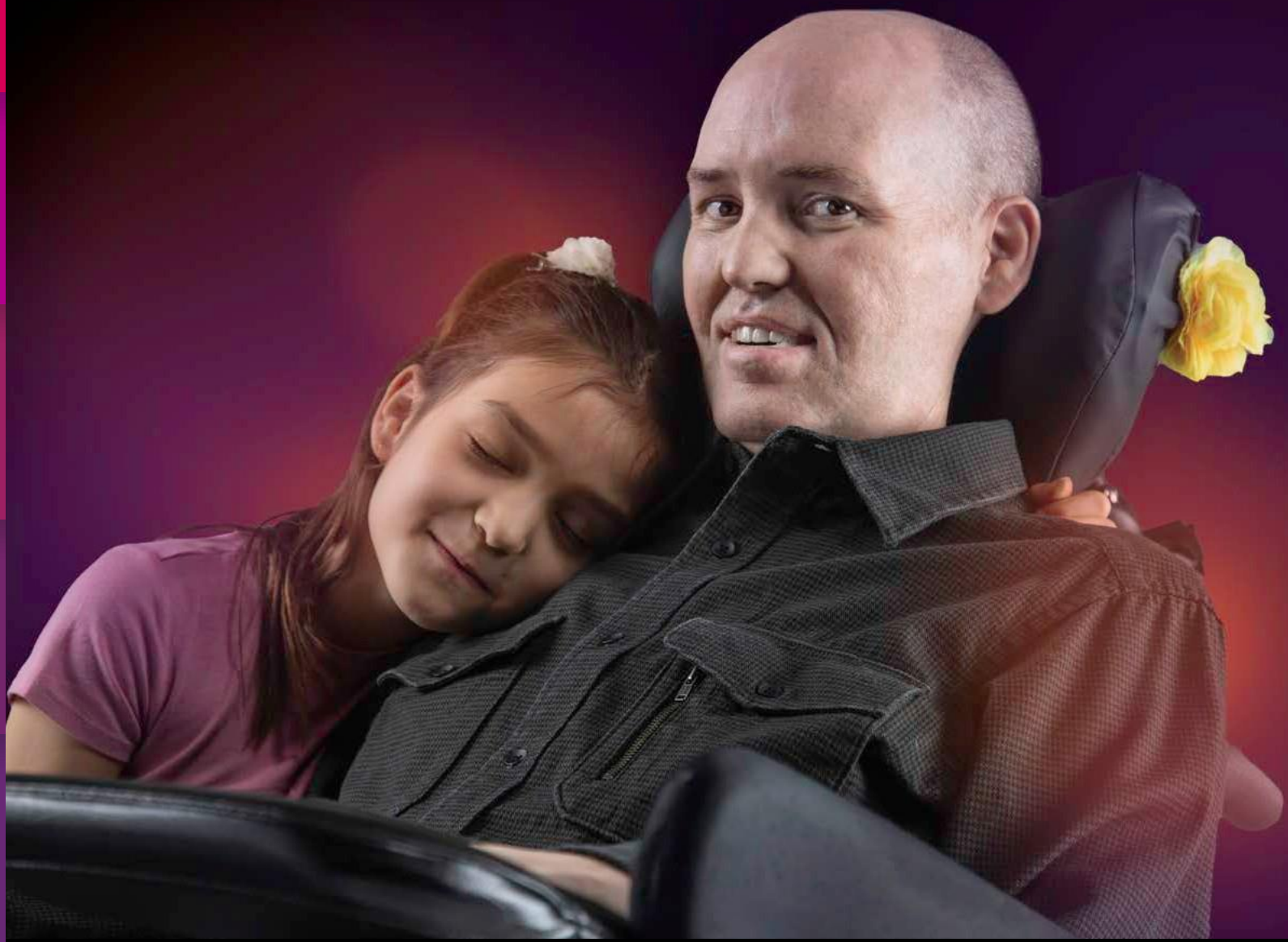
IMPROVING ALS CARE ACROSS ONTARIO

2023 PRE-BUDGET SUBMISSION
THE ALS SOCIETY OF CANADA

February 2023



INTRODUCTION

AMYOTROPHIC LATERAL SCLEROSIS (ALS) IS A TERMINAL AND PROGRESSIVE neurodegenerative disease that can affect anyone. The disease causes progressive paralysis, and eventually, someone living with ALS will lose the ability to walk, talk, eat, move, swallow – and breathe. With no cure, four out of five people with ALS will die within five years of diagnosis.

RECEIVING AN ALS DIAGNOSIS IS DEVASTATING, and the physical, emotional, and financial impacts of the disease on a person and their family are immense. In addition, due to ALS's complex nature, people living with the disease have substantial care needs that evolve and increase over time. Yet all too often, Ontario's fragmented health system fails to meet the unique needs of people and families living with ALS, and their car falls through the cracks.

In any given year, approximately 1,200 Ontarians are living with ALS.
Yet, the impact of ALS is not limited to just those who have the disease.
The number of people affected is even more significant when considering the profound impact of the disease on family members, caregivers, friends and communities.

Due to the strains faced by hospitals and healthcare providers, people living with ALS cannot access the unique levels of care and support they need a timeframe that matches the urgency of this disease. Furthermore, gaps and barriers in the province's reimbursement system, prevent Ontarians living with ALS from having timely and equitable access to the drugs they need to help manage or even delay progression.

These issues can lead to worse health outcomes and, in turn, a further strained healthcare system. As a result, ALS Clinics across Ontario must work beyond their capacity to meet the critical clinical needs of people living with ALS – and donor funded organizations like the ALS Society of Canada must step in to fill the gaps in equipment loans and community support services.

IMPACT OF AN ALS DIAGNOSIS

The disease carries a tremendous burden – emotionally, mentally, physically and financially.

Every situation is different with uniqueconsiderations.

Families often face a $150,000 to $250,000 financial burden over the course of the disease, including the costof treatment, care, and equipment needs, as well as the income families lose when people living with ALS and family caregivers stop working.

WHO IS AFFECTED?

Any given year, approximately 1,200 Ontarians are livingwith ALS, but the number of people affected is even moresignificant when you consider the profound impact of the disease on family members, caregivers, and friends.

With no cure, four out of five people with ALS will die within five years of diagnosis.

ALS does not discriminate — anyone can develop the diseaseregardless of gender, socioeconomic status, geography, or race.

THE CARE AND SERVICES PROVIDED BY ALS CLINICS, TOGETHER WITH THE ALS SOCIETY OF CANADA, ARE CRITICAL IN DELAYING ADMISSION TO LONG-TERM CARE, REDUCING UNNECESSARY EMERGENCY ROOM VISITS AND ENHANCING COMMUNITY CARE. However, with increased pressure on multidisciplinary clinics' capacity and funding uncertainty, care is at risk, existing challenges have been amplified, and new issues are emerging that impact the entire ALS community.

ONTARIANS LIVING WITH ALS AND THEIR FAMILIES ARE FINDING THEMSELVES IN A PLACE WHERE THEY MUST ENDURE MORE ADVERSITY AS THEY STRUGGLE WITH THIS DEVASTATING TERMINAL DISEASE.

Knowing the significant impact this disease has on all Ontarians, the government must take action to ensure people living with ALS are able to have timely and equitable access to the treatments and care they require.

OPPORTUNITIES AHEAD

Currently, in Ontario, the care provided to people living with ALS is inadequate. This creates an overwhelming strain on caregivers, families and an unnecessary burden on our health and long-term care system.

But this can change. The Ontario Government has a significant opportunity to respond to these circumstances in a way that will create a future where Ontarians diagnosed with ALS can access the care, services and therapies they need in a timely and equitable manner. Together we can build on initiatives in Ontario Health that can create a more integrated, more patient-centered, and more compassionate health system.

We are putting forward two recommendations for the Government of Ontario that would reduce the burden on our healthcare system and improve the standard of care provided to people and families living with ALS:

Recommendation 1:
ELIMINATE BARRIERS PREVENTING ALL ONTARIANS FROM HAVING TIMELY, EQUITABLE AND AFFORDABLE ACCESS TO APPROVED ALS TREATMENTS.

Recommendation 2:
ESTABLISH AN ONTARIO PROVINCIAL ALS PROGRAM TO REDUCE THE BURDEN ON THE HEALTH CARE SYSTEM AND IMPROVE THE STANDARD OF CARE PROVIDED TO PEOPLE LIVING WITH ALS

RECOMMENDATION 1

Eliminate barriers preventing all Ontarians from having timely, equitable and affordable access to approved ALS treatments

The unique and complex care needs of Ontarians living with ALS go unmet not only in our healthcare system but also within our drug access and reimbursement processes. While Ontario's Public Drug Program (OPDP) provides relief to families by reimbursing the cost of a limited number of drugs, there continues to be unnecessary red-tape and barriers in the province's reimbursement system that prevent access for vulnerable populations. Under the current pathway it can take several years for new Health Canada-approved treatments to be made available for Ontarians – a timeline that does not reflects the realities of what it means to live with a fatal progressive disease with no cure.

However, with more ALS clinical trials underway and promising early results, the ALS community is hopeful that the future of ALS can be different. But that hope can only be achieved if newly approved treatments are covered by the provincial formulary and move swiftly into the hands of the Ontarians who need them. Access to innovative treatments is a time-sensitive issue for people living with ALS, and accelerated reimbursement for new proven treatments is critical.

Consider that in June 2022, Health Canada approved ALBRIOZA. However, more than one year after the regulatory review started, the treatment is still not accessible through public funding for people living with ALS in Ontario. This lack of progress in expediting access to new ALS treatments takes a toll on the ALS community.

As outlined in the Time is Now Position Paper, (Appendix I) we are proposing two roadmaps to get Health Canada-approved treatments to Ontarians living with ALS in a timeframe that more accurately meets the urgency faced by this community

> **PATHWAY A:** Upon Health Canada's approval and the development of applicable clinical criteria/prescribing guidelines, all ALS treatments are publicly funded on an interim basis by public drug plans. **Total time to access: 6 months**
>
> **PATHWAY B:** All ALS treatments be approved, reviewed for public reimbursement, and publicly funded through a single condensed timeframe applicable to all jurisdictions in Canada. **Total time to access: 18 months.**

No one should lose their life while waiting for an approved therapy to be covered by the provincial formulary – and if changes are not made soon, thousands more Ontarians will die waiting for access to much-needed treatments.

Implementing these solutions together would ensure new treatments still undergo the necessary reviews and assessments while allowing for timely reimbursement of ALS treatments. Quicker access to ALS treatments would have a positive impact on the lives of people living with ALS across Ontario: disease progression will be slowed, and death will be delayed; independence and quality of life will be retained; the strain on the healthcare system would be reduced; and perhaps with this extension of life, new treatments will become available that could one day cure the disease.

RECOMMENDATION 2

Establish an Ontario Provincial ALS Program to reduce the burden on the health care system and improve the standard of care provided to people living with ALS

The rapidly progressive disabling nature of ALS results in substantial care needs that are costly and increase over time. However, within the current Ontario health care system, government-funded services either do not exist for ALS care or are not coordinated to ensure timely access to the unique levels of care and support essential for people living with ALS. As a result, ALS clinics in Ontario work beyond their capacity to meet the patients' critical clinical needs and rely on donor-funded organizations like the ALS Society of Canada to fill the enormous gaps in areas such as essential patient equipment and community support services.

Current levels of ALS care in Ontario are unsustainable, inequitable and not optimized. This will continue to escalate steadily if a programmatic approach to ALS care is not established in Ontario. Without increased support and a provincial strategy, ALS clinics will need to decline referrals from non-catchment regions resulting in further inequality in access to multidisciplinary care and increased ER visits and hospital/ICU admissions.

ALS Canada proposes the Ontario government work directly with the ALS clinics across the province and ALS Canada to establish a coordinated provincial approach to ALS care informed by the Canadian Best Practice Recommendations for the Management of ALS.

A coordinated provincial approach to ALS care is critical in ensuring equitable access to best practice care, enhancing community care to avoid admissions to long-term care and reducing unnecessary ER visits and ICU admissions.

By establishing an Ontario Provincial ALS Program with multidisciplinary ALS centres of excellence and efficient, cost-effective access to needed support and equipment at each stage of the patient journey, the Government of Ontario will reduce the burden on the health system and improve the standard of care provided to people and families living with ALS. As such, ALS Canada will seek opportunities for an ongoing dialogue and supports the forthcoming proposal to be submitted by Sunnybrook Health Sciences Centre, on behalf of the 5 ALS Clinics across Ontario and ALS Canada, to address this need.

CONCLUSION

While Ontario is a national leader in many areas, its approach to ALS care is a glaring exception. We need the Government of Ontario to step up and address this issue.

Each person's journey living with ALS is different and requires unique care, support, and services. Some will progress rapidly, while a small number may live well beyond the average five-year life expectancy. Some will experience the loss of function in their arms or legs, while others first experience the loss of function in their voice, mouth, or throat.

The Ontario Government must take action to improve these circumstances to create a future where Ontarians diagnosed with ALS can access the care and treatments they need throughout their disease trajectory. We implore the Government of Ontario to utilize the 2023 Budget as a chance to implement the recommendations in this submission.

Now is the time for Ontario to seize the opportunity to take a leadership role to improve access to critical supports, enhance the quality and standard of care, and eliminate the challenges and red tape-filled barriers faced by Ontarians living with ALS.

ABOUT ALS SOCIETY OF CANADA

The ALS Society of Canada (ALS Canada) is working to change what it means to live with amyotrophic lateral sclerosis, an unrelenting and currently terminal disease. Grounded in and informed by the Canadian ALS community, we respond to the urgent unmet need for life-changing treatments by investing in high-quality research that will fuel scientific discovery and by engaging industry, supporting increased clinical capacity and advocating for equitable, affordable and timely access to proven therapies.

In Ontario, ALS Canada's team of Community Leads assists people and families living with ALS in navigating their journey. Community Leads offer home and virtual visits to discuss individual and family needs, provide information and education and assist with connections to other health care providers and community supports. They also facilitate support groups for people living with ALS as well as caregivers. Additionally, through the ALS Canada Equipment Program, ALS Canada helps Ontarians diagnosed with ALS to cope with the daily challenges of decreasing mobility and communication ability and to help with retaining independence. The Program provides access to basic and essential assistive equipment through a pool of loaned equipment, funding assistance or flexible funding for some leased, rented equipment or purchased equipment.

ALS Canada relies on the generosity of donors to fund these programs which fill a critical gap in the healthcare and research ecosystem in Ontario and Canada.

THE TIME IS NOW.

AN URGENT CALL FOR EXPEDITED & EQUITABLE ACCESS TO ALS THERAPIES

ALS SOCIETY OF CANADA

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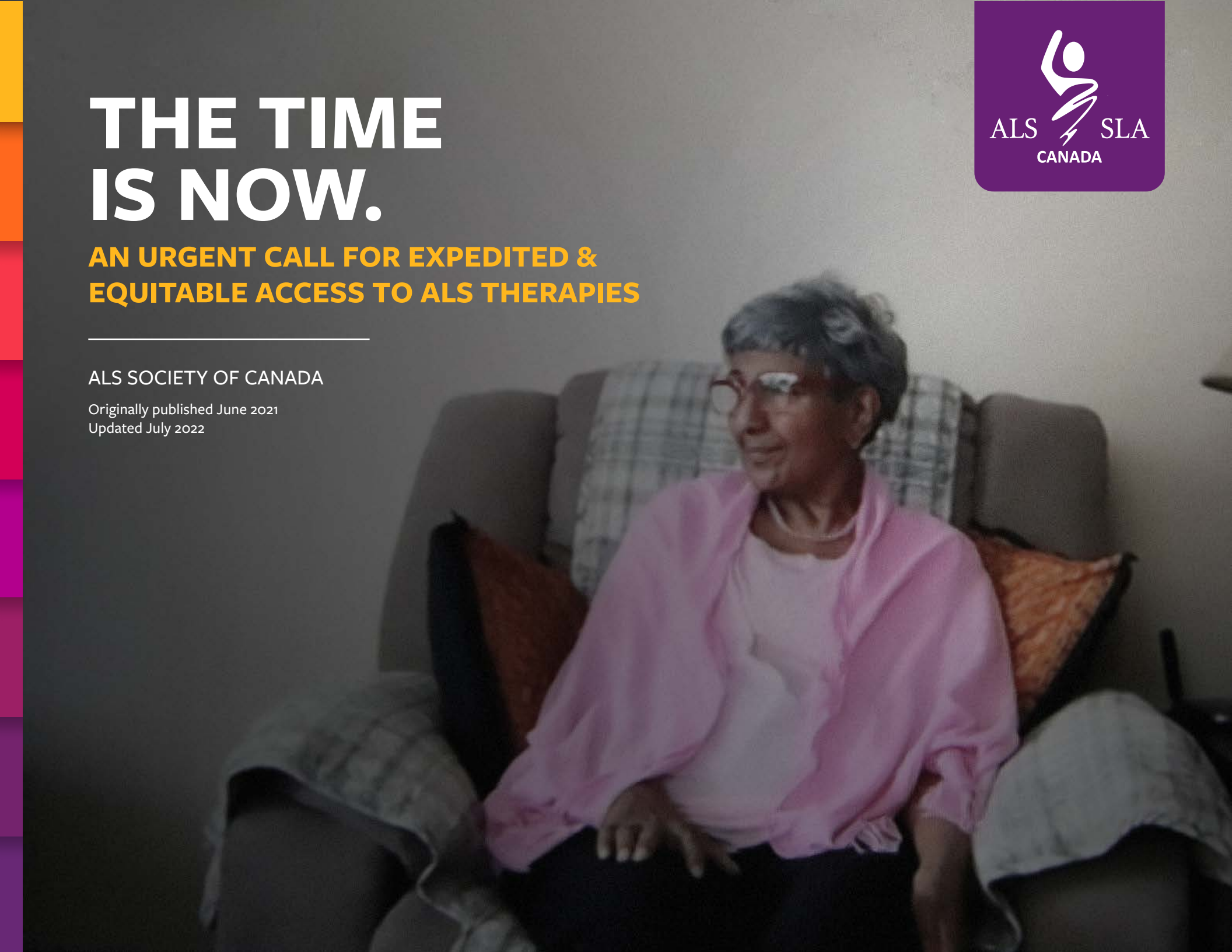


Introduction

WHEN NEW YORK YANKEE BASEBALL LEGEND LOU GEHRIG DIED OF AMYOTROPHIC LATERAL SCLEROSIS (ALS) 81 YEARS AGO, THERE WAS LITTLE KNOWN ABOUT THE DISEASE THAT CLAIMED HIS LIFE, OR HOW TO TREAT IT.

Today, more is known about this relentlessly progressive motor neuron disease which causes paralysis and leads to the death of approximately 1,000 people in Canada each year. And while the prognosis of ALS is variable and its progression difficult to predict, (i) we know that it can move with startling swiftness – leaving a very narrow window of time to slow it down, often further compressed by delayed diagnosis.

With only two disease-modifying ALS therapies currently approved in Canada, it is important that as many people as possible are able to benefit from these and other innovations to come, as quickly as possible following regulatory approval.

The same imperative applies to the unprecedented number of ALS therapies currently in development globally – totaling more than 60 novel molecules. It is essential that Canada have the appropriate conditions to encourage pharmaceutical companies to submit these therapies for approval in Canada, and when they do, support swift access to patients.

However, if we consider the current drug access pathway and the significant time it takes for a new therapy to move from regulatory approval through to the reimbursement decisions that result in patient access, thousands of Canadians with ALS will die waiting for these much-needed treatments.

We have witnessed this scenario play out in real-time over the past three years following the approval of the second ALS therapy in Canada. Yet looking at more recent experience with Canadians' access to COVID-19 vaccines, we see a very different scenario where access was achieved faster than ever before – proof that Canada can do better.

EXPEDITED AND EQUITABLE ACCESS TO ALS THERAPIES IS URGENTLY NEEDED. THE TIME IS NOW.

On March 11th, 2021, MP Heather McPherson presented an e-petition in the House of Commons, initiated by patient advocate Norman MacIsaac, that had been signed by 25,762 Canadians from all provinces and territories. The petition was the result of a grassroots movement by patients and caregivers, backed by ALS societies across Canada, and was formally endorsed by the multiparty ALS Caucus in a press conference that same day. It called upon on the federal government to work with stakeholders across the country on a pilot project to streamline the drug access pathway following regulatory approval of ALS therapies, in order for Canadians to access them more affordably and equitably, and with more urgency – ideally within three to six months.

Building on this e-petition and other important initiatives, the ALS Society of Canada – in consultation with the Canadian ALS community through focus groups and surveys – undertook the development of this position paper which includes immediate and long-term drug access solutions that will meet the urgent needs of people living with ALS – now and in the future.

On the cover: Susheela Balasingam was devoted to helping other people living with ALS in any way she possibly could.. Susheela died in November 2021 leaving a legacy of strength and determination.

This position paper was updated in July 2022 to reflect changes in the drug access environment since its original publication.

Part 1.0

CURRENT DRUG APPROVAL AND REIMBURSEMENT PROCESSES IN CANADA

This paper will take a close look at the realities of living with ALS, but first will map out the current processes and timeframes for patients to gain publicly funded access to any new treatment – ALS or otherwise – in Canada. For the purposes of this exercise, we can estimate that the average amount of time for a new rare disease therapy to become publicly reimbursed and accessible to patients who need it all across Canada is approximately three years – with some drugs advancing more quickly and others much more slowly depending on a number of variables.

While the federal government approves medications for sale, regulates their use, issues drug patents and regulates prices, the delivery of healthcare – which includes publicly funded access to prescription medication – is almost exclusively provincial/territorial jurisdiction under the Constitution Act, 1982 (S. 92).

In Canada, approximately 42 per cent of prescription drug spending comes from public drug plans, with the balance covered by private insurance (35%) or out-of-pocket (23%). (ii) However, drug funding in Canada is complex and our public formularies are affected by various federal, provincial and national (i.e. pan-Canadian collaboration between Ottawa, the provinces and territories) policies and processes.

A drug's regulatory and reimbursement journey begins in Canada when the pharmaceutical company makes a New Drug Submission (NDS) to Health Canada (HC), which then reviews it for safety, efficacy and quality. Once the drug is approved, or sometimes in parallel with the regulatory review, the company typically submits the drug to two health technology assessment (HTA) bodies: the Canadian Agency for Drugs and Technologies in Health (CADTH) and the Institut national d'excellence en santé et en services sociaux (INESSS) in Québec. Both CADTH and INESSS – often simultaneously – review the clinical and cost-effectiveness of the drug and make reimbursement recommendations to public drug plans. For the purposes of this paper, we have assumed a scenario of aligned regulatory and CADTH/INESSS reviews; however, it is important to note that some pharmaceutical companies may not be in a position to take advantage of this condensed timeframe.

From there, the drug moves on to another national process (including the province of Québec) called the pan-Canadian Pharmaceutical Alliance (pCPA) which conducts joint federal/provincial/territorial pricing negotiations with the stated objective of achieving greater value for publicly funded drug programs. The pCPA process ideally concludes when mutually agreed upon terms are reached with the drug's manufacturer and a Letter of Intent (LOI) is signed. It is important to note that the member jurisdictions are not mandated to participate in pCPA negotiations and can opt out of signing LOIs. (iii) A drug's journey to public reimbursement concludes with each province and territory having the final word on whether a medication is publicly funded within its borders through the negotiation of Product Listing Agreements (PLAs), which are typically based on the content contained within the pCPA LOI.

Many variables can affect the pace of a drug's journey through to reimbursement, including the good faith role of the submitting pharmaceutical companies. In recent years, there has been greater transparency around the timeframes of some of these processes, whereas others – such as PLAs – remain unclear. According to publicly available information, the following are the target or "aspirational" timeframes provided by the various organizations and processes involved in the approval and reimbursement of drugs in Canada:

HEALTH CANADA REVIEW
180 calendar days (6 months) for a Priority Review and **300 calendar days** (10 months) for a standard review.

CADTH
180 business days (8 months) and can be conducted in alignment with Health Canada Review

INESSS
90 to 180 business days (up to 8 months) and can be conducted in alignment with Health Canada Review

pCPA
140 business days (6.5 months)

PLAs
Unknown (funding of a drug in all provinces and territories can take up to 12 months or more)

Note: The Patented Medicine Prices Review Board (PMPRB) is a federal quasi-judicial body mandated to protect Canadians by ensuring that the prices of patented medications are not excessive. While timeframes related to the Patented Medicine Prices Review Board (PMPRB) have not been addressed in this position paper the ALS community expects that the PMPRB process will in no way ever hinder or delay individuals from accessing beneficial ALS treatments.

Louise and Peter's daughter, Carol, was diagnosed with ALS in 2013 and died in 2021.

THE REVIEW OF EIGHT RARE DISEASE DRUGS BELOW ILLUSTRATES A VERY DIFFERENT OVERALL REALITY FOR PATIENTS.

To date, none of these medications are publicly funded across the entire country, including one that was approved by Health Canada more than 11 years ago. So, while isolated elements of the drug approval and reimbursement processes do meet their target timeframes, the bigger, more relevant picture cannot be ignored – Canadian patients with rare diseases and their families are not getting timely access to treatments.

DRUG NAME	INDICATION	HC NDS ACCEPTANCE	HC APPROVAL	CADTH/ INESSS FINAL RECO.	PCPA ENGAGEMENT LETTER ISSUED	PCPA LETTER OF INTENT ISSUED	PLAS IN ALL PROVINCES	TOTAL TIMEFRAME TO DATE*
Kanuma® (sebelipase alfa)	Lysosomal acid lipase deficiency	April 2017	November 7, 2017	CADTH: November 21, 2018 INESSS: Dec. 2019	November 30, 2018	October 21, 2020	No	62 months+
Onpattro® (patisiran)	Hereditary transthyretin-mediated amyloidosis	December 2018	June 7, 2019	CADTH: July 29, 2019 INESSS: September 11, 2019	November 15, 2019	November 30, 2020	No	42 months+
Spinraza® (nusinersen)	Spinal Muscular Atrophy	December 2016	June 29, 2017	CADTH: March 1, 2019 INESSS: January 14, 2019	January 29, 2018	September 26, 2018	No	66 months+
Takhzyro® (lanadelumab)	Hereditary Angioedema	March 2018	September 2018	CADTH: November 22, 2019 INESSS: May 21, 2020 (re-consideration)	February 21, 2020	October 30, 2020	No	51 months+
Procysbi™ (cysteamine bitartrate)	Nephropathic cystinosis	March 2016	June 19, 2017	CADTH: January 24, 2018 INESSS: September 27, 2018	February 9, 2018	July 20, 2018	No	75 months+
Tegsedi® (inotersen injection)	hATTR Amyloidosis	April 2018	October 2, 2018	CADTH: January 10, 2020 INESSS: September 11, 2019	November 29, 2019	April 30, 2020	No	50 months+
Verkazia™ (cyclosporine topical ophthalmic emulsion 0.1% w/v)	Severe Vernal Kerato-conjunctivitis	July 2018	December 21, 2018	CADTH: January 14, 2020 INESSS: January 8, 2020	February 27, 2020	November 20, 2020	No	47 months+
Kuvan® (sapropterin dihydro-chloride)	Phenyl-ketonuria	Not available	April 28, 2010	CADTH: October 26, 2016 (re-submission) INESSS: June 1, 2012	May 5, 2017	February 13, 2020	No	12 years+

**From Health Canada New Drug Submission acceptance*

Note: The table above includes select drugs for rare diseases in which a pCPA Engagement Letter or Letter of Intent was issued between April 1, 2018 and March 31, 2020.

DRUG ACCESS EXAMPLE #1:
COVID-19 VACCINES

The global COVID-19 pandemic has created an unprecedented demand on Canada's healthcare system and an urgent need for access to health products. To facilitate earlier access to COVID-19 vaccines, Health Canada created an Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19 which allowed for an accelerated review of these products, with the first vaccine (Pfizer-BioNTech) receiving regulatory approval just 61 days after the drug company's submission to Health Canada. Upon approval, the federal government then began shipping purchased quantities of the vaccine to the provinces and territories for distribution. The initial doses of the first COVID-19 vaccine approved in Canada were administered just five days after being approved.

With an urgent need to ensure that as many Canadians were protected from the virus as quickly as possible, the federal government stepped in as the public payer for approved COVID-19 vaccines. In addition, policy makers and public health professionals at the federal and provincial levels undertook public health decisions that recognized that the COVID-19 pandemic affected the right to health and life under Canada's international and domestic human rights laws. These decisions also recognized that all levels of government have a legal obligation to take preventative steps to stop the spread of COVID-19 and treat people who have the virus, without discrimination. (iv,v)

PROCESS	CONCLUSION	TIMEFRAME
NDS	OCT 9, 2020	-
HC	DEC 9, 2020	61 DAYS
FIRST VACCINE ADMINISTERED	DEC 14, 2020	5 DAYS
TOTAL TIMEFRAME		**66 DAYS**

DRUG ACCESS EXAMPLE #2:
RADICAVA® (EDARAVONE) FOR ALS

Only the second therapy available in Canada for the treatment of ALS, Radicava® (edaravone) was granted a Priority Review by Health Canada due to "limited options to treat the disease." (vi) The progression-slowing therapy was approved for sale in Canada in October 2018, one and a half years later than the U.S., followed by a one-year delay in commercial availability (i.e. the manufacturer did not have Canadian supply). During this time, many Canadians chose to pay out of pocket to import a generic version of the drug from abroad and continued to do so even after Canadian supply was available in November 2019 (vii), as no public funding decisions had been made. Ultimately, it took three years from Health Canada approval for all provinces and territories to publicly reimbursement Radicava. Given the rapid progression of ALS and the clinical criteria for patients to receive benefit from the therapy this three year time frames means, many people became ineligible to receive treatment and lost their lives to the disease, while waiting for their province or territory to sign a Product Listing Agreement for Radicava. ALS therapies must be accessible not just to the few with the means to pay out-of-pocket or who live in a province equipped to make rapid reimbursement decisions.

As demonstrated in the table, even a drug whose journey began with a strong commitment from the federal government to "work with the drug company to facilitate access until the authorized drug is available on the Canadian market, reimbursement recommendations have been issued...and funding decisions have been made by public and private drug plans," (vi) took 19 months after approval to even start to get to people living with ALS when they could still benefit from it. When it comes to addressing the urgent medical needs of those diagnosed with a rapidly progressing, always fatal disease like ALS, the processes for regulatory approval and reimbursement must be better – and the timeframe to getting COVID-19 vaccines into the arms of Canadians has demonstrated that this is possible.

PROCESS	CONCLUSION	TIMEFRAME MONTHS
NDS	MAR 2018	-
HC*	OCT 2018	6
CADTH**	MAR 2019	10
INESSS**	JAN 2019	8
pCPA*	APR 2020	13
PLAs**	NOV 2021***	19+
TOTAL TIMEFRAME TO ACCESS		**3+ YEARS**

The Special Access Program (SAP) is a federal government mechanism that allows clinicians to request access to drugs that are not available for sale in Canada. Because this position paper focuses on Canadians' access to ALS therapies that have received Health Canada approval, the SAP is not discussed here.

**Priority Review*

***Includes 6-month overlap with Health Canada Review*

****All provinces and territories*

Part 2.0

MEASURING TIME BY LOSS: DIAGNOSIS AND PROGRESSION OF ALS

ALS is a neurodegenerative disease that gradually causes paralysis because the brain is no longer able to communicate with the muscles of the body. Over time, as their motor neurons die, someone living with ALS will lose the ability to walk, talk, eat, swallow, and eventually breathe. That is why the ALS community measures time not by months or years, but by loss – loss of function and loss of life. The impact of an ALS diagnosis on both the person living with the disease and their loved ones is tremendous and pervasive – physically, psychologically and financially. The realities of the disease are harsh – and they reinforce the need for better government support and access within the healthcare system.

Not everyone experiences ALS in the same way. There are some aspects that can be considered more "typical" or common in people living with the disease, and others that are much more variable. For example, it is common for the onset of ALS to be gradual, and for people to experience progressive muscle weakness and paralysis which leads to death. What is usually variable from one person to another are the initial symptoms of the disease, and the sequence and rate at which the disease progresses. (viii) For the purposes of this paper, similar to the more typical timeframe we have used for the approval and reimbursement of drugs in Canada, we have chosen to look at how ALS can progress over a three-year period from diagnosis or the onset of symptoms, representing the median survival of a person living with the disease. (ix)

One important factor to consider when it comes to the timeframe of disease progression is that the early symptoms of ALS can be very similar to other diseases, making it difficult to diagnose. Without a definitive diagnostic test, a neurologist will typically diagnose ALS through a process of reviewing symptoms and eliminating other possible diseases. The average time to a confirmed ALS diagnosis from the onset of symptoms can vary depending on where you live in Canada – ranging from 15 months to more than two years.[(ix)]

While there may be a delay in receiving a diagnosis of ALS, the devastating loss caused by the disease continues unabated. As time goes by, the opportunity for treatment narrows as a person living with ALS may no longer meet the eligibility criteria to receive clinical benefit from an investigational or approved therapy. Clinical experts have stated that "given the natural history of ALS, the unmet needs of ALS patients are colossal and any drug that slows down disease progression would be welcome." (x) The harsh reality is that in the time it takes for Health Canada to conduct a Priority Review of a novel therapy, or for the pCPA to negotiate the cost and reimbursement criteria of a drug, approximately 500 Canadians with ALS will die without knowing if that therapy could have slowed their disease, improved their quality of life, or given them more precious time with their loved ones.

REGARDLESS OF THE ORDER OF LOSS EXPERIENCED, THE FIRST THREE YEARS OF LIFE WITH ALS ARE DEVASTATING FOR MOST PATIENTS AND THEIR LOVED ONES.

We asked people currently living with ALS, those who are or were caregivers to people living with ALS, as well as ALS specialists to describe the loss of function experienced in the first, second and third year after diagnosis. The following is a summary of their experiences with ALS. It is important to remember that while these examples are grounded in real-life experiences, many people will have slower symptom progression while others will progress much faster.

YEAR one

"The impact of ALS varies across patients in the first year, but in general, there is the emotional toll of receiving the diagnosis and the social, financial and physical implications. Patients usually begin using adaptive aids to compensate for impairments in the first year after diagnosis and often have to give up work; losses in their ability to walk and in hand function impact their independence."

~ ALS Specialist

In the first year after the onset of symptoms people living with ALS and their caregivers recall a significant loss of energy, balance and overall coordination. Numbness, loss of muscle control and paralysis beginning in the hands, wrists, legs and feet which meant the gradual loss of the ability to write, type, walk, eat, and speak. Getting dressed, repositioning in bed, toileting, and transferring from one place to another also became challenging, signifying the start of the loss of independence. Assistive devices from orthotic braces, to canes, to a walker, and modifications to the family car and home became necessary in the first year of living with ALS.

"What I remember most of all in the first year of living with ALS is witnessing my dreams and my future crumble. I spent a lot of time researching the disease and reading about hopeful treatments."

~ Person living with ALS

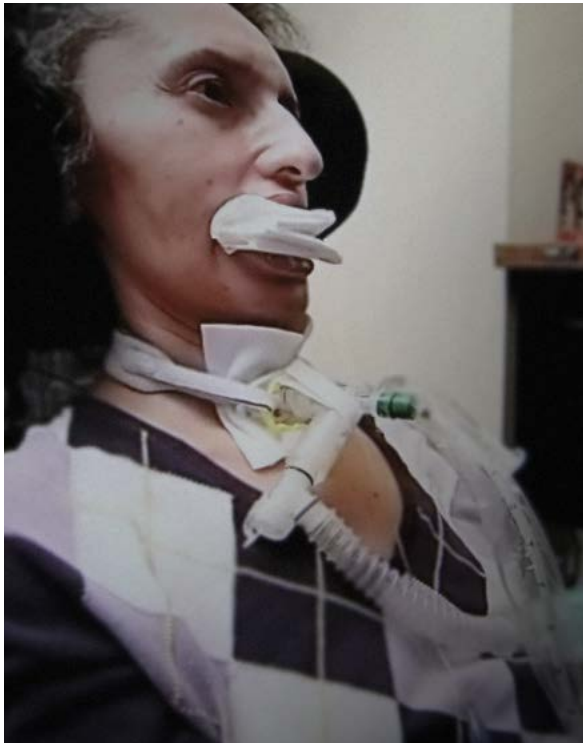
Chris and his husband Bert, was diagnosed with ALS in 2020 and passed away in early 2022, leaving a legacy of compassion.

YEAR two

"In the second year of living with ALS, patients will experience distressing changes in respiratory/bulbar symptoms that further reduce their independence and quality of life. There is an increased need for hands-on care, and patients are usually unable to work by this stage. Each loss they experience represents another stage of grieving." ***~ ALS Specialist***

During the second year of living with ALS, people recall experiencing continued muscle weakness, reduced range of motion, and in some cases complete paralysis of hands, wrists, biceps and triceps and legs. Some began using a portable electric wheelchair and progressed to a full-size custom power wheelchair in this interval as they began losing the ability to walk or bear weight. In some cases, in order to continue living safely at home, more substantial renovations became necessary, including the installation of an elevator and ceiling lifts to facilitate transfers. During this stage of the disease, people living with ALS and their caregivers recall progressive loss in the ability to speak – becoming more unclear and difficult to understand; to eat – necessitating a shift to soft/pureed foods or a feeding tube; and to breathe – relying on a BiPAP (bilevel positive airway pressure) ventilator overnight and sometimes during the day to a help push air into the lungs.

" I lost the ability to care for myself, to drive and run, to hold my wife's hand, and to hug my family." *~ Person living with ALS*



Zehra has been living with ALS since 2009.

YEAR three

"As the disease progresses, patients require more care and family members often leave work to care for their loved ones at home. There's an increased need for respiratory and mobility equipment, and greater involvement of palliative care and home care in symptom management. By this stage there are minimal opportunities for drug trial participation which is devastating for those who were delayed in diagnosis." ~ *ALS Specialist*

By the third year after diagnosis, people living with ALS and their caregivers recall feeling the considerable – often overwhelming – psychological and physiological impacts of the disease. Extreme fatigue, anxiety and depression become commonplace as people experience a further decline in their ability to eat safely, swallow liquid including saliva, speak, stand, move and breathe. They became more reliant on assistive equipment including eye-gaze technology to communicate and full-powered wheelchairs. Choking due to excessive salivation becomes a concern, leading to regular use of cough assist and suction machines. Chewing and swallowing become more difficult, and a feeding tube inserted directly into the stomach may become necessary. At this stage of the disease, the loss of independence weighs heavily on the person living with ALS and their caregivers – as does the more imminent end of life.

"Without access to technology, devices, modifications for our home, and personal support workers, this would be an even worse journey than it is." ~ ***Personal caregiver***

Ritu's mother lived with ALS for two and a half years.

Part 3.0

RECOMMENDATIONS TO EXPEDITE ACCESS TO ALS THERAPIES

It should now be clear that the current drug approval and reimbursement processes in Canada do not function in such a way that reflect the realities of the typical disease trajectory in ALS. Those processes are too lengthy and too unpredictable for a community in which people have an average life expectancy of three years post diagnosis.

Given this challenge, it would be ideal to simply replicate a more streamlined ALS-specific approval/reimbursement pathway that already exists elsewhere in the world.

Unfortunately, as far as we know there is no such pathway, nor are there any broader rare disease approval/ reimbursement pathways globally that could be modeled for ALS therapies in Canada. The only existing pathway we found that could be modified for ALS is the Patient d'exception program in Quebec where drugs can be funded immediately after Health Canada approval, but only on a case-by-case basis.

Yet with the current COVID-19 pandemic, it has been proven that when there is an urgency to having treatments approved and accessible to people through public funding, this can be done in a very expedited manner.

It is in the spirit of our collective and collaborative response to the pandemic that we offer two solutions to getting therapies to Canadians living with ALS in a timeframe that more accurately reflects the urgent needs of this community. ***The time is now.***

PATHWAY A: INTERIM FUNDING MECHANISM

RECOMMENDATION: ALL ALS TREATMENTS, UPON APPROVAL BY HEALTH CANADA AND THE DEVELOPMENT OF APPLICABLE CLINICAL CRITERIA/PRESCRIBING GUIDELINES, BE PUBLICLY FUNDED ON AN INTERIM BASIS ACROSS THE COUNTRY.

People living with ALS cannot wait for the existing public reimbursement processes to unfold as new treatments become available. So, the first solution would be for all ALS treatments, upon approval by Health Canada and the development of applicable clinical criteria/prescribing guidelines, to be immediately publicly funded on an interim basis. This would allow an ALS clinician to make timely application on behalf of any ALS patient who could benefit from the newly approved treatment, based on the clinical criteria/prescribing guidelines.

The assumption would be that if the patient's disease progression meets the criteria or guidelines, the medication will be publicly funded regardless of where in Canada the person lives.

To support this interim funding mechanism, an expert committee of practicing ALS specialists in Canada should be established. In addition to providing further clarity as to how such a mechanism for ALS should operate, they would be tasked with ensuring the development (if necessary) and adoption of applicable clinical criteria/prescribing guidelines. This would ensure that the ALS patients who stand to benefit from a new treatment are able to access it, albeit in a quick and efficient manner.

In addition to Quebec's Patient d'exception program, providing an interim funding mechanism for medications in Canada is not unprecedented. In April 2013, the drug Esbriet® (pirfenidone) for the treatment of idiopathic pulmonary fibrosis received an initial "do not list" recommendation from CADTH. (xi) And yet both Ontario (in August 2014) and New Brunswick (in October 2014) decided to publicly fund Esbriet on an interim basis pending a resubmission to CADTH – that resubmission resulting in a "list with clinical criteria/conditions" recommendation in April 2015. (xiii)

Susheela was diagnosed with ALS in 2020 and died in November 2021.

Similarly, Soliris® (eculizumab) for the treatment of atypical hemolytic uremic syndrome (aHUS) received an initial "do not list" recommendation from CADTH in July 2013. (xiii) That recommendation was upheld in August 2015 through a CADTH Request for Advice Report. (xiv) However, in February 2015, Ontario announced interim funding for Soliris for aHUS patients who met defined clinical criteria. (xv)

Zolgensma® (onasemnogene abeparvovec), a gene therapy used to treat spinal muscle atrophy (SMA), was approved by Health Canada in December 2020. (xvi) Within a month, both Ontario and Alberta announced that they would ensure that they had interim funding mechanisms in place by which families with children suffering from SMA could access Zolgensma. (xvii, xviii) Those announcements were made even before CADTH issued their "list with conditions" recommendation for Zolgensma in March 2021. (xix)

These examples clearly illustrate that when provinces choose to fund medications on an interim basis, sometimes even after CADTH has issued a "do not list" recommendation, they can do so. Given the relentless nature of ALS progression, we believe that people living with ALS across Canada must be able to access a permanent interim funding mechanism for approved treatments.

PATHWAY B: CONDENSING PROCESS TIMEFRAMES

RECOMMENDATION: ALL ALS TREATMENTS BE APPROVED, REVIEWED FOR PUBLIC REIMBURSEMENT AND PUBLICLY FUNDED THROUGH A SINGLE CONDENSED TIMEFRAME APPLICABLE TO ALL JURISDICTIONS IN CANADA.

It is our position that an interim funding mechanism for all ALS treatments, as outlined in Pathway A, serves as a bridge to the second solution, which would be for all ALS treatments to proceed through condensed and predictable approval and reimbursement processes. We believe that initially, that condensed timeframe should be no more than 18 months from when a pharmaceutical company's submission is accepted by Health Canada through to public reimbursement by all of the provinces/territories. However, 18 months is just a first step – given an average life expectancy of three years, the ALS community ultimately needs the timeframe condensed down even further to ensure expedited and equitable long-term access to medications.

Health Canada/CADTH/INESSS

Fortunately, we already have precedents in Canada for process expediency and alignment. Health Canada's Priority Review, which allows for a shortened review target of 180 days (versus the 300 days for a standard review) is critical for the ALS community. As was the case with Radicava, (vi) we fully expect that all new drug submissions for ALS will be granted Priority Review moving forward. Equally as important is the provision that allows CADTH and INESSS to accept submissions from pharmaceutical companies up to six months prior to the issuance of a Notice of Compliance from Health Canada. This alignment can serve to eliminate a significant amount to time between the approval and HTA processes, and we acknowledge that positive streamlining.

CADTH/INESSS/pCPA

If concurrent review processes can occur between Health Canada and CADTH/INESSS, then the same can surely occur between CADTH and pCPA. We understand that pharmaceutical companies are not entitled to have their medications accepted into the pCPA process, and that whether or not a particular drug is subject to pCPA negotiations is largely contingent upon its CADTH review and recommendation. We also know that the pCPA has partnered with CADTH to receive any materials companies choose to share at CADTH pre-submission meetings. Relevant information from INESSS is incorporated into the pCPA process, as required. (iii) Nevertheless, in an effort to move ALS treatments along for a community in desperate need, it is imperative that once a submission is received by CADTH, the pCPA should begin discussions with the applicable company to inform what will ultimately be the content of an LOI. Perhaps a panel of treating clinicians could provide guidance at this stage, similar to the expert committee suggested in Pathway A. Even a savings of a few months between these processes will be meaningful to people living with ALS and their families.

pCPA/Provincial and Territorial Reimbursement

This final step in the public reimbursement processes is where we believe there is no excuse for the existing lengthy timelines. Currently, a pharmaceutical company goes through pCPA negotiations with the objective of entering into an LOI. Once completed, the terms of the LOI (cost, reimbursement criteria, etc.) are then typically transposed into legally binding Product Listing Agreements (PLAs) between the company and the individual public drug plans. **We see no reason that the terms of an LOI and PLAs could not be negotiated concurrently.** After all, it was the Premiers of Canada who originally established the pan-Canadian Pricing Alliance in August 2010; the precursor to what has been known as the pCPA since 2015. (xx)

In essence, the pCPA is the provinces/territories, acting with additional participation by the federal public drug programs. The choice to enter into a PLA is within the exclusive jurisdiction of each of the provinces/territories/federal public drug programs.

Given this jurisdictional commonality, we believe that all LOIs and PLAs that pertain to ALS treatments should be concluded in a timely and concurrent manner. As well, while the pCPA allows jurisdictions to opt-out of individual negotiations, we are requesting that the provinces/territories explicitly forego opting-out of any condensed timeframe models in the case of ALS.

PATHWAYS A & B TOGETHER: IMMEDIATE ACCESS WITH STREAMLINED FUNDING TIMEFRAMES

The two pathways would co-exist: Pathway A would be implemented immediately to publicly reimburse ALS therapies upon regulatory approval and aligned with prescribing guidelines. Concurrent with patients accessing the therapy via Pathway A, Pathway B would be undertaken as a pilot project, with tangible deliverables and measurable outcomes, for the therapy's continued public funding.

For illustrative purposes we have applied these pathways to the hypothetical example of a new ALS therapy undergoing regulatory review starting in June 2021. (see Drug Access Example #3).

DRUG ACCESS EXAMPLE #3: NEW ALS THERAPY

PATHWAY A

PROCESS	CONCLUSION	TIMEFRAME MONTHS
NDS	JUN 1, 2021	-
HC*	DEC, 2021	6
PATIENT ACCESS**	DEC, 2021	6
TOTAL TIMEFRAME TO ACCESS		**6 MONTHS**

**Assumes Priority Review by Health Canada*

*** Based on physician application aligned with clinical criteria/prescribing guidelines*

PATHWAY B

PROCESS	CONCLUSION	TIMEFRAME MONTHS
NDS	JUN 1, 2021	-
HC*	DEC, 2021	6
CADTH /INESSS**	FEB, 2022	8
pCPA***	MID-AUGUST 2022	6.5
PLAs****	DEC, 2022	9
TOTAL TIMEFRAME TO ACCESS		**18 MONTHS**

**Assumes Priority Review by Health Canada*

*** Includes 6-month overlap with Health Canada Review*

**** Includes 1.5-month overlap with CADTH/INESSS*

***** Includes 4-month overlap with pCPA*

PLEASE NOTE: THIS PAGE HAS BEEN UPDATED FROM THE PREVIOUS VERSION TO ADDRESS A TYPO IN THE ABOVE CHARTS.

Conclusion

As we have established through this position paper, people living with ALS cannot wait for the existing public reimbursement processes to unfold within their typical timeframes as new treatments become available to slow the progression of this devasting disease.

EXPEDITED AND, IDEALLY, IMMEDIATE ACCESS TO APPROVED ALS THERAPIES IS URGENTLY NEEDED.

IN THE TIME IT HAS TAKEN FOR RADICAVA TO BE FULLY FUNDED BY THE PROVINCIAL AND TERRITORIAL DRUG PROGRAMS (WITH THE EXCEPTION OF PEI), APPROXIMATELY 3,000 PEOPLE WHO WERE LIVING WITH ALS HAVE DIED.

There would be a positive impact on the lives of ALS patients in Canada if the recommended pathways to expedite drug funding were to be applied moving forward: disease progression will be slowed, independence and quality of life will be retained, death will be delayed, and perhaps with this extension of life, new therapies will become available that will cure the disease.

FOR RECOMMENDATION #1: If Pathway A were adopted and interim funding for new ALS therapies were provided once approved by Health Canada, 2,500 fewer people living with ALS would die awaiting access, compared to Radicava.

FOR RECOMMENDATION #2: If Pathway B were applied, condensing the timeframes for the existing processes, 1,500 fewer people with ALS would die awaiting access, compared to Radicava.

It is the ALS community's unequivocal view that federal, provincial and territorial governments have a legal, moral and ethical imperative to do everything within their power to reduce the human suffering and loss of life caused by this disease. Our experience with COVID-19 in this country has shown that when governments want to get treatments to Canadians urgently and predictably, it can be done.

We acknowledge that the reimbursement processes are constantly evolving in Canada and this paper reflects where we are to date based on current government policy, consultations and constructs, and our recommendations are based on the current processes and policies. Given today's drug reimbursement timeframe, we believe that the solutions put forward in this position paper provide a feasible roadmap to get ALS treatments to Canadians – urgently, predictably and equitably. **THE TIME IS NOW.**

We now look forward to discussing the content of this position paper with the federal, provincial and territorial governments of Canada so that its recommendations can be implemented for the benefit of the ALS community.

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ABOUT

THE ALS SOCIETY OF CANADA

The ALS Society of Canada is working to change what it means to live with amyotrophic lateral sclerosis, an unrelenting and currently terminal disease. Grounded in and informed by the Canadian ALS community, we respond to the urgent unmet need for life-changing treatments by investing in high-quality research that will fuel scientific discovery and by engaging industry, supporting increased clinical capacity and advocating for equitable, affordable and timely access to proven therapies. Responding to the tremendous need for current and credible ALS knowledge, awareness and education, we empower Canadians affected by ALS to navigate the current realities of ALS, be informed consumers of ALS information, and advocate effectively for change. In Ontario, we provide direct community services to help people navigate ALS. Founded in 1977, we are a registered charity that receives no core government funding – our work is powered by generous donors who share our vision of a future without ALS.