Neurological Health Charities Canada

Neurological Health Charities Canada (NHCC) is a coalition of organizations that represent people with brain diseases, disorders and injuries in Canada. NHCC provides leadership in evaluating and advancing new opportunities for collaboration specific to advocacy, education and research to improve the quality of life for people affected by brain conditions.

NHCC Mission
Working together to improve the lives of people affected by brain diseases, disorders and injuries in Canada.

National Population Health Study of Neurological Conditions
The National Population Health Study of Neurological Conditions (the Study) was jointly planned and managed between 2009 and 2014 through a unique partnership between NHCC, the Public Health Agency of Canada, Health Canada and the Canadian Institutes of Health Research. The Study was designed to: enhance understanding of the scope of neurological conditions in Canada and their impacts on affected individuals, families and the health care system; support the development of effective programs and services; and reduce the burden of brain conditions in Canada. The Study resulted in the report Mapping Connections: An understanding of neurological conditions in Canada, which provides a synopsis of the social and economic impact of brain conditions on individuals, families and caregivers. Mapping Connections documents that neurological diseases, disorders and injuries (brain conditions) are estimated to affect almost 4 million Canadians. It also identifies crucial policy, program and funding needs to improve the lives of people affected by brain conditions.

Thank You
NHCC received much thoughtful and generous advice from numerous individuals and organizations during the preparation of this paper. We are very grateful for that advice and counsel, which has strengthened our analyses and recommendations as to what is needed to improve the quality of life of people affected by brain conditions.

Driving Research to Action: Canadian Action Plan for Brain Health, September 2017. Available at: mybrainmatters.ca

NHCC Member Organizations
ALS Canada  Huntington Society of Canada
Alzheimer Society Ontario  March of Dimes Canada
Brain Injury Canada  Mood Disorders Society of Canada
Brain Tumour Foundation of Canada  Ontario Federation for Cerebral Palsy
Canadian Epilepsy Alliance  Ontario Neurotrauma Foundation
Canadian Neurological Sciences Federation  Ontario Rett Syndrome Association
Dystonia Medical Research Foundation Canada  Parkinson Society Canada
Heart & Stroke Foundation of Canada  Spina Bifida & Hydrocephalus Association of Ontario
CHERIE IS JUGGLING THE DEMANDS OF WORK AND FAMILY LIFE. SHE WAS 38 WHEN HER MOTHER WAS DIAGNOSED WITH ALZHEIMER’S DISEASE. HER MOM, WHO LOVED TO THROW DINNER PARTIES, SUDDENLY STRUGGLED TO SET THE TABLE. SEVEN YEARS LATER, LIFE TOOK A NEW TWIST WHEN HER FATHER STARTED WALKING UP TO STRANGERS AND BEGAN YELLING AT THEM. IT WAS FRONTAL TEMPORAL DEMENTIA. WATCHING HER BELIEVED PARENTS SLIP INTO THE CLUTCHES OF DEMENTIA HAS BEEN HEARTBREAKING AND FRUSTRATING.

Brain health is essential to the overall health of Canadians and their productivity. Brain conditions affect millions of Canadians. They affect mobility and dexterity. They impair memory and the ability to think. They can make it hard to see, speak and communicate. They can be painful and debilitating.

Brain conditions make it harder to work, to succeed academically and to participate in everyday activities. They can leave Canadians living with brain conditions – and their families and caregivers – isolated, stigmatized and struggling to maintain their emotional and mental health. Brain health matters to Canadians impacted by brain conditions, to the health care system and to the economy.

Between 2009-2014, Neurological Health Charities Canada (NHCC) partnered with the Government of Canada to study brain health in the National Population Health Study of Neurological Conditions (the Study). As summarized in the report Mapping Connections, there is now a rich understanding of the scope, breadth, impact and cost of brain conditions in Canada and what needs to be done to improve the lives, productivity and prosperity of Canadians living with brain conditions and their families.

NHCC recommendations to the Government of Canada to improve brain health:

**Recommendation 1:** Work with NHCC to develop a Canadian Action Plan for Brain Health, based on the key findings of the Study, as summarized in Mapping Connections, to improve the lives, productivity and prosperity of the millions of Canadians living with brain conditions and their families through increased brain health research and meaningful care and supports.

**Recommendations 2 – 4:** Work with NHCC to conduct research into three key knowledge gaps identified in Mapping Connections. (See p. 7 for details.)

**Recommendation 5:** Increase Government of Canada funding of investigator-led research with an emphasis on fundamental brain health research.

**Recommendation 6:** In partnership with NHCC and the provinces and territories, the Government of Canada should test the new proposed Chronic Care Model for Neurological Conditions in carefully selected demonstration projects to test its real-world application as an integrated care model for brain conditions.

**Support for others’ recommendations:** Adopt measures to improve income security for individuals living with brain conditions and caregivers, initiate a national pharmacare program and support an inclusive national dementia strategy. (See pp. 10-13 for details.)
Driving Research to Action: Canadian Action Plan for Brain Health

WHY BRAIN HEALTH IS VITAL

In 2009 at age 37, Ken was on his way to work when the car he was in was hit by another vehicle. He sustained a traumatic brain injury that has left him unable to walk and return to work. After many months in hospital and rehabilitation centres, he is now in a palliative care unit at a regional hospital with nowhere else to go, despite his best efforts and those of his twin sister and mother. Everyone agrees he should not be in a long-term care home with the frail and elderly, but the nearest supportive care homes that can provide the rehabilitation services he needs have waiting lists of 10 to 20 years.

Brain health is essential to our overall health and to the sustainability of our health care system. Brain conditions affect millions of Canadians. They can affect our mobility and damage dexterity. They can impair memory and our ability to think. They can make it hard to see, speak and communicate. They can be painful and debilitating.

Brain conditions make it harder to work, to succeed academically and to participate in everyday activities. They can leave Canadians living with brain conditions – and their families and caregivers – isolated, stigmatized and struggling to maintain their emotional and mental health.

Brain health matters – to the millions of Canadians impacted by brain conditions, to our health care system and to our economy. We need to find causes. We need to find cures. We need care and supports.

RESEARCH TO ACTION

We partnered with the Government of Canada between 2009 and 2014 to study brain health in the National Population Health Study of Neurological Conditions (the Study). In collaboration with the Canadian brain community, we completed the most comprehensive study of brain conditions ever conducted in this country. We now have a rich understanding of the scope, breadth, impact and cost of brain conditions in Canada.

The Study report, Mapping Connections: An understanding of neurological conditions in Canada, provides a synopsis of the social and economic impact of brain conditions on individuals, families and caregivers. It identifies policy, program and funding gaps we need to fill. In addition, using microsimulation models, it has given us a glimpse of the consequences Canada will face in terms of rising disability numbers and economic costs from today to 2031.\(^1\)
By 2031, the overall number of Canadians living with a brain condition will increase, and more affected individuals will be living with severe disability. For example, the number of individuals with dementia and Parkinson’s disease are expected to nearly double, and the number of people with brain injury are expected to increase by almost 30 percent, as are health care costs and caregiving demands on family and friends related to these conditions.

Along with physical and emotional pain, affected individuals and families will face increasing financial burdens as a result of brain conditions, and Canadian taxpayers will have to pay substantial and increasing costs for health care and other services.

**IT IS TIME FOR ACTION ON BRAIN HEALTH**

**Recommendation 1**

NHCC urges the Government of Canada to work with NHCC to develop a Canadian Action Plan for Brain Health, based on the key findings of the Study as summarized in *Mapping Connections*, to improve the lives, productivity and prosperity of the millions of Canadians living with brain conditions and their families through increased brain health research and meaningful care and supports.

**NEUROLOGICAL HEALTH CHARITIES CANADA SOLUTIONS**

Neurological Health Charities Canada (NHCC) believes a Canadian Action Plan for Brain Health is needed to bring together stakeholders in a concerted, collaborative approach to improving brain health. The Action Plan would be the focal point for solutions that build on existing knowledge and expertise, drawing from the findings in *Mapping Connections*. 

Brothers Chris and Mike have witnessed life with Parkinson’s disease for more than a decade, watching their father’s health decline. As young boys, Mike recalls feeling embarrassed by their father’s shuffling walk. Then they noticed he couldn’t fasten the buttons on his shirt. The Parkinson’s diagnosis came in 2006. Today, increasing dementia affects the retired physician’s ability to communicate. Chris and Mike are not only concerned for their father’s well-being, but also worry about their mother. She is their father’s primary caregiver. She too is aging, and they know she struggles with isolation, having to stay home with their father most of the time.
By bringing stakeholders together under the Canadian Action Plan for Brain Health, we will be able to move much more quickly toward the ultimate goal of improving the lives, productivity and prosperity of the millions of Canadians living with brain conditions and their families and caregivers.

Below are the elements we believe should be part of the Canadian Action Plan for Brain Health.

**1.0 INCREASE INVESTMENT IN BRAIN HEALTH RESEARCH**

First and foremost, we need to know more about the causes, prevention and treatment of brain conditions. We need cures. We need to start filling the research gaps reported in *Mapping Connections*. We also need to put knowledge gained from the Study to the test so it can lead to better care for individuals affected by brain conditions.

At 58, Mike was a successful farmer, husband and father of four who started suddenly to behave violently and impulsively. While the diagnosis of Huntington disease brought some immediate answers about his behaviour, it also made his wife Carol and their four adult children anxious about whether they too might be at risk of developing this genetic disease. Sadly, genetic testing has found that three of the four children have the Huntington disease gene mutation while the fourth child chose not to be tested. Carol is now Mike’s full-time caregiver and worries she will also be the caregiver for her adult children and, perhaps, in time, her grandchildren.

NHCC believes investment in brain health research should be directed to:

- Filling the research gaps already identified in *Mapping Connections*; and
- Increasing brain health research to discover the causes, prevention and effective treatments for brain conditions.

**1.1 Invest to fill research gaps**

NHCC is proud of its participation in the National Population Health Study of Neurological Conditions. It gave us crucial information that we can now use to improve the quality of life for people living with brain conditions. It also pointed out serious gaps in knowledge that additional research must fill and provided baseline data which must be kept up-to-date. Here are the top three gaps we believe should be tackled first.

First, *Mapping Connections* did not contain robust information on some conditions, because of technical reasons and/or because some of the conditions are less prevalent. Targeted studies of ALS, dystonia, Huntington’s disease, muscular dystrophy, spinal cord injury and traumatic brain injury would overcome these issues and provide the vital information needed to develop better programs and services, greater awareness and targeted research. They would also be part of an overall commitment to gather data on brain conditions on an ongoing basis to ensure that the baseline data collected for *Mapping Connections* stays relevant and up-to-date.
Second, a clear conclusion of *Mapping Connections* was that much more research needs to be done on how brain conditions affect Indigenous communities. While some work is underway on mental health conditions, under the leadership of the Mental Health Commission of Canada, and the new First People-First Person Indigenous Hub of the Canadian Depression Research and Intervention Network (CDRIN) is now active, this is not the case in terms of neurological conditions. In addition, the one project in the Study focussing on the Indigenous experience with neurological conditions, did not include Inuit populations. NHCC is pleased the recent review of federal funding programs, which culminated in the report *Investing in Canada’s Future: Strengthening the Foundations of Canadian Research*, recommended the development of a comprehensive plan and long-term support for Indigenous research (Recommendation 5.7). NHCC believes brain conditions should be part of any Indigenous research plan.

Third, *Mapping Connections* provided evidence that when individuals experience both neurological and mental health conditions, their health outcomes are more negative. Self-reported mood or anxiety disorder occurred 2.5 times more frequently in individuals with a neurological condition than in people without neurological conditions. In some conditions, a mood or anxiety disorder occurred six times more frequently compared to people with neurological conditions. In addition, when psychiatric diagnoses or severe behavioural disorders are concurrent with a neurological condition, access to health care services becomes much more limited. This issue needs to be better understood and strategies put in place to combat it.

**Recommendation 2**

The Government of Canada, in partnership with NHCC, should carry out studies on amyotrophic lateral sclerosis (ALS), dystonia, Huntington’s disease, muscular dystrophy, spinal cord injury and traumatic brain injury.

**Recommendation 3**

The Government of Canada, in partnership with NHCC and Indigenous communities, should conduct detailed studies of the impact of brain conditions on First Nations, Inuit and Métis populations.

**Recommendation 4**

The Government of Canada, in partnership with NHCC, should examine how having both neurological and mental health conditions negatively impact accessing appropriate health services and develop strategies to assist individuals and health care professionals in obtaining optimal health outcomes.
1.2 Invest in fundamental brain health research

Far too little is known about the causes, prevention and treatment of most brain conditions. Thanks to advances in research, innovative therapies are available for some brain conditions. Unfortunately, many others remain untreatable, and their progressive course means that Canadians living with these conditions face continued deterioration, greater disability, a reduced quality of life and less ability to participate in Canadian society.

We are encouraged by two recent developments.

**Canadian Brain Research Strategy**

NHCC has advocated strongly for a coordinated approach to understanding and improving brain health. One of our recommendations has been for a Brain Summit to bring together leading researchers and other stakeholders to map out a coordinated approach to brain health research. We are pleased the proposed Canadian Brain Research Strategy\(^8\) is similar to our vision of a Brain Summit.

Developed by leading neuroscience researchers, the Strategy pledges to be interdisciplinary and collaborative across four inter-connected pillars: 1. understanding normal brain development and functioning; 2. addressing the health challenges that arise from abnormal brain functioning including prevention and treatment; 3. research to improve individual brain health; and 4. building better artificial intelligence to elevate experimental and clinical neuroscience research. It would also be the vehicle for Canada’s participation in already ongoing international brain research initiatives.

NHCC looks forward to participating as a key stakeholder as the Strategy moves forward. NHCC agrees that any investment in the Canadian Brain Research Strategy should be in addition to existing federal government health research funding.

**Report on future of Canadian research**

We are also encouraged by the recommendations in the recent report *Investing in Canada’s Future: Strengthening the Foundations of Canadian Research*. Among other important recommendations, it calls for more collaboration both within the federal research “ecosystem” and with provincial and territorial research initiatives (Recommendation 4.8).\(^9\) This recommendation, is very much in line with NHCC’s call for greater research collaboration and coordination.

In addition, NHCC agrees with the report’s recommendation that the “Government of Canada should quickly increase its investment in independent investigator-led research to redress the imbalance caused by differential investments favouring priority-driven targeted research over the past decade
(Recommendation 6.1) with most of the funding going to the granting councils’ core “open” competition program.\(^{10}\)

While the report does not emphasize any specific area of research, NHCC is confident that the well-known excellence of Canadian brain health research would thrive under the recommended reforms.

**Recommendation 5**

The Government of Canada should increase Government of Canada funding of investigator-led research with an emphasis on fundamental brain health research.

### 2.0 HARNESS KNOWLEDGE FOR BETTER CARE

Kayleigh has Rett syndrome. Seemingly healthy until she was 23-months-old, she then lost the ability to speak, to use her hands, and eventually to walk. Caring for a child with a neurodevelopmental disorder like Rett syndrome can consume the life of the entire family. Even worse, when Kayleigh reached 18, she was discharged from five specialists at the local children’s hospital and her care switched to the family doctor. He became responsible for the management of her seizures, cardiac and urological issues, gastrostomy tube, osteoporosis, pain and so much more. Leaving the coordinated care at the children’s hospital for decentralized medical care has been overwhelming for Kayleigh and her family.

All too often, individuals living with brain conditions face disjointed, fragmented care across multiple settings and care providers. *Mapping Connections* documented a lack of knowledge or awareness of brain conditions among health service providers and limited availability and/or accessibility of necessary services, particularly for people living in rural areas. In addition, more health services are available for people with common brain conditions than for those with rare conditions, resulting in inequitable access.\(^{12}\)

Children with brain conditions face additional obstacles. They may have a crisis in care when they reach age 18 and have to move from pediatric to adult health care. A paediatric clinic setting, where the child received coordinated care from an integrated team of health professionals, is often replaced by an over-worked family physician who may have little knowledge about the child’s specific brain condition.

In other cases, family physicians are unwilling to accept people with brain conditions as patients because of complex care needs. As mentioned, some health service providers exclude people with brain conditions from services if they have a co-existing psychiatric diagnosis, severe behavioural disorder or substance abuse/dependence. In addition, self-management, a key feature of the usual model of chronic-disease management, is difficult to achieve when the individual has significant mental health or cognitive challenges.
2.1 Support neurological integrated care model

NHCC believes one of the projects in the Study would be an excellent starting point for improved health care for people living with brain conditions and their families and caregivers. A team led by Dr. Susan Jaglal looked at the current Expanded Chronic Care Model (Expanded-CCM) and found it has significant limitations for people living with brain conditions.\(^\text{13}\)

Dr. Susan Jaglal and her colleagues propose some adaptations to make the Expanded CCM more effective for people with brain conditions. The proposed Chronic Care Model for Neurological Conditions places more emphasis on an integrated approach including caregiver support and supported transitions, acceptance and openness to overcome the stigma associated with brain conditions, and ensuring increased knowledge of brain conditions across all services and program, not just health care.\(^\text{14}\)

NHCC believes it is time to put this proposed model to the test.

Recommendation 6

In partnership with NHCC and the provinces and territories, the Government of Canada should test the new proposed Chronic Care Model for Neurological Conditions in carefully selected demonstration projects to test its real-world application as an integrated care model for brain conditions.

3.0 SUPPORT INDIVIDUALS, FAMILIES AND CAREGIVERS

Life with a brain condition often means high costs but low incomes. \textit{Mapping Connections} documented the fact that having a neurological condition affects the ability to work\(^\text{15}\) and having a neurological condition contributes to families’ overall financial insecurity.\(^\text{16}\) Many people with brain conditions must leave their jobs prematurely. Others, particularly children who were born with or developed a brain condition shortly after birth, are not able to work at all.

Income insecurity also affects caregivers. \textit{Mapping Connections} documents the negative impact caregiving can have on parents of children with brain conditions. Nearly a quarter of parents reported financial problems because of their caregiving responsibilities including pay cuts, demotions and/or the ability to work outside the home.\(^\text{17}\)

Life with a brain conditions also brings added costs for medications, some of which are only partly covered by private or public drug plans, mobility equipment, adaptations to homes and specialized transportation.\(^\text{18}\)
Recommendation 7

The Government of Canada should take immediate steps to improve the lives of all Canadians affected by brain conditions, other chronic conditions and disabilities by taking action on policy solutions described below.

3.1 Working together to make a difference now

NHCC is encouraged that there appears to be an openness on the part of the Government of Canada to partner with us, others in the brain and disability communities and employers to tackle the issue of income insecurity and to identify potential policy solutions.

The consultation report on the creation of accessibility legislation highlighted the importance that many respondents placed on employment and job retention for people living with disabilities and the need for appropriate supports. As well, we are pleased to see the recommendations to strengthen federal income support programs in the May 2017 report *Breaking the Cycle: A Study on Poverty Reduction*, by the Standing Committee on Human Resources Skills and Social Development and the Status of Persons with Disabilities. They are practical and do-able.

We also commend recent reports by two highly regarded policy thinktanks for well-researched and real-world recommendations that, if implemented, would contribute to income security of people affected by brain conditions, other chronic conditions and disabilities. They are the 2015 report by the Institute for Research on Public Policy, *Leaving Some Behind: What happens when workers get sick* and the May 2017 report by the Caledon Institute of Social Policy, *Dismantling the Welfare Wall for Persons with Disabilities*.

All of the above emphasize the need for interconnectedness in addressing the need for income security of people living with brain conditions, their families and caregivers. As noted in Section 2, the neurological integrated care model, which NHCC supports, would be an important component in addressing low incomes and high costs experienced daily by people affected by brain conditions.

NHCC recognizes and applauds the excellent work underway in advocating for better income security and supports by our individual member organizations and by other coalitions. We are pleased to add our voice to bring about the following important policy and program changes.
Income security policy solutions for individuals living with brain conditions

NHCC urges the Government of Canada to:

7.1 Increase the amount of Canada Pension Plan-Disability benefits so they provide adequate income for those with little or no other means of financial support;
7.2 Increase EI sickness benefits from 15 weeks to 26 weeks, with expanded flexibility for partial work and partial benefits for individuals who can work episodically;
7.3 Create employer tax credit/grant incentives for small to medium-size employers to help fund work accommodation costs and support the adoption of disability management;
7.4 Ensure any future Canadian Accessibility Act protects the rights of persons living with brain conditions and other chronic conditions and disabilities to employment and employment-related benefits;
7.5 Make disability tax credits fully refundable to help families whose incomes are so low they do not benefit from the credit;
7.6 Study the feasibility of adapting other income security models to Canada’s needs:
   a) Targeted guaranteed income for persons living with brain conditions and other chronic conditions and disabilities; and
   b) Australian National Disability Insurance Scheme, which provides a wide-range of supports for people living with disabilities;
7.7 Closely monitor the guaranteed annual income pilot projects underway in Ontario and adopt quickly if shown successful.

Income security policy solutions for caregivers

7.8 Increase the value of the Caregiver Amount (tax credit) and the Family Caregiver Amount (tax credit) by 10 per cent in 2018 and another 10 per cent in 2019;
7.9 Make both caregiver tax credits refundable to help families whose incomes are so low they do not benefit from the credit;
7.10 Expand the Employment Insurance Compassionate Care Benefit by broadening eligibility criteria to allow for caregivers to claim partial weeks over a period longer than the current 26 consecutive weeks; extending eligibility to caregivers of people living with a serious chronic or episodic condition beyond the current requirement of caring for a person who is gravely ill and in danger of death; and eliminating the mandatory one-week waiting period.

National pharmacare program policy solution

*Mapping Connections* documented that drug costs are high for many people living with brain conditions and their families, and they struggle to pay for necessary prescription medications. A number of organizations, including some NHCC member organizations, professional organizations such
as the Canadian Medical Association, and other coalitions are calling for a universal national pharmacare program. NHCC agrees it is time for action on this important issue. NHCC also commends the Standing Committee on Health for launching a study of a national pharmacare program and strongly suggests it finalize the study and report as soon as possible to provide guidance to the Government of Canada.

NHCC urges the Government of Canada to:

7.11 Draw upon existing expertise and guidance to develop, in partnership with the provinces and territories, a national pharmacare program that is accessible to all Canadians and provides the greatest amount of choice and flexibility.

National dementia strategy policy solution

NHCC applauds the work underway on the development of a national dementia strategy. Dementia can affect individuals who live with Alzheimer’s disease, Parkinson’s disease, stroke and other brain conditions. While we support the proposed private member’s bill to establish a national dementia strategy, we urge that it be expanded so its impact reaches as many affected Canadians as possible.

NHCC urges Parliamentarians to:

7.12 Ensure that Bill C-233 is inclusive of all dementias and that the subsequent development of a national dementia strategy involves representatives and stakeholders of a wide-range of organizations involved with dementia.

IN CONCLUSION

It is time to put research to action for individuals like Ken, Kayleigh, Joe and Mike whose lives have been turned upside down by a brain condition, and who are challenged to live well and participate to their full potential in our society. It is time to make the essential policy and program changes for caregivers like Cherie and Chris and Mike’s mom who struggle with their own well-being as they support loved ones. They need help now.

Mapping Connections and the National Population Health Study of Neurological Conditions has pointed the way. It is time for action on brain health.

NHCC is ready to be a catalyst, convenor and collaborator to assist the Government of Canada in making the Canadian Action Plan for Brain Health a reality.
ENDNOTES


2 Mapping Connections, pp. 69-70.

3 Mapping Connections, p. 31.

4 Canadian Depression Research & Intervention Network, accessed at: http://cdrin.org/first-peoples-first-person


6 Mapping Connections, p. 17.

7 Mapping Connections, p. 41.

8 Canadian Brain Research Strategy, accessed at: https://www.canadianbrain.ca

9 Investing in Canada’s Future: Strengthening the Foundation’s of Canadian Research. p. xxviii.


11 Mapping Connections, p. 40.


14 Development of a Chronic Care Model for Neurological Conditions, p. 10.


16 Mapping Connections, p. 25.


22 The National Disability Insurance Scheme is a new disability support program. It provides funds directly to people with disabilities so they can choose the kinds of supports they need. Accessed at: https://www.ndis.gov.au/

23 Mapping Connections, p. 39.

### Estimated cost of recommendations

NHCC estimates the cost of implementing the recommendations as follows:

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Cost and Timeframe</th>
</tr>
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<tbody>
<tr>
<td>Recommendation 1</td>
<td>$5 million over two years</td>
</tr>
<tr>
<td>Recommendations 2 – 4</td>
<td>$40 million over five years</td>
</tr>
<tr>
<td>Recommendation 5</td>
<td>Not costed since this has been addressed by Canada’s Fundamental Science Review</td>
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<tr>
<td>Recommendation 6</td>
<td>$10 million over two years</td>
</tr>
<tr>
<td>Recommendation 7</td>
<td>Not costed since these solutions have been addressed by other organizations</td>
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<tr>
<td><strong>Total – recommendations 1 – 4 and 6</strong></td>
<td><strong>$55 million over two to five years</strong></td>
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