access clinical trials (and more of them):

[5]"*Australian governments should collaborate to develop a national 'one-stop' clinical trials portal similar to the Common European Submission Portal. This should be supported by a single IT platform, provide a central gateway for submission of all clinical trial application documents, and allow a single application to be within reach of all relevant agencies. This would eliminate the need for multiple applications, help to promote transparency and increase inter-institutional trust and acceptance of HREC reviews, and promote standardisation of requirements.*

A single national online application form for ethics and research governance/SSA should also be developed. The form should consolidate information requirements for HREC review and SSAs and should be divided into modules for different areas. A single national form would ensure parallel approval processes, encourage pre-submission planning, and drive

[4] Research Australia "Budget Update 2020"
[5] The Mc Kell Institute "Living with Duchenne and Becker in Australia: Supporting Families Waiting for A Cure" Page 40/41

applicants to provide comprehensive information and documentation at the application stage. It would also reduce duplication in information requirements and eliminate the need for multiple different applications.

The Australian government should establish a national clinical trial coordinating agency to support a centralised and nationally consistent approach. The agency would be responsible for upfront assessment and triaging of applications to relevant bodies, and act as a central point of contact for trial sponsors and applicants. This would help applicants navigate approval processes and reduce inefficiencies such as delays in providing requisite information."

Ethics and Other Regulatory Approval Processes

The protracted nature of the ethics and other regulatory approval processes in Australia is seen as a major disincentive for companies looking to undertake clinical trials and research in Australia. This issue must consequently be addressed when examining measures to make Australia a more attractive location for the pharmaceutical companies. The McKell Report identified (page 30) a number of major barriers working against the selection of Australia as a clinical trial site including:

- lengthy and variable timeframes for local site governance approvals;
- the lack of a truly nationalised system for ethics approval, resulting in the need for multiple ethics submissions;
- long and separate process for genetically modified organisms; and
- difficulties meeting patient recruitment targets.

Appendix 1 is an international comparison table (and summary) developed by the McKell Institute which details the clinical trials application and approval requirements and processes by country (McKell Report pages 30-39). As is evident from this material, there are a number weaknesses to the Australian system when

compared with other countries. These include but are not limited to:

- fragmentation and inefficiency;
- lack of national accreditation of health services undertaking clinical trials;
- separate ethics and research governance processes which can create for major delays in start-up; (combined in UK, US and Canada);
- decentralised site-specific authorization for each trial site – local variations could be a disincentive for companies to organize trials across multiple sites; (centralized in UK);
- multiple HREC applications may be required with sites in different jurisdictions; (single ethics application is places like UK and Canada);
- GMO license must be issued by OGTR to use GMOs in clinical trials (Australia being the only jurisdiction that requires licensing of GMOs for use in clinical trials or approval by a separate gene technology regulator- there is no separate gene therapy approval processes in NZ, USA, UK and Canada).

Despite these weaknesses, the authors of the McKell Report highlight that our Clinical Trial Notification (CTN) scheme is the most efficient regulatory process of the jurisdictions studied and a key strength of Australia's clinical trial system (McKell Report page 36). Unlike many countries, trials can commence as soon as ethics and site authorisations have been granted. However, this advantage of our current system is quickly lost due to our protracted ethics and other approval processes.

Table 2 (**Appendix 1 - pages 36/37**) demonstrates just how far we lag behind other countries in our ethics and research governance approvals timeframes despite the fact we have such an efficient CTN Scheme. The average timeframe for completion of the processes in Australia ranges from 150-160 days (2014-2017) compared to the UK where it is approximately 90 days according to 2016 data. This difference in approval timeframes gives the UK a huge competitive advantage over Australia in

attracting pharmaceutical companies to undertake clinical trials -especially when population density is factored into the equation.

SOSDF subsequently welcomes the establishment (and funding) of the Australian Government's *Encouraging More Clinical Trials in Australia* initiative which has set about reforming/streamlining many aspects of our current clinical trials processes. The Duchenne and Becker and rare diseases community more broadly, eagerly await the outcome of this initiative which clearly has critical implications for the future of clinical trials in this country.

ToR 4 - Without compromising the assessment of safety, quality, efficacy or cost effectiveness, whether the approval process for new drugs and novel medical technologies, could be made more efficient, including through greater use of international approval processes, greater alignment of registration and reimbursement processes or post market assessment.

"We are running against a time bomb. Boys in the US are getting on treatments. ***Why do we need trials here when it is already approved overseas****? VILTEPSO is now an approved therapy and is no longer considered an investigational product. Surely the Australian Government can jump on board with this and approve it here so we can slow the progression of this devastating condition in those amenable. Hopefully this will be a step forward in also having this type of drug developed for all the other deletions out there***".**

(**Michelle, mother of a boy with Duchenne, from WA**)

"*It's like dangling a carrot in front of you. You know it (the treatment) is there to be taken but you just can't get any access to it*"

(Patricia, mother of a boy with Duchenne, from NSW)

Along with access to clinical trials, the lack of ready access to medications and treatments which have already been approved overseas remains a major concern and source of distress for the Duchenne and Becker community. Families cannot understand why there are such long delays in progressing the distribution in Australia of medicines and treatments which have already been approved by bodies such as the FDA in the USA. Furthermore, these families struggle to understand the necessity for further clinical trials in Australia to approve drugs which have already been through rigorous approval processes overseas.

As already discussed earlier in this submission, many Duchenne and Becker families were prepared to go to extreme lengths to ensure that their boys were able to get access to medications and treatments approved overseas. While the Duchenne and Becker community recognise the importance of Therapeutic Goods Administration (TGA) safety regulations around new drugs and treatments, they nonetheless believe that more urgency must be brought into the current health technology assessment

processes. The drug Translarna/Ataluren is a case in point. Writes Sue, a grandmother of three boys with Duchenne from Victoria:

"Ataluren (previously called PTC124) is an oral drug that targets a specific type of mistake in the genetic code, called a "nonsense mutation", which affects approximately 10 to 15 percent of boys with DMD. This is when a stop signal is present part way through the gene. Ataluren encourages the cell to ignore this stop signal and to continue to read the full set of instructions contained within the gene. There are currently ***no marketed therapies*** *approved to treat the underlying cause of DMD. The drug is available for sale in many European countries and has been listed on their pharmaceutical benefit schemes BUT* ***NOT IN AUSTRALIA. This drug will help slow the disease, but we need it now as time is one thing these children do not have."***

This drug has shown signs for treating the disease and slowing down the progression of DMD. The Royal Children's hospital in Melbourne is running a third trial site and two of the three boys are on placebo trial for 3 years, however, the eldest boy can't wait any longer, he is slowing down and losing muscle mass quickly. The trial does not guarantee he is getting the real drug he may be on placebo that's why he can't wait. And even after the three years the drug may not be approved in Australia from the TGA. These drugs take well over 10 years to even make it to a human trial yet with COVID the process was sped up. I strongly believe that we can speed up any medical drug approval.

These children are on a time bomb and cannot wait for drugs to be approved in the current timeframe".

SOSDF subsequently notes with some interest the investment by the Federal Government of $12 million in the recent budget [6]*to modernise the Therapeutic Goods Administration business systems to streamline processes for the medicines industry and reduce red tape for new medicines.*

Whether this means there will be some relaxation (creation of greater efficiencies) of current processes by the TGA in relation to the assessment of drugs developed overseas will be eagerly watched by members of the Duchenne and Becker

[6] Medicines Australia Media Release "*Federal Government makes bold commitment to the Health of Australians"*

community.

SOSDF also notes with great interest the [7]$2.8 billion of dedicated funding which has been announced in the budget towards innovation and new medicines. This commitment we applaud and (unashamedly) hope that some of this funding will make its way to increased research, clinical trial opportunities and medical treatments for the Duchenne and Becker community. It is an important step forward and suggests the Government is getting serious in the development of new medicines (inclusive of rare diseases) which are locally developed and produced.

Finally, SOSDF also notes there were some major developments in relation to PBS listings arising from the Federal Government's recent budget. These included:

- *[8]Lynparza® (olaparib) will be made available for the treatment of newly diagnosed advanced high grade epithelial ovarian, fallopian tube or primary peritoneal cancers.*
- *Tecentriq® (atezolizumab) and Avastin® (bevacizumab) will also be listed for Hepatocellular carcinoma (HCC), the most common type of primary liver cancer.*
- *Eylea® (aflibercept) was listed for the treatment of subfoveal choroidal neovascularisation due to pathologic myopia.*
- *Calquence® (acalabrutinib) was listed for the treatment of chronic lymphoma leukaemia or small lymphocyctic lymphoma.*
- *Rozlytrek® (entrectinib) was listed for the treatment of non-small cell lung cancer.*
- *Ozempic® (semaglutide) was listed for the treatment of insufficiently controlled type 2 diabetes.*

According to the Sydney Morning Herald these listings form part of [9]$376 million in spending on new and amended listings on the PBS. This is wholeheartedly

[7] Medicines Australia Media Release "*Landmark funding and long-term certainty for innovative medicines for Australian patients, the community and the Economy*"
[8] Medicines Australia Media Release "*Federal Government makes bold commitment to the Health of Australians"*
[9] Sydney Morning Herald "*Ovarian Cancer Drug Listed on PBS*" 7 October 2020.

supported by SOSDF. It is a positive sign/indicator that greater flexibility and PBS support will be available (in the assessment phases) when drugs and medications are approved by TGA and become available (and are targeted) to the Duchenne and Becker community.

As already highlighted through the McKell Report, (refer Appendix 1 of the McKell Report) the financial impacts of Duchenne and Becker are devastating to families over the lifetime of this disease. These impacts are the product of ongoing, health and social care, aide/equipment costs and the loss of wages/productivity resulting from ongoing carers' duties and responsibilities. Expediting PBS approval processes and ensuring the PBS subsidisation of as many drugs and medicines utilised for the treatment of Duchenne and Becker is therefore critical to family well-being and to ensuring that medications and drugs are readily accessible when they do eventually become available (irrespective of a family's socio-economic circumstances).

Participation in health technology assessment processes

SOSDF is currently unaware of any member of the Duchenne and Becker community who are directly involved/participating in current health technology assessment processes and going forward will seek to take the lead in this regard on behalf of our community. We believe participation on established committees, or other fora should be encouraged to promote both the empowerment of a highly disadvantaged community and to ensure that the voice and insights of the Duchenne and Becker community are heard as part of any formal approval process. This disease is so poorly understood (amongst medical practitioners let alone the general community) and it is those with the "lived experience" who have so much knowledge and wisdom to impart and share with policy makers, regulators and other key stakeholders.

The active (and encouraged) involvement of the community in the HTA process will also help address any "myth-making' around access to drugs and medications and

will help to educate this community on the particular complexities involved in health technology assessment.

Conclusion

This Parliamentary Inquiry provides an invaluable and unique opportunity to constructively progress a number of concerns which have laid at the heart of the Duchenne and Becker community over many years. SOSDF is therefore extremely thankful that this Inquiry has been established by the Federal Government with cross-Party, bipartisan support. It demonstrates an important political consensus around the need to move the agenda forward in relation to approval processes for new drugs and novel medical technologies.

This submission has been written in good faith and as an attempt to make an important contribution to this process. SOSDF has endeavoured to raise key issues as fairly and as accurately as they were articulated to us by members of the Duchenne and Becker community, accurately reflecting their concerns and perceptions as relayed to us.

SOSDF makes no apology for attempting to capitalise on the bi-partisan political momentum which has now been built up in relation to the issues which are the subject of the Inquiry. The health and well-being of our community are much too important for us not to actively participate in the important work of the Standing Committee.

Our organisation, along with the wider Duchenne and Becker community, would therefore welcome any further opportunities (e.g., public hearings) to participate and provide feedback to the Standing Committee.

We would like to conclude with the following (and compelling) appeal from Donna, a mother of an 8 year old boy with Duchenne, from Queensland - which perhaps best sums up the views which have been put forth in this submission:

"To whom this may concern,

I am writing this statement on behalf of my 8yr old son Jayden Greenhalgh.

Jayden was diagnosed with Duchenne muscular dystrophy (DMD) on October 13th, 2015. And on that day 'D' day (diagnosis day), our hearts sank with grief as all our hopes, dreams and aspirations for our first born son frizzled away in a blink of an eye.

DMD is a *rare genetic disorder, it is a progressive muscle wasting illness which causes eventual paralysis from the neck down and premature death. The life expectancy is 20-30years. The statistics for Duchenne are 1: 3500, so really not so rare, but rare enough that we had never heard of it before, and now we live and breathe it.*

As heart breaking as it is, a ray of hope was given to us around diagnosis, as we soon discovered that our son had the nonsense gene mutation and was compatible for a new drug- the first ever drug for DMD, TRANSLARNA.

The medication translarna is not a cure but slows down the disease process. Which could mean years of extra life for our son. Years! Something money cannot buy. However, our ray of hope soon diminished as we were informed that the drug was not yet approved here in Australia but most probably would in two years. Two years passed, my son turned five and no news on accessing translarna came.

This was not only painful but frustrating as at the time, Translarna was available in more than 20 countries through expanded access programs or commercial sales including UK, Scotland, Italy, Germany, Brazil and Israel. And at the same time, in our own country, Australia, there were around 20 families accessing the drug through expanded access programs. The reason being that a clinical trial was held here is Australia. It was based in Victoria and NSW. Children were recruited from SA, VIC, NSW, QLD and NZ. When the trial ended, those families had been allowed to continue with the drug, perhaps as a reward for participating in the trial. However, there were some children left behind who were either too young to go on the trial or not diagnosed before the trail began. This included my son Jayden.

It was unfair that my son was left to suffer, it was unfair that his life should be made shorter as he could not access a drug that other families in his same county and same state could.

Jayden had no voice at 5years old, he is now 8 and still has no voice and no cure for DMD. Not only did he not get translarna, he has not been selected for another clinical trial, treatment or ray of hope.

Help Jayden and other children like him to get access to these vital drugs for rare genetic disorders.

My son is a beautiful boy, he is charming, funny and eccentric. He is a son to me and my husband, a brother, a nephew, a grandson and most of all a child, a child who misses out on so much as it is. ***Please don't let him miss out on life as well as time waits for no one and certainly won't wait for the bureaucracy of the current situation of access to new medication****".*

Kind regards

Donna Greenhalgh

SOSDF wholeheartedly thank the Standing Committee for the opportunity to make a contribution to this important Inquiry on behalf of the Duchenne and Becker community in Australia.

RECOMMENDATIONS:

1. **That the Australian Government establish a national "one-stop" clinical trials portal;**

2. **That the Australian Government develop a single national ethics review and site-specific assessment application form;**

3. **That the Australian Government establish a national clinical trial coordinating agency;**

4. **That the Australian Government introduce national legislation to harmonise relevant regulatory requirements;**

5. **As part of the National Gene Therapy strategy the Australian Government review the approval process for the use of genetically modified organisms in clinical trials;**

6. **The Australian Government include clear funding mechanisms for gene therapies as part of its 2020 review of the National Health Genomics Policy Framework;**

7. **That current health technology assessment processes be reviewed and streamlined to ensure that members of the Duchenne and Becker community are able to access medicines and treatments in a timely manner especially if they have already been through recognised first-world approval processes;**

8. **That the active participation and feedback of the Duchenne and Becker community be sought in any health technology assessment processes with relevance to Duchenne or Becker muscular dystrophy;**

9. **That building on the commitments provided in the 2020 Federal Budget some investment of new research funding be directed towards research into Duchenne and Becker muscular dystrophy;**

10. **That the Australian Government make a greater investment (funding, subsidies, reduction of red tape etc) in efforts to attract pharmaceutical companies to this country to undertake clinical trials for rare diseases such as Duchenne and Becker muscular dystrophy;**

11. **That the Federal Government streamline and expedite approval processes (inclusive of ethics review and governance approvals) to ensure their remains no disincentives to pharmaceutical companies undertaking clinical trials in Australia;**

12. **That the Federal Government investigate and apply international best practice in clinical trial approvals and health technology assessments;**

13. **That the Federal Government provide financial and other "in kind assistance" to those families living in remote and regional areas – to enable participation in clinical trials run out of capital cities;**

14. **That the Federal Government investigate "best practice sites" for the current location of clinical trials for the Duchenne and Becker community and work out what services/resources need to be provided to ensure clinical trials can be run at a variety of locations across the country;**

15. **That the Federal Government develop strategies/initiatives (including a National clinical trials coordinating agency) to ensure that all members of the Duchenne and Becker community have equivalent access to information on clinical trials, new drugs and medications which are relevant to Duchenne and Becker muscular dystrophy.**

References

1) **The Mc Kell Institute "***Living with Duchenne and Becker in Australia: Supporting Families Waiting for a Cure***"** Angela Jackson/Equity Economics April 2020.

2) **Sydney Morning Herald** https://www.smh.com.au/politics/federal/new-liver-cancer-treatment-to-be-fast-tracked-in-230m-budget-boost-20201003-p561n7.html?btis)

3) **Sydney Morning Herald** https://www.smh.com.au/national/heart-disease-stroke-cancer-mnd-research-hit-in-uni-cash-crunch-20201001-p560z0.html?btis

4) **Sydney Morning Herald "***Ovarian Cancer Drug Listed on PBS*" 7 October 2020.

5) **Medicines Australia Media Release** *"Federal Government makes bold commitment to the Health of Australians"*

6) Medicines Australia Media Release "*Landmark funding and long-term certainty for innovative medicines for Australian patients, the community and the Economy*".

7) Research Australia "Budget Update 2020**"**

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ATTACHMENT ONE:

Some Questions in relation to the Parliamentary Inquiry

1) **Can you please tell us about any frustrations you have encountered with the current system of accessing clinical trials and treatment for your child?**

2) **Has your child ever participated in a clinical trial and how did you find the process?**

3) **What current therapies does your child access and how did you go about accessing them?**

4) **What are your views on drugs being approved overseas yet not available in Australia? What is your understanding of the issues delaying approval?**

5) **What are your views on the majority of clinical trials being carried out overseas and very few in Australia?**

6) **Have you got a story to share which best captures the current shortcomings of the drug treatment and clinical trial system in Australia?**

Attachment 2 -International Comparisons -Clinical Trial Processes

VIDEO ATTACHMENTS:

“6 of 9”

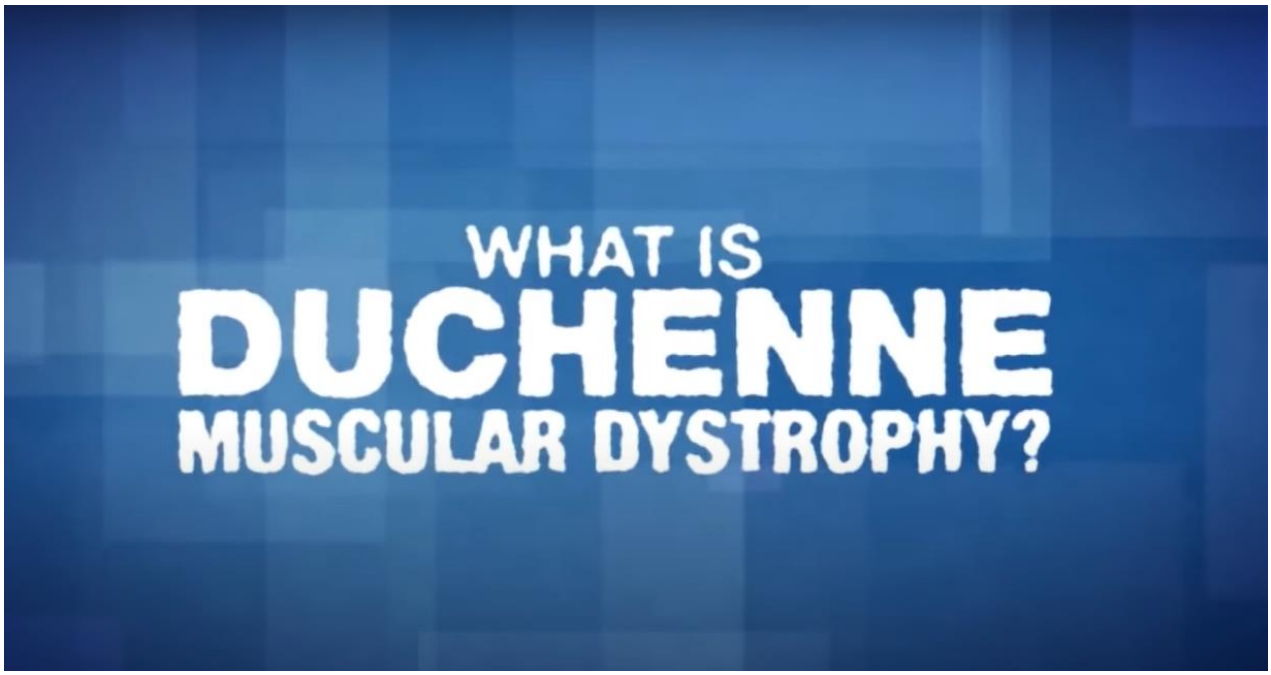
The following 45 minute documentary was made as a lasting gift for his family by Martin Dix a Melbourne born and raised film maker residing in Los Angeles. It is the story of Martin’s brother Kieran who suffered from Duchenne muscular dystrophy and passed away some years ago.

When COVID 19 struck in the US, Martin finally found the opportunity to edit over 40 hours of archival footage of his brother Kieran’s life – footage which had been left stored away for many years. What he finally produced is a moving documentary which documents both the lived experience of Duchenne for those who suffer directly from it, but also the huge emotional and personal impacts for those who care and love someone with the disease – in this case, Martin’s seven other brothers and his mum and dad.

SOSDF feels honoured that Martin wanted our organisation to use this film as part of the Parliamentary Inquiry process and on that basis, we are privileged to be sharing this with members the “Standing Committee”.

https://vimeo.com/427928501

SOSDF YouTube Documentary



The second video is an 8 minute YouTube produced by Save our Sons Duchenne Foundation which gives a brief overview of Duchenne muscular dystrophy and the work of Save our Sons in finding a lasting cure to this condition.

https://www.youtube.com/watch?v=GcI7od9fqxs

Alex Scollard Video

The third video commemorates the life and times of Alex Scollard a boy with Duchenne who sadly passed away last year but remains a central figure in the services delivered by Save Our Sons. Through the establishment of the Alex Scollard Memorial PHD Scholarship, Save Our Sons is currently funding ($30,000 per annum over 3 years) Dr Rajiv Wijesinghe who will undertake a PhD Scholarship in the Neuromuscular field with specific benefit for the Duchenne and Becker muscular dystrophy community in Australia. Amongst some of the critical work undertaken by Dr Rajiv will be:

- Embark on a PhD project that will aim to rigorously test gene therapy delivery systems that may rescue and repair damaged muscle and aim to provide a strong scientific evidence base for the development of a potential therapeutic that may eventually be applied in human research;

- Help to bridge the gap between clinical neuromuscular practice and translational scientific research, and help through work at a neuromuscular clinic and continue to contribute to clinical work during and after the PhD;

- Contribute to an area that does need further attention, being the transition period from paediatric to adult care, which can be tumultuous. Help to establish some clinical guidelines that may be used during this period to smooth out the process.

https://vimeo.com/467240733/8565f265be


SAVE OUR SONS
DUCHENNE FOUNDATION