

**School of Special
Educational Needs**
Medical & Mental Health



**Levelling the Impact of
Health Factors on
Education for Students with
Medical and Mental Health Needs
in Western Australia**

Caleb Jones



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Are young people with chronic illness left behind?

The advancement of medical research is sustaining life in ways that were not possible years ago. Novel treatments are improving the prognosis for many illnesses, making it possible to survive diseases once considered fatal. With these advancements comes great responsibility to ensure quality of life for those living with chronic illness.

Irwin, K. & Elam, M. (2011)

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Why Education and Health need to collaborate

**There is no 'safe' threshold of absence.
Educators cannot do this alone: the
community needs to be included.**

Hancock, KJ et al. (2013)
Telethon Kids Institute Research

**Collaborative practices are now well
documented as increasing effectiveness...**

Miller & Ahmad (2000)

everyday counts



Photo courtesy of the Western Australian Newspapers



2023 We've
come a long way

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**WESTERN
AUSTRALIA**





100

Teaching &
Support Staff

400

Students
Weekly

6000

Students
Annually

60+

Liaison and Teaching Programs

40+

Settings Statewide



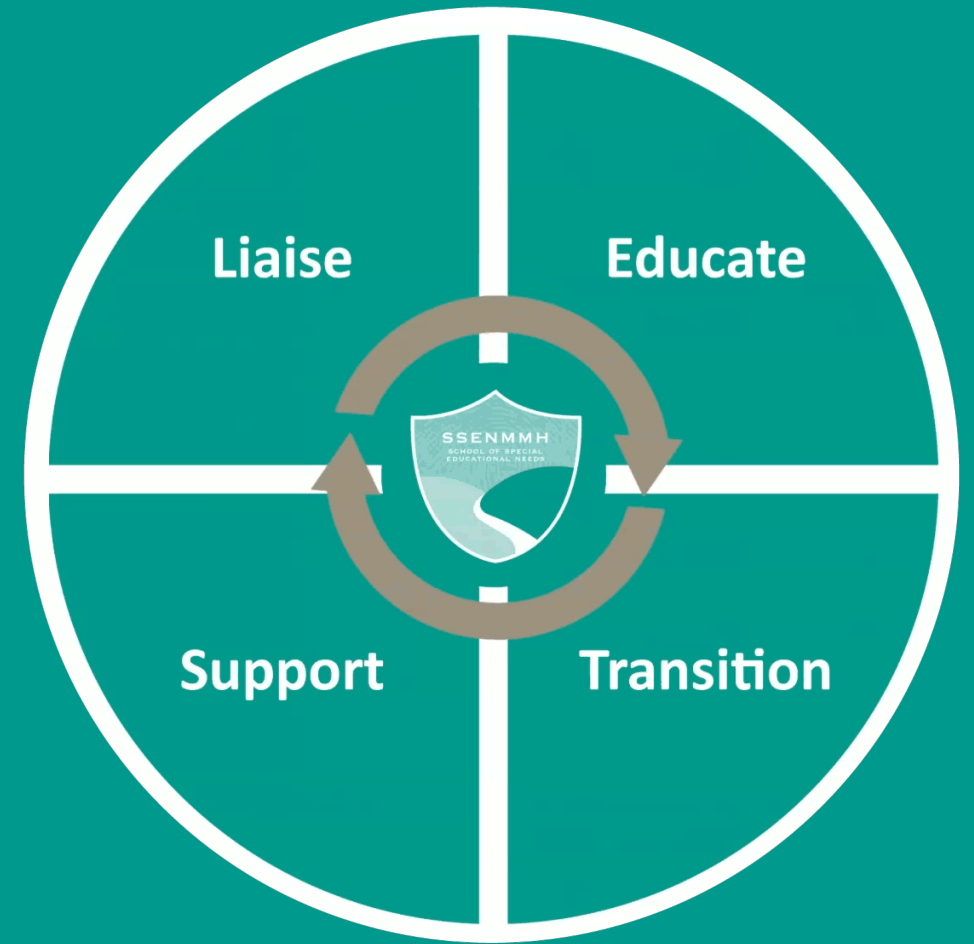
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Danjoo, Kaartdijin, Moorditj

Connect, Learn and Thrive

Provide educational services to students whose medical or mental health presents difficulties in accessing their enrolled school program, and facilitates their entry or return to a program that best meets their ongoing needs.



Our Model - LETS

February 2023 Memorandum of Understanding Between:



Government of **Western Australia**
Department of **Health**



Department of
Education

Parent/Childcare Provider
55 Victoria Avenue
Perth Western Australia 6005
Learning Style Network WA 6005
Phone: 9452 5343 Fax: 081 6439 2424
szenmmh.wa.edu.au

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CONSENT FOR INFORMATION EXCHANGE


The role of Department of Education, School of Special Educational Needs, Medical and Mental Health (SSEN:MMH) teachers attached to Department of Health teams, is to provide support for your child's educational and/or school transition needs. Your consent is sought to contact your child's school and/or associated Education Offices or Student Services Team for relevant information.

This information will be used and shared with the health team and other appropriate agencies as necessary to assess, support and enhance your child's educational outcomes and will include sharing digital work records and samples, which may contain photos. The ongoing exchange of information will continue while your child is being supported by SSEN:MMH.

Health teams, in conjunction with SSEN:MMH, occasionally utilise information obtained from schools for the purposes of monitoring and evaluating the effectiveness of the programs we offer to your child and others. All data used will be de-identified. If you would like further information or have any concerns then please telephone 6456 0383. If you should choose to withdraw your consent then please advise us in writing.

Thank you for your support.

Yours sincerely

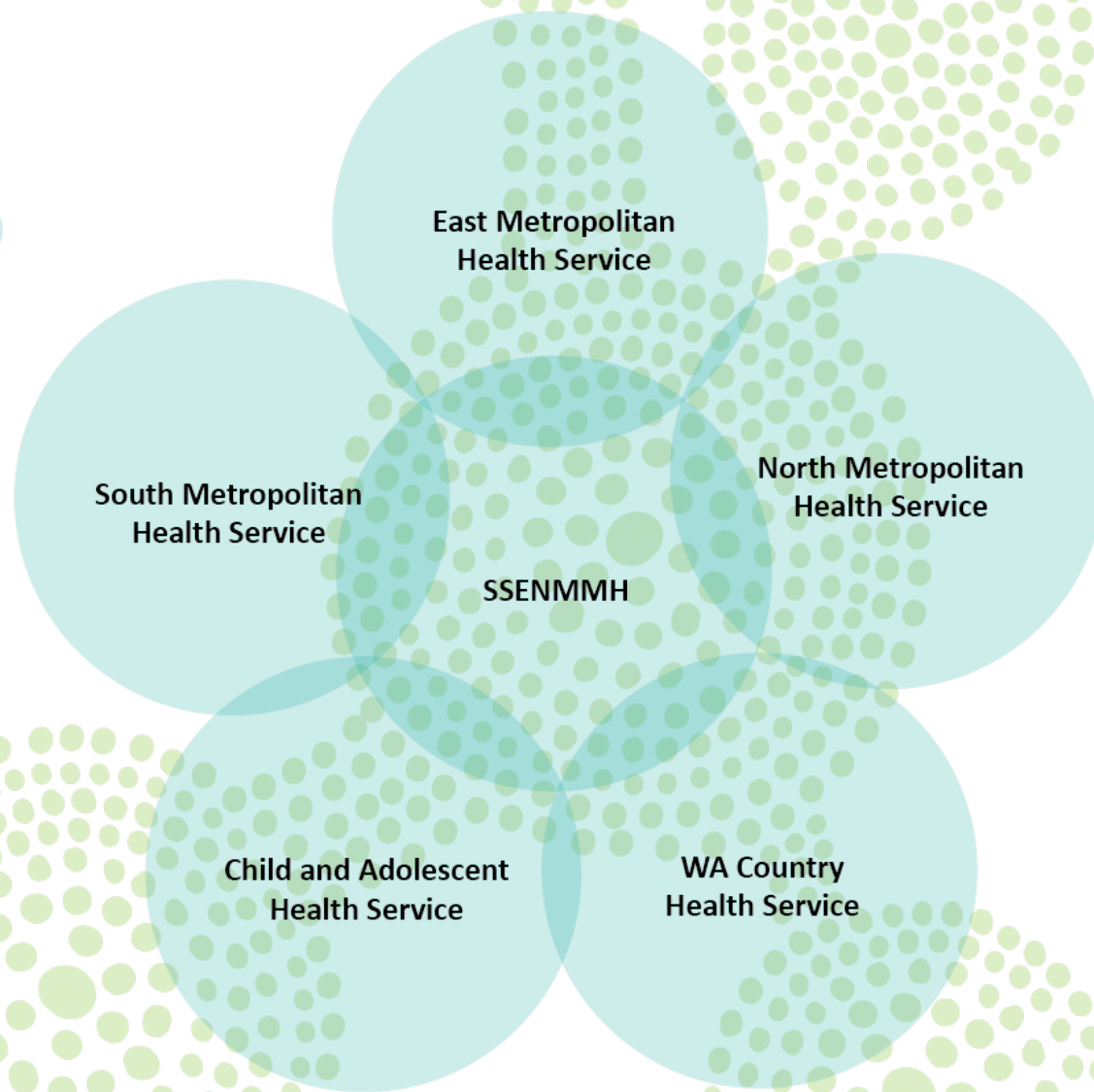

CALEB JONES
Principal

Date of Birth: _____

Student Name: _____

Parent / Legal Guardian: _____

Address: _____



A Study of

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- Hospital schools play a critical role
- Large body of evidence
- Mostly qualitative

Does a hospital
school make a
difference?

the answer is
not simple...

Hypothesis

The negative association between high absence and lower outcomes will be reduced among students who receive more SSEN:MMH support.

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Data Linkage

2008-2016

SSEN:MMH:

- All 28,697 students receiving support
- Enrolling school and caregiver details
- Program (e.g. hospital, day program, outpatient clinic)
- Teaching and Liaison hours
- Access days
- School sector – public or non-government
- Disability

Department of Education:

- All government students
- Enrolment and caregiver details
- Absences
- Teacher judgements - attitude, behaviour and effort (ABE)
- Grades
- NAPLAN scores (National assessment of literacy and numeracy in yr3, 5, 7, 9)

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SSEN:MMH Data

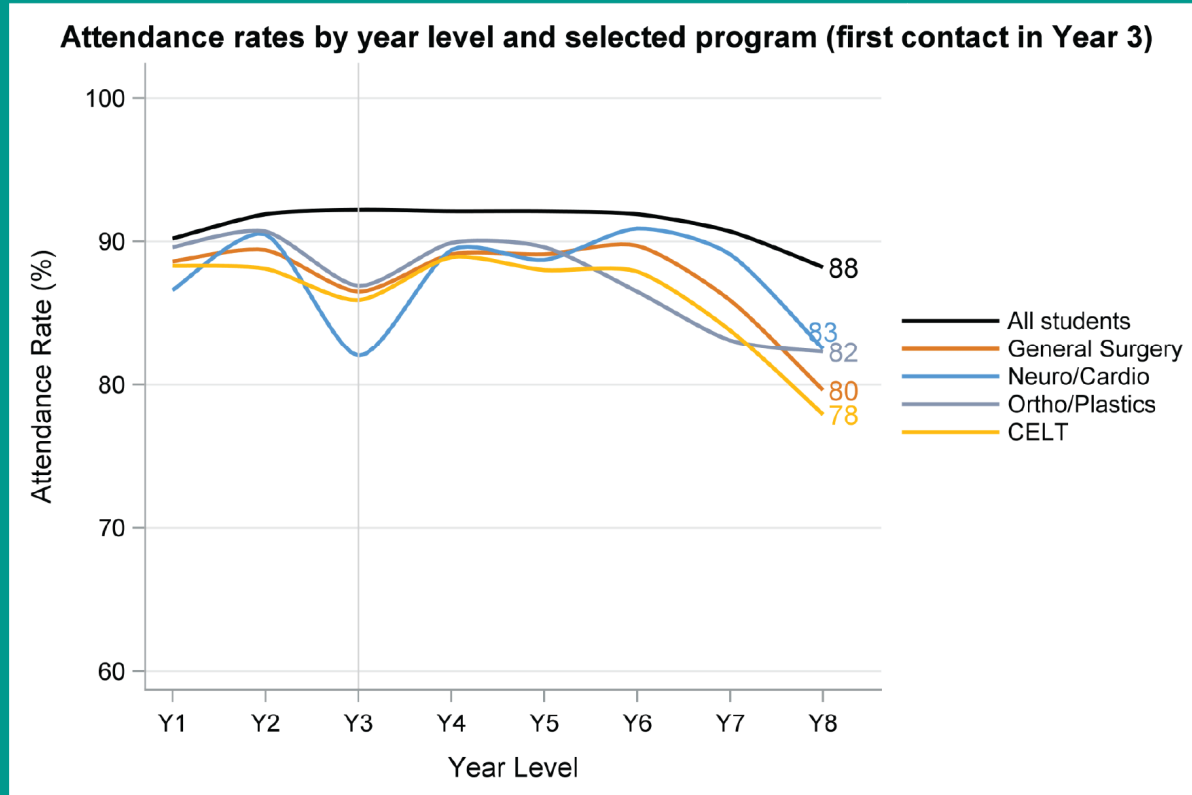
Promising size data set:

- 8 years of longitudinal data tracks before, during and after support.
- Data diminishes:
 - 30% attend non-government schools, no linkage possible.
 - NAPLAN only certain year groups.
 - Diverse range of variables to control.

How do you
create a
**randomised
control group -
ethically.**

Phase 1 of study

positive findings



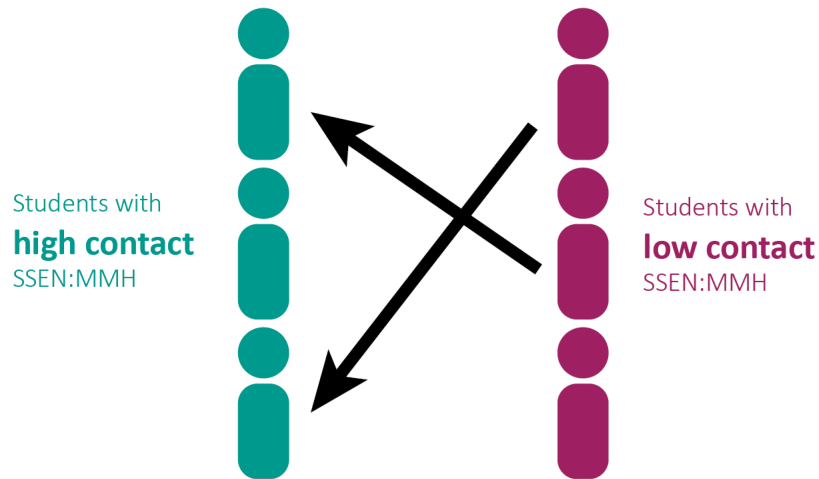
Phase 2 of study

Propensity score matching

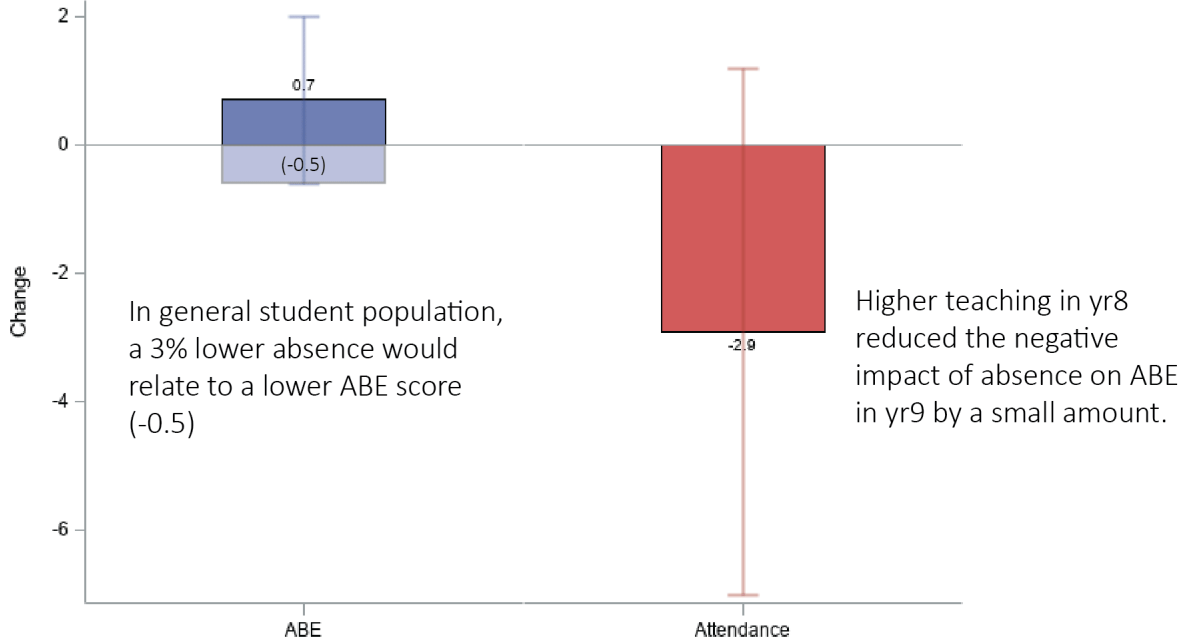
Creates a score for each students and then 'matches' students based on scores'

Creates a 'treatment' group (high SSEN:MMH) and 'control' group (low SSEN:MMH support).

Now we can compare knowing the only difference is the level of SSEN:MMH support

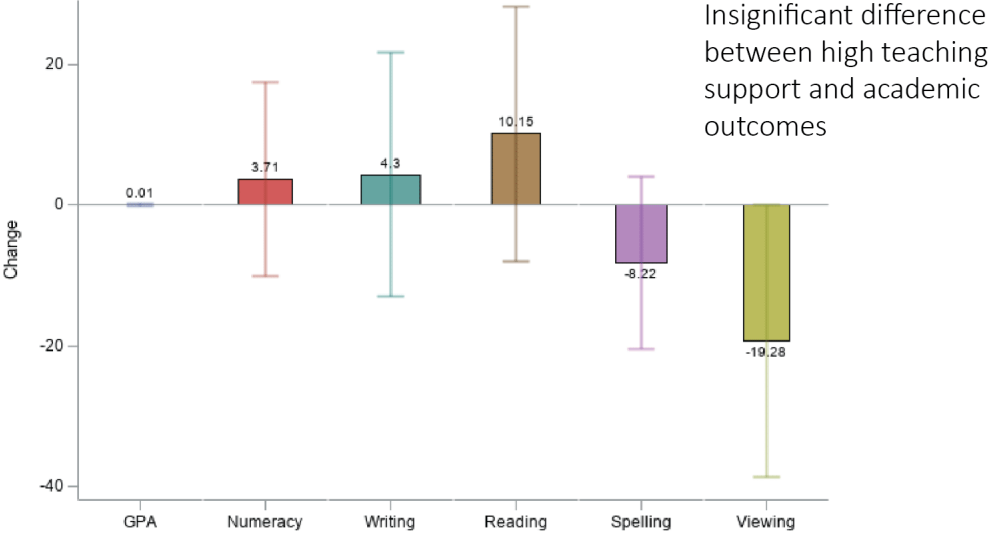


Teaching: ABE and Attendance outcomes



NB: ABE scores ranged from 8-32, attendance rates ranged from 0-100.

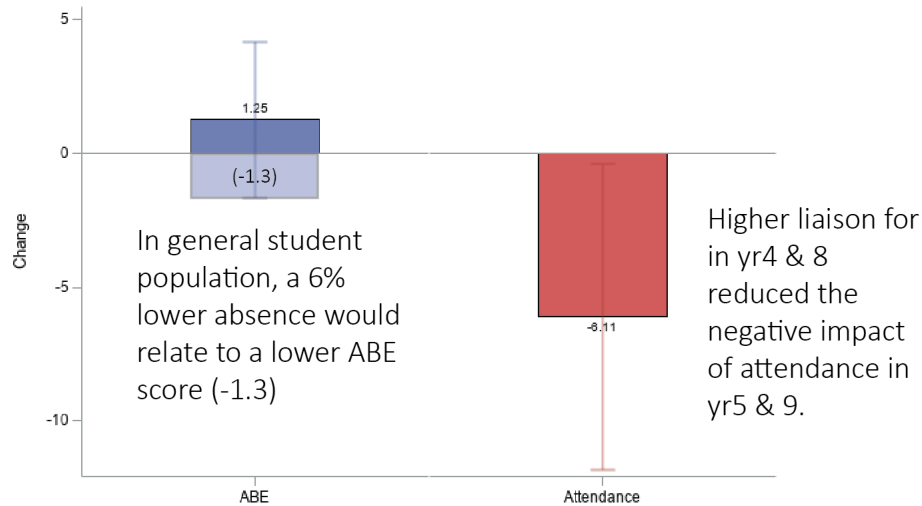
Teaching: Academic outcomes



NB: GPA scores ranged from 1-5.

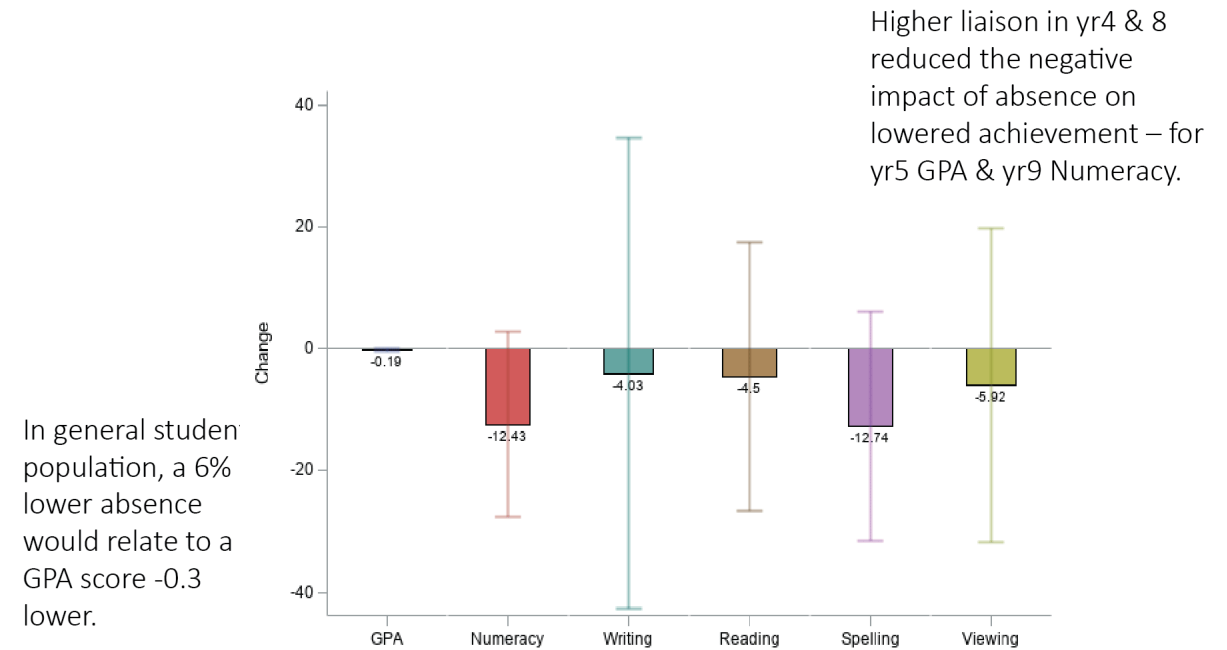


Liaison: ABE and Attendance outcomes



NB: ABE scores ranged from 8-32, ABE social aptitude ranged from 1-4, ABE school engagement ranged from 2-8, attendance rates ranged from 0-100.

Liaison: Academic outcomes



NB: GPA scores ranged from 1-5.

70%

Attendance

4 Years

3 Days Fortnight
3 Weeks
12 Weeks

80%

Attendance

2.5 Years

2 Days Fortnight
2 Week
8 Weeks

90%

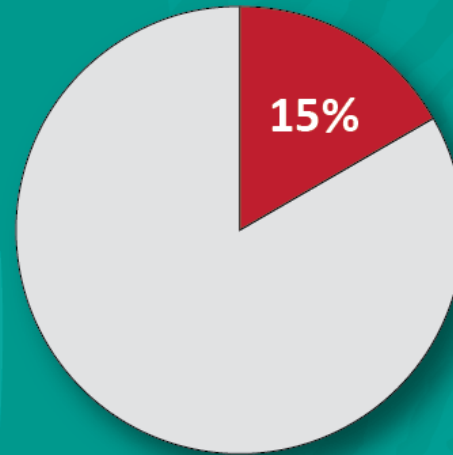
Attendance

1.25 Years

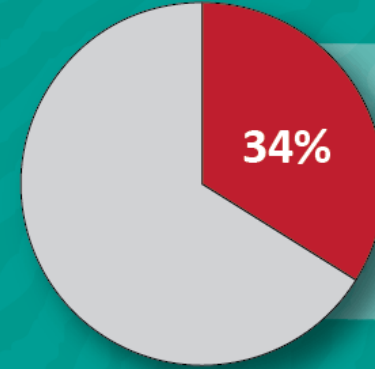
1 Day Fortnight
1 Week
4 Weeks

Years over 13 Year Period

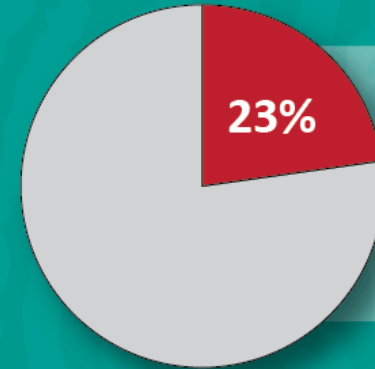
**15 +
sick days**



WA government
secondary students
in 2016.



15 sick days
=
D or E grade
in English



Less than 5
=
D or E grade
in English

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What does the study tell us?

Promising size data set:

Finding no difference is a good thing!

- Even with matching to create a control, more support had similar outcomes (not statistically different)
- Expect worse outcomes compared to impact of absence on general population

No significant difference indicates some levelling of the impacts.

Liaison support may have a more enduring impact:

- on absence, academic, attitude and behaviour outcomes
- on more than academics (communication, PL, connection and engagement).

Can a few days of teaching address many months of academic absence?

- Prioritise time invest in students who need it most.

Hospital schools can not address all absence.

Enrolling school influence can not be undervalued.



Limits to the Study

The data available

- Data collected is not designed to predict outcomes of study
- Data collection focusses on inputs, rather than outputs

Detecting any difference is difficult

- Measuring impact over a 3 year period
- Hospital school students are a highly variable group
- Unable to account for severity / comorbidities = large standard deviations

Pre-existing challenges in relationships and educational intervention

- School history effects outcome and need control
- More liaison hours necessary just to respond to pre-existing challenges - enrolled school and family

There is a limit to what quantitative data alone can evidence about hospital schools.



Response to the Study

Prioritise support

- Vulnerable, longer absence, chronic health

Collect output data

- Transition - return to school
- Liaison outcomes - communication, PL, school attitude (how to aggregate)

Further research with TKI

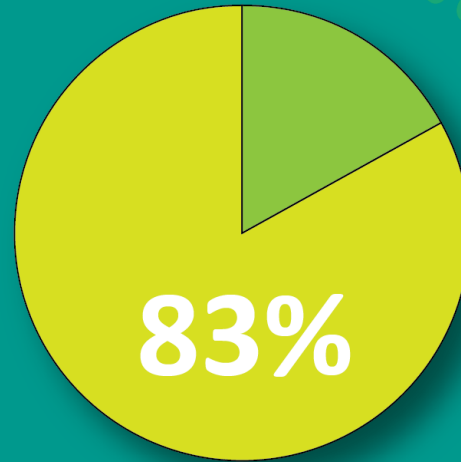
- Timely pre and post measures
- 8 more years, larger sample (52,600), increase validity
- Analyse chronic health cohorts
- Post school cohort – counterfactual analysis
- A control group outside SSEN:MMH (Australian longitudinal study of non-hospitalised students)
- Consider pooling across jurisdictions

Since the study Transition Data

Can now collect return to school attendance 30 days post support

83% successfully supported to return to school in Term 1 2023:

30% Child Protection
100% Epilepsy, Continence,
Diabetes and MH Kimberley



1980 Students Supported

 Returned to School

Since the study Cohort Transition Data

2020 COVID

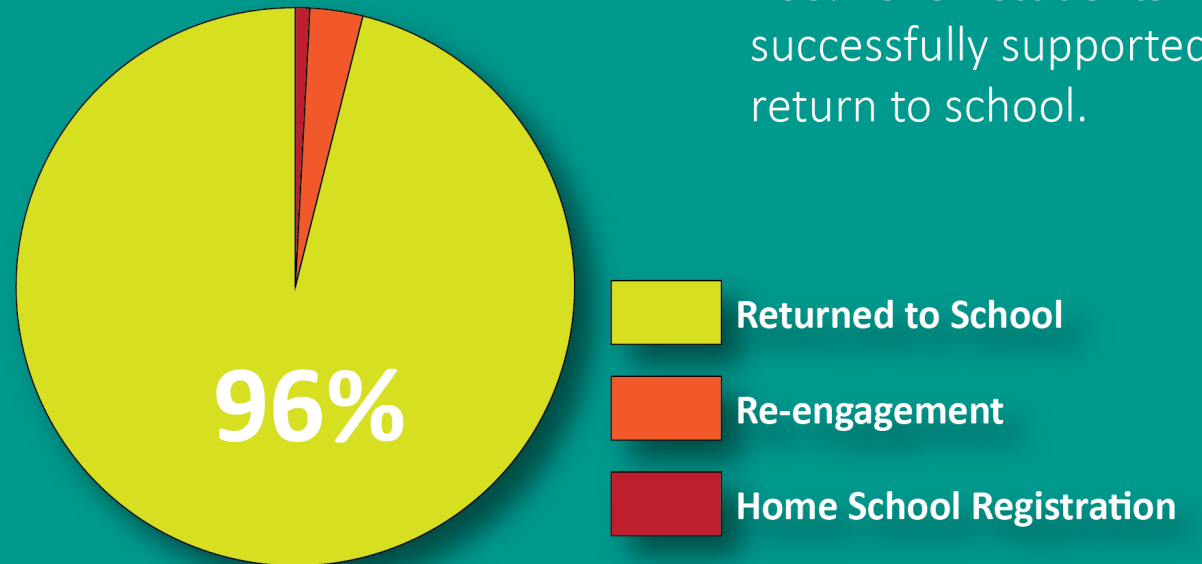
Medical Referrals

96% of 680 students were successfully supported to return to school.

2022 COVID

Medical Referrals

100% of 92 students were successfully supported to return to school.



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Caleb Jones

Principal

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Thank you!

SSEN:MMH
Cultural Case Study
Parallel Session - Thurs
May 11th 4.10pm