

Research partnership between the Victorian Government Department of Education and Training and the Melbourne School of Population and Global Health, The Jack Brockhoff Child Health and Wellbeing Program

FINAL REPORT ON ACTIVITIES, OUTPUTS AND OUTCOMES

MAY 2015



The Jack Brockhoff
**Child Health
and Wellbeing
Program**

Research partnerships
working for every child

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PARTNERSHIP AIM

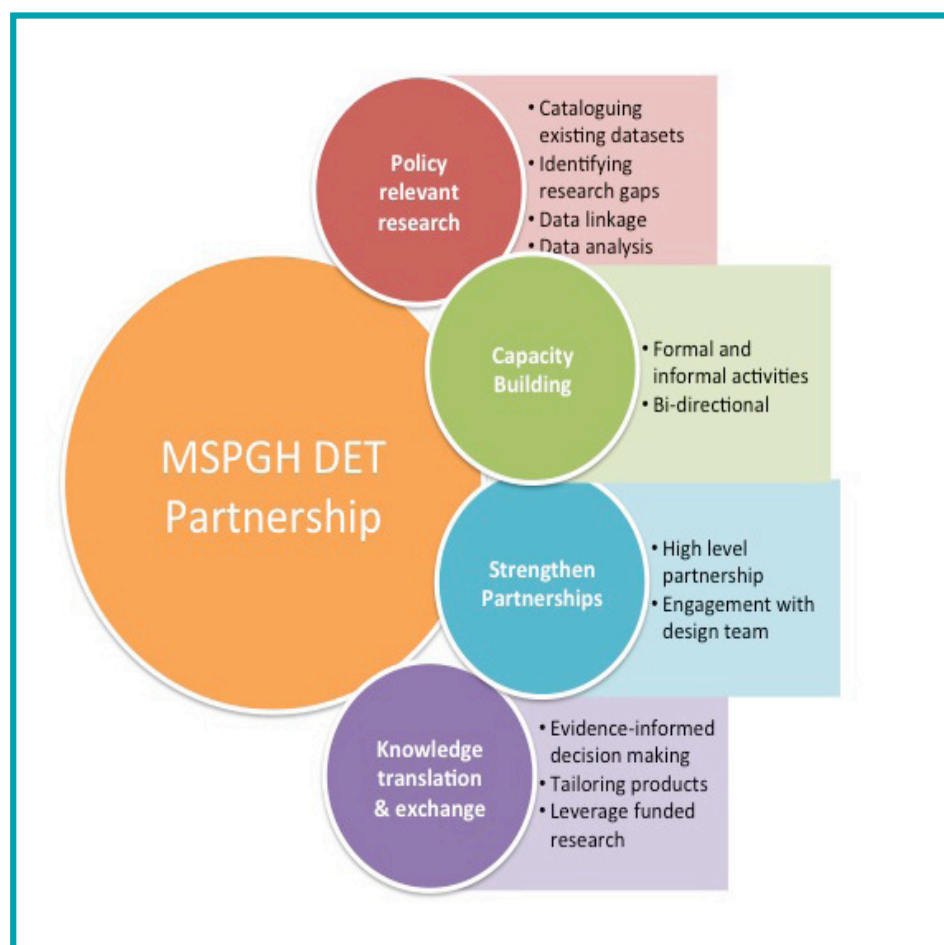
The Melbourne School of Population and Global Health (MSPGH) and the Victorian Department of Education and Training (DET) partnership commenced in July 2011.

This partnership was a unique collaboration between government policy makers and public health and education researchers and aimed to improve the health, wellbeing, learning opportunities and life experience for children across Victoria by informing policy priorities using a population approach.

The partnership incorporated four broad areas: data analysis, strengthening of systems for DET outcomes, development and use of evidence and strengthening the use of evidence. Specifically the partnership utilised a series of population wide surveys held by DET to conduct broad policy related analysis in order to improve knowledge of child health and wellbeing.

PARTNERSHIP STRATEGY

The partnership strategy was set up to incorporate four major themes, being Capacity Building, Policy Relevant Research, Knowledge Translation and Exchange and Strengthening Partnerships.



STAGE 1. ENSURING POLICY RELEVANT RESEARCH

SCOPING AND IDENTIFYING RESEARCH GAPS

The initial stage of the Partnership focused on the cataloguing of DET datasets and the identification of research gaps.

Cataloguing DET data assets was carried out to determine completeness of data coverage and identify opportunities for strengthening the coverage and providing a more complete picture of the health, wellbeing and education outcomes of Victorian children.

Fifteen datasets were identified incorporating information on children from birth to 24 years of age. The potential to link data was also investigated.

A set of interviews and informal discussions were held with a wide range of stakeholders from DET to inform the direction of the MSPGH-DET partnership work program. Discussions centred on how and why the datasets were used by DET and what would be useful to obtain from the datasets. Meetings then occurred to clarify what research questions were to be answered and how to use the available data.

Findings were reported within the following documents:

- *A catalogue of Child and Adolescent Health, Education and Administrative Datasets: Describing the Health, Wellbeing and Education of Victorian Children and Adolescents*
- *Review of the Research and Analysis Division Survey Suite*

WORKSHOP SERIES

A series of workshops were provided by MSPGH. The workshops focused on using evidence in research and aimed to build DET capacity for research and evaluation.



STAGE 2. DATA PREPARATION

Stage two of the partnership involved preparation of the data. This was a detailed and lengthy stage with the main steps outlined below. An overarching data management process was integral to all activities.

- Sourcing datasets
- Sourcing documentation
- Ethics approval
- Data matching/linkage
- Data cleaning

A technical report was completed on the data matching process:

- *Data Matching 2008 School Entrant Health Questionnaire and 2011 Year 3 National Assessment Program – Literacy and Numeracy*

The following timeline provides an indication of the necessary steps, at monthly increments, that were necessary to move from scoping potential datasets to analysis of data.

Activity	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Structured capacity building activities	X					X	X							
MSPH update seminars	X		X	X						X			X	
MSPH WIP seminars											X		X	
Reporting		X						X						X
Data analysis + reporting (single datasets)														
Scoping and preparations for data linkage	X	X		X	X	X	X	X						
Data linkage								X	X					
Prepare linked dataset										X	X			
Analysis of linked data												X	X	X

DATASETS

- SEHQ 2008 to 2012
- SEHQ2008-NAPLAN2011-NAPLAN2013
- SEHQ2010-NAPLAN2013
- Kinder2011
- Kinder2011-NQS2011-SEHQ2012
- AEDI2012
- EOL
- VicGen

STAGE 3. ANALYSIS

PROJECTS

The resulting investigation of datasets and research gaps that occurred over Stage 1 and 2 of the partnership informed the development of specific areas of research. The expert knowledge and skills provided by MSPGH were also instrumental in shaping these research areas.

Three broad areas were identified with projects sitting within each area.

The health and wellbeing of children as they enter school

- Identifying health trends in early childhood
- The identification of indicators of disadvantage for emotional and behavioural wellbeing in children
- The establishment of norms for the Strengths and Difficulties Questionnaire (SDQ) for young Victorian children

What factors within an ecological framework influence child education outcomes

- What is the impact of emotional and behavioural difficulties at school entry on educational outcomes at Grade 3? How do these impacts vary by socioeconomic status?
- Investigating associations between family stressors and Year 3 education outcomes

Use of Early Childhood Education and Care services

- How the use of early childhood services is reflected by social, economic and demographic factors
- What is the difference between children that do and do not repeat Kindergarten
- Which children are not attending Kindergarten
- What child and family factors are associated with not attending Maternal and Child Health services

Two other discrete pieces of research undertaken were the MCH data standards review and the School Funding Reform Analysis.

MCH Data Standards

The data that is currently collected by DET from the Maternal and Child Health service is being reviewed to enable a more informative outcomes based data collection to be established. This review aims to create an outcome framework and reporting framework that is closely aligned to a data dictionary for both child and family outcomes.

School Funding Reform Analysis

The School Funding Reform Unit has been investigating the case for funding low achievement in addition to family background characteristics. This research project adds to this body of knowledge by successfully constructing a model that shows the most powerful predictive variables for literacy and numeracy at Grade 3.

STAGE 3. ANALYSIS

ACTIVITIES

MEETINGS

Partnership and Design meetings were held to oversee and direct the partnership. In addition DET formed working groups specific to the research areas and the datasets. Meetings could then be held between MSPGH and DET that were specific to each piece of research. MSPGH-DET.

- Partnership (4)
- Design (5)
- Cohort (5)
- Data (5)
- ECEC (3)
- Kindergarten (3)
- MCH standards (8)
- Funding reform (5)

MSPGH

- MSPGH team (approximately monthly)
- MSPGH reporting (5)

COLLABORATION

Collaboration with other research teams undertaking education and child health research assisted in the shaping of the partnership projects and ensured research duplication did not occur.

Melbourne Graduate School of Education

- Collette Taylor

Melbourne Institute of Applied Economic and Social Research

- Chris Ryan

Melbourne Graduate School of Education

- Stephen Lamb

The Royal Children's Hospital Centre for Community Child Health

- Sharon Goldfeld

Research Partnership Group - University of Melbourne Catch-up



STAGE 1 & 2 UPDATES

PRESENTATIONS

The following are the main presentations by MSPGH.

- Oct 2012 Research Update to Policy and Performance Standing Committee
- Oct 2013 Research Update to Programs and Partnerships Divisional Meeting
- Oct 2014 Research Update to Early Childhood and School Education Group Leadership Meeting
- Child health, development, learning - Evidence-Policy-Evidence
- MCH service usage - Victorian Maternal and Child Health Service Usage
- Repeat Kinder – What are the factors associated with kinder repeat?
- Kinder non-participation - Factors associated with kindergarten non-participation
- MCH standards – Outcomes framework
- Indicators of Disadvantage
- SDQ, Family Stress and NAPLAN
- Funding Reform - What are the predictors of poor academic achievement at Grade 3?

Conference presentation

- De Silva-Sanigorski, A., Cleary, J., Kremer, P., Hamond, J., Waters, E., & Nolan, T. Building a linked data platform to drive policy and evaluation in early childhood health and education in Victoria. Paper presented at International Data Linkage Conference, Perth, May 2-4, 2012.

PRESENTATION SLIDE PACKS

A number of presentations were compiled into presentation slide packs for use by DET.

For example:

- Child and family characteristics of non-attendees of Maternal and Child Health (MCH) Service consultations

Research Summary sheets were the primary product requested by DET. The Summary sheet format was 1 to 4 pages with simplified language, a glossary for technical terms and key points highlighted.

- MSPGH-DET Partnership Technical Report
- Child health prevalence and trends
- What indicators of disadvantage predict emotional and behavioural problems for children in their first year at school?
- What is the impact of emotional and behavioural difficulties at school entry on educational outcomes at Grade 3? How do these impacts vary by socioeconomic status?
- The impact of family stressors on children's educational outcomes – SEHQ 2010-NAPLAN 2013
- Characteristics of children who did not attend kindergarten the year prior to commencing school: Findings from SEHQ 2013
- Child and family characteristics of non-attendees of Maternal and Child Health (MCH) Service consultations
- What are the strongest predictors of poor academic achievement at Grade 3?



OUTPUTS

REPORTS

Over the length of the partnership a number of reports were provided to DET.

- Quarterly reports (2014/15 only)
- MCH Standards Outcomes Framework
- MCH Standards Reporting Framework
- MCH Standards Report with Recommendations
- School Funding Reform
- VicGen - participant use of Child Care Centres and Family Day Care Services
- VicGen - participant use of services and barriers faced

ACADEMIC PAPERS

SDQ norms

Kremer P, de Silva A, Cleary J, Santoro G, Weston K, Steele E, Waters E. Normative data for the Strengths and Difficulties Questionnaire for young children in Australia. Accepted by Journal of Paediatrics and Child Health, 6 March 2015.

Indicators of Disadvantage

Steele E, Wong E, Karahalio A, Johnson S, Kremer P, de Silva A, Davis E, Nolan T, Water E. The influence of social disadvantage on children's emotional and behavioural difficulties at age 4-7 years. Under review (as at 23 March 2015), Journal of Pediatrics.

Repeat Kinder

Wong E, Steele E, Johnson S, Proimos J, Batterham A, Nolan T, Waters E. Socioeconomic and health factors associated with kindergarten retention in Australian children. Under review (as at 23 March 2015), Australian Journal of Early Childhood.

SDQ – NAPLAN

Steele E, Wong E, Johnson S, Davis E, Weston K, Gabriel S, Nolan T, Waters E. Does socioeconomic status moderate the association between social and emotional difficulties at Prep and academic achievement at Grade 3? Under review (as at 23 March 2015), Department of Education and Training.

OTHER PRODUCTS

A variety of other products and outputs were produced by MSPGH including the following:

Master of Public Health research project

- Does utilization of specialist health services in early childhood affect academic performance of Victorian children? (Esther Michelle Nasuuna)

OUTPUTS

- MPH research project – Investigating factors associated with speech and language pathology service utilization by Victorian children (Syeda Mah-E-Muneer)

MCH Standards Data Dictionary

School Transition Questionnaire for VicGen cohort

Linking research cohorts to government data - Ethics approval and parental permission to link data from the VicGen cohort to government health and education datasets

Submission of suggested changes to SEHQ - November 2014

WORKING DOCUMENTS

Working documents were required at different stages of the partnership. These included:

MSPGH In-house data documents

1. Data management
2. Data privacy
3. Data dictionary

Authorship protocol

MSPGH project plans

Partnership model task mix

Communication strategy



COMMUNICATION AND CAPACITY BUILDING

All outputs, activities and collaboration aimed to increase the potential for knowledge translation and capacity building within the partnership. In addition the following steps were undertaken to specifically increase knowledge translation and exchange across the Partnership and beyond.

Staff co-location

MSPGH staff sitting at DET (Peter Kremer, Evelyn Wong). The long term relocation of Peter Kremer to DET had broad benefits including fostering a better mutual understanding and a better awareness of working context, limitations and challenges.

Tailored capacity building

Requests for knowledge brokerage specifically in data analysis (Emily Steele, Evelyn Wong, Jamie Jacobs)

Joint presentations and manuscript preparation

Website - MSPGH and DET

Inclusion of findings in Government reports

Visiting expert

Oct 2013

Audrey Brown

Audrey Brown has been the Chief Statistician at the Department for Children, Schools and Families (DCSF) since 1996 with overall responsibility for providing analysis of data about schools. She was a council member of the Royal Statistical Society from 2004 to 2008. Audrey was awarded the Commander of the Order of the British Empire (CBE) in 2007.

Presentation - Analyses from the Department for Education's National Pupil Database





ADDITIONAL RESEARCH

The Australian Study of Child Health in Same-Sex Families (ACHESS)

ACHESS is the first study in Australia to consider the health and wellbeing of children with same-sex attracted parents. The study aims to capture the physical, mental and social wellbeing of Australian children with at least one same-sex attracted parent, and to explore how these children are affected by experiences of stigma and discrimination.

Findings showed that Australian children with same-sex attracted parents' score higher than population samples on a number of parent-reported measures of child health. However, the study found that these children were affected by experiences of stigma which is related to poorer outcomes on some emotional and mental wellbeing measures. Through improved awareness of stigma these findings play an important role in health policy, improving child health outcomes.

Beyond Bushfires

The aim of this study is to determine patterns of changes in child health, behaviour and wellbeing at school entry following bushfires and to explore subsequent academic outcomes.

The findings from these analyses will contribute to new knowledge about the impact of a disaster on child health, behaviour, wellbeing and academic outcomes over time, and reflect the demands this places on schools in disaster-affected catchment areas.

Morbidity and wellbeing of children at school entry and trajectory to academic outcomes at Years 3, 5 and beyond.

The aim of this work will be to have a clear understanding of the impact of health conditions and concurrent morbidity, it's prevalence and burden, it's patterns across the state, and the impact on academic achievement at older age groups.

CHALLENGES

As with all long term partnerships a number of challenges were faced. These included:

- Data and document sourcing and retrieval
- Data preparation time – resource heavy with little visible return
- Limited knowledge transfer to enable an understanding of policy needs and opportunities
- Staff turnover with both organisations – resulting in loss of continuity and changes to research priorities
- Limited time and opportunity for reflection
- Timings for policy priorities and analysis not melding well

RECOMMENDATIONS AND FUTURE DIRECTION

The following four points touch on areas where it is recommended there is an increased focus of resources.

Data linkage

Collaboration on creating clear methods and systems.

Data documentation and cataloguing

Clear, accurate and up to date system of documentation for all government data.

Priority publications

Setting the agenda and maximising available data for research.

Research and Policy

Continue to build a two-way knowledge exchange and increase the emphasis on knowledge translation.

CONTACT DETAILS

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