

5 October 2016

Jonathan Coppel
Presiding Commissioner
Level 12
530 Collins St
Melbourne Vic 3000

Dear Commissioner Coppel,

On behalf of the Murdoch Childrens Research Institute (MCRI), I'm pleased to submit our response to the Commission's draft report on the national education evidence base. The MCRI has a long history of excellence in high quality research and data; it's therefore exciting to see the same excellence and rigour being extended to education research through the Commission's draft report and support many of the recommendations.

We believe that better collection, analysis and use of data and evidence offers the potential to result in significant systemic improvements that will ultimately benefit all Australian children.

We would particularly welcome the opportunity to speak with Members of the Productivity Commission Inquiry into the National Education Evidence Base. We think we might add value to Members' understanding of the specific contexts in which we use data and research, the current barriers to data access and linkage, and particularly, how we are working to capitalise on the potential of data linkage and longitudinal data through programs such as Generation Victoria (Gen V).

Once again, I commend you on your efforts to date and look forward to further opportunities to discuss this crucial area of reform with you.

Yours faithfully,

Professor Kathryn North AM, MD, FRACP
Director, Murdoch Childrens Research Institute

Productivity Commission Inquiry – Response to draft report

National Education Evidence Base

October 2016

Contents

| | |
|--|----|
| About us..... | 2 |
| Responses to Productivity Commission draft report recommendations | 3 |
| Draft recommendation 2.1 | 3 |
| Draft recommendation 3.1 | 3 |
| Draft recommendation 3.2 | 3 |
| Draft recommendation 3.3 | 4 |
| Draft recommendation 4.1 | 4 |
| Draft recommendation 5.1 | 5 |
| Draft recommendation 5.2 | 5 |
| Responses to Productivity Commission draft report requests for information | 8 |
| Information request 3.1 | 8 |
| Information request 4.1 | 8 |
| Information request 5.1 | 9 |
| Information request 5.2 | 9 |
| Information request 8.1 | 9 |
| References | 10 |

About us

The Murdoch Childrens Research Institute (MCRI) is the largest child health research institute in Australia and the leading paediatric research institute in this field. Research at MCRI brings together the best clinical paediatric skills and knowledge in cross-disciplinary research teams working collaboratively to solve broader children's health problems. This 'bench to bedside to community' approach to child health research is unique in Australia.

MCRI welcomes the opportunity to respond to the Productivity Commission's draft report on the development of a National Education Evidence Base. This response has been coordinated by MCRI's Population Health theme. This theme studies the health of communities and populations, including the determinants, distribution and management of health at the population level. The platforms used are local, national and global cohorts, clinical databases and gene/environment expertise. We have developed a significant reputation for the delivery of high quality research, evaluation and translation projects in health risk and protective factors, wellbeing and healthy development, education, service systems development and the policy implications and drivers for implementing reforms that will improve children and young people's outcomes and enable optimal health, learning, development and wellbeing. We have significant experience in the following:

- Planning and preliminary analysis
- Systematic literature reviews
- Descriptive data analysis
- Longitudinal data development and analysis
- Intervention trials
- Statistical analysis.

MCRI supports efforts to develop a national education evidence base and we would like to acknowledge the Commission's efforts in drafting this first report. We believe that better collection, analysis and use of data and evidence offers the potential to result in significant systemic improvements that will ultimately benefit all Australian children.

Responses to Productivity Commission draft report recommendations

Draft recommendation 2.1

In supporting the further development of a national education evidence base, governments should be guided by the following principles. The national education evidence base should:

- *Meet the varied needs of decision makers at all levels of the education system*
- *Provide high-quality data and evidence to inform decisions*
- *Drive improved student achievement through four interconnected processes – monitoring of performance, evaluation of what works best, dissemination of evidence and application of that evidence by educators and policy makers*
- *Generate benefits in excess of the costs incurred in collecting and processing data and in creating, sharing and using evidence.*

MCRI supports draft recommendation 2.1, and strongly argues that investment in the development of a national education evidence base will generate benefits in excess of the costs incurred in collecting and processing data, and in creating, sharing and using evidence. With the current policy and political environment focused on school funding there is even more of an imperative to link evidence with equitable funding distribution to ensure impact. There is currently substantial under-investment in the education research and evidence-base, and this will lead to greater costs for Australian in the future with regard to loss of productivity and wellbeing.

Draft recommendation 3.1

In assessing whether to improve the quality of existing education data, governments should examine whether:

- *there is a need to improve the quality of the data so it is fit for purpose*
- *data quality improvements are feasible given the context of data collection*
- *other options are available*
- *the benefits of improving data quality exceed the costs.*

There is undoubtedly scope to improve the quality of some existing data. This would include whether there should be expansion of NAPLAN to include non-literacy/numeracy based testing and improve school attendance data. Where improvements to education data quality are required, the benefits of improving that data and making it available will outweigh the costs associated with the improvement.

MCRI recommends that the Productivity Commission consider reframing this recommendation to one that prioritises government seeking to improve the quality of existing education data.

Draft recommendation 3.2

The Australian Government should request and sufficiently fund the agencies that conduct the Longitudinal Study of Australian Children and the Longitudinal Study of Indigenous Children to establish new cohorts of children at regular intervals.

Cohort studies like the Longitudinal Study of Australian Children (LSAC) and the Longitudinal Study of Indigenous Children (LSIC) are valuable national resources. However, it is also possible to create longitudinal studies with national cohorts via a state-by-state approach, which may be a more effective and efficient means given that states and territories are responsible for much of

Australia's education and other service provision. [Generation Victoria](#) (or Gen V), an initiative we referenced in our initial submission, is an example of how data infrastructure can be created state-by-state, with federal funding supporting the development and linkage of such initiatives to enable the creation of national cohort(s).

MCRI considers that cohort studies like LSAC and LSIC should not be considered alternatives to what can be achieved with data linkage, which provides breadth, end-user engagement from the beginning, and does not underrepresent important sections of the population (particularly those most vulnerable).

Ideally, both new cohorts and data linkage should be enabled to proceed. However, in a resource-limited environment, data linkage should be prioritised.

Draft recommendation 3.3

Australian, state and territory governments should support greater use of value-added measures of education outcomes.

MCRI supports this recommendation and sees it as an essential element of an efficient administrative core of data.

Draft recommendation 4.1

Agencies responsible for collecting education data should review and adjust their procedures to reduce the administration costs and the compliance burden on respondents, including by:

- *to the greatest extent possible, collecting sample, rather than census data*
- *removing duplication in data collection and processing*
- *avoiding frequent changes to reporting requirements, but when changes are necessary, allowing sufficient time for respondents to comply with the new requirements*

MCRI strongly disagrees with the recommendation for sample only being the preferred option for data collection. Education currently enables two of the most powerful national census data sets being NAPLAN and the AEDC. These census data provide powerful tools for small area and subpopulation analyses. In our view sample-based approaches should not be considered alternatives to what can be achieved with data linkage across full populations. Having the Australian Early Development Census (AEDC) data has revolutionised what we know about vulnerable populations (e.g. those from a language background other than English) and provided data at the local level that has galvanized community effort around young children. From a community perspective, the census gives small area level data that is transformative for data-informed service planning and development. Subpopulation data are critical for policy and planning yet vulnerable populations are both less likely to enter sample studies and more likely to drop out over time.

There is a need to create longitudinal data on individuals to enable the assessment of education trajectories to outline and measure the impact of interventions. As has been shown by the recent failures of the UK LifeStudy and the US National Children's Study, the costs and practicalities of recruiting and maintaining sufficiently powered samples poses massive challenges and one could argue has greater administrative and respondent burden. In contrast, embedding data collection into universal services can create longitudinal census data through linkage. More detailed samples of specific groups can then be built off this backbone for considerably less cost.

MCRI supports the Productivity Commission's recommendation to remove duplication in data collection and processing, and notes that a complete assessment of government data (including beyond education) will enable this. Appropriate identifiers will enable linkage and create the ability to remove significant duplication.

Draft recommendation 5.1

Agencies responsible for education data collections should amend their processes for collecting personal information from parents/guardians to incorporate formal consent and notification procedures regarding the use and disclosure of personal information at the initial point of collection.

MCRI recommends that where it is appropriate for education data collections to incorporate formal consent and notification procedures regarding the use and disclosure of personal information at the initial point of collection, this should be implemented. However, we also note that not all data requires this approach.

Information provisions with opt-out approaches provide a mechanism for consent for utilisation of data. MCRI has significant experience in implementing such processes in the Victorian Newborn Screening Program which achieves >95% consent for use in research. In addition, the AEDC data are collected through opt-out with similar consent rates.

Agencies need to ensure they implement consent carefully, taking into consideration the population's comfort and expectations for use of their data. Evidence from our own work and others¹ indicates that the majority of the population expects use of their data for research to improve policies and services. However, they trust and are more comfortable with independent research organisations (universities and independent research institutes) to complete such work. For example, Research Australia's most recent 2016 polling indicates that 91% of people support use of their data for research, 6% are unsure and 3% are unwilling. Top reasons for use of data include: 79% to advance medical research, 74% so healthcare providers can improve patient care, and 68% so public health officials can better track disease, disability and the causes.¹

Draft recommendation 5.2

Australian Government should amend the Privacy Act 1998 (Cwlth) to extend the arrangements relating to the collection, use or disclosure of personal information without consent in the area of health and medical research to cover public interest research more generally.

MCRI strongly supports this recommendation. Due to the significant interaction between psychosocial, health and education for children, research across all of these areas is required to elucidate interventions and build education and other systems to enable children to achieve their full potential.

Draft recommendation 5.3

The ACT Government should enact in its privacy law an exception to cover public interest research. In Western Australia and South Australia where there is not a legislated privacy regime, their privacy arrangements should reflect a similar public interest research exception.

Consistent with our response to recommendation 5.2, MCRI supports this recommendation.

Draft recommendation 5.4

The Australian, state and territory governments should pursue legislative consistency in education and related Acts regulating the use and disclosure of education information, and amend legislation so that it is aligned with the intent of general privacy laws.

Consistent with our response to recommendation 5.2, MCRI supports this recommendation.

Draft recommendation 5.5

The Australian, state and territory governments should introduce policy guidelines which place the onus on data custodians to share data unless a privacy (or other) exception can be justified.

Consistent with our response to recommendation 5.2, MCRI strongly supports this recommendation.

Draft recommendation 7.1

The Australian, state and territory governments should ensure that an online metadata repository for education data collections is created. The approach used by the Australian Institute of Health and Welfare could serve as a model.

As per our original submission to the Productivity Commission's Inquiry, MCRI recommends that an online metadata repository for data collections encompass education data as well as data on the many determinants of health and wellbeing outside of the school setting. This would include information about family and community circumstance, student attributes like social-emotional wellbeing, and information about participation in community services, including health and early childhood.

The repository would ideally exist to answer the question: *how are Australian children faring and what are the policy levers for change to improve outcomes?*

In this way, data could be maximised to (1) inform education policy; (2) understand children's health and developmental trajectories; and (3) contribute to evaluation of a range of public policies over time.

The model needs to include:

- high quality administrative data collections starting from pregnancy
- linked data sets
- the ability to, with consent, link in-depth samples to explore associations and mechanisms in greater detail.

MCRI commends the Productivity Commission's support of investment in high-quality research, particularly randomised controlled trials (RCTs). We reiterate that RCTs have been fundamental to transforming healthcare. Many intuitively appealing interventions that have been thought to be effective by those receiving and delivering a service have been found to not in fact achieve any benefits through RCTs. It is important to conduct both efficacy (ideal conditions) and effectiveness trials ("real world" implementation), as interventions can be effective when tightly controlled but not once scaled up. Insights from the field of implementation science are also extremely important. Done well, RCTs can achieve huge advances in promoting good outcomes for children and effective use of resources. Our own research has shown that RCT's in schools are feasible and can utilise existing data sources for efficient research (see Classroom Promotion of Oral Language RCT-http://www.rch.org.au/uploadedFiles/Main/Content/ccch/CPOL_information-sheet.pdf)

Draft recommendation 7.2

The Australian, state and territory governments should pursue a national policy effort to develop a high-quality and relevant Australian evidence base about what works best to improve school and early childhood education outcomes. In particular, five activities need to be supported:

- *development of research priorities*
- *commissioning of high-quality education research*
- *adoption of rigorous research quality control processes*
- *dissemination of high-quality evidence*
- *development of researcher capacity.*

MCRI supports this recommendation, and notes that appropriate funding needs to be made available to conduct research, disseminate the research, and ensure the research is ultimately translated into effective policies and practice.

Draft recommendation 8.1

The Australian, state and territory governments should task the COAG Education Council to provide explicit policy direction through a new Education Agreement, which would build on prior agreements and define the:

- *objectives*
- *nature of the research to be undertaken in the bottom-up evaluation of what works*
- *evidentiary standards or frameworks to be applied, including assessment of cost effectiveness*
- *requirement for translation of evidence into guidelines accessible by schools, early childhood education and care services and teachers.*

They should also request the Education Council to:

- *assign an institution to be responsible and accountable for implementation of the functions set out above and in Draft Recommendation 7.2*
- *specify the assigned institution's governance arrangements, functions and operations*
- *including a responsibility for promoting a culture of using the evidence base by policy makers and educators.*

MCRI supports the creation of an Education Agreement. We also support the idea of establishing (whether a new or existing organisation) an agency to lead the implementation of the Education Agreement. This body should not be responsible for doing the research, as this expertise exists across a large number of organisations and sectors, but rather should be responsible for coordinating, funding, and supporting research, and promoting a culture of using the evidence base, as the Productivity Commission recommends. Any recommendations for education should be undertaken in the context of the broader health and social policy environment for children to ensure there is convergence of effort for maximum impact, especially in considering how best to close the inequity gap.

Responses to Productivity Commission draft report requests for information

Information request 3.1

The Commission seeks comment on whether the Australian Early Development Census could be used to monitor progress against Australia's early learning objectives.

MCRI strongly supports the use of AEDC data to monitor progress against Australia's early learning objectives.

Australia's Early Years Learning Framework² references five key learning outcomes for children birth to five years:

1. Children have a strong sense of identity
2. Children are connected with and contribute to their world
3. Children have a strong sense of wellbeing
4. Children are confident and involved learners
5. Children are effective communicators

To achieve these learning outcomes, children must be physically healthy, and competent in their social, emotional, language, cognitive and communication skills. These domains of health, wellbeing and competency are assessed by the AEDC on the following five domains:

1. Physical health and wellbeing
2. Social competence
3. Emotional maturity
4. Language and cognitive skills
5. Communication skills and general knowledge.

This firmly anchors early childhood development with the early learning process. As an existing data collection mechanism it provides a universal census back bone for data linkage to other early childhood and then school based data collections. In addition, as noted in our response to draft recommendation 4.1, MCRI strongly supports the use of the AEDC as a census tool that provides crucial data on vulnerable populations – those who are less likely to enter sample studies and more likely to drop out over time. This census data has enabled research aimed to address inequities in the health and wellbeing of subpopulations of Australian children, and it is vital that this research be able to continue.

Information request 4.1

The Commission seeks further information on:

- *the costs and benefits of moving toward a national student identifier (compared to jurisdictional systems)*

- *the feasibility of using the unique student identifier system used in the vocational education and training sector to deliver more comprehensive student coverage*
- *the costs and benefits of children in the early childhood education and care sector being covered by the same identifier as school students.*

MCRI supports the use of a national student identifier. We have seen significant benefits from the implementation of a Victorian Student Number in enabling research to proceed. The benefits to having a national identifier would be significant. MCRI also supports the extension of the student identifier into the early childhood education system. Due to the significance of this period, as outlined in our original submission, it is vital that we enable high quality research to understand the influences on child outcomes in the early years. An identifier will vastly improve the accuracy and efficiency of data linkage ensuring timely availability of data of researchers and policymakers alike

Information request 5.1

The Commission invites participants to comment on the operation of the section 95 guidelines in health research and lessons for other forms of research including education.

MCRI notes that Australian Privacy Principle 6.2 includes processes for both consented and non-consented use and reasons for when you would approve such uses – this in particular should cover all research, to enable the Education Department to release data for use on research related to the primary purpose of collection (e.g. education). Critical to this is that the purpose of collecting data by agencies in education should include “improving education and services for children and families” and not just as an administrative function.

Information request 5.2

The Commission invites participants to comment on the operation of mutual recognition in the health area and any lessons it provides for education research.

There has been an interesting divergence of research approaches to health and education. While the use of RCT's and other rigorous testing mechanisms have been central to medicine and health care, there has been a considerable reluctance in education and other social policy platforms for progressing this agenda. Yet in health care RCT's have enabled accelerated progress as well as prevention of unnecessary care. The embedding of evidence into care (evidence based practice) remains a challenge and calls on other sciences such as implementation and improvement science to ensure that trial findings do indeed make their way into policy and practice. There seems no logical or real reason why these approaches, considered gold standard, cannot be embedded into the most powerful and influential platform for children in this country.

Information request 8.1

The Commission seeks further information about the strengths and weaknesses of its proposed institutional and governance arrangements.

MCRI supports the establishment of a lead agency for oversight of the national education evidence base. However, we do not agree that the Education Council should be able to veto the selection of research projects, even if conducted transparently. This allows the possibility of research projects being evaluated with a political lens, which will not always be in the best interests of Australia's children, or health and education system. Further, there are already mechanisms in place (e.g. ethics committees and peer review processes) for detection of poor quality research or projects that are ethically or morally unsound.

References

1. Research Australia. Australia Speaks! Research Australia opinion polling; 2016.
2. Australian Government Department of Education Employment and Workplace. Belonging, being and becoming: The Early Years Learning Framework for Australia. Canberra: Commonwealth of Australia;2009.