Resilient networks connecting people and places

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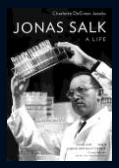
Yours is the stuff of envy.....

- Clinicians in hospitals are always aiming to save lives, but we do this case by case. You save lives at scale.
- Clinicians might do heroic things in the ambulance at the bottom of the cliff. You stop people from falling off the cliff.
- The effects of a clinician's labour, even if it lasts a lifetime, is transient cf. the intergenerational reach of your ventures
- Can we join forces across our sectors and others to leave a legacy we could be proud of?



The most important question we must ask ourselves is,

'Are we being good ancestors?'

2

We don't just design transport systems. We design health outcomes.

In NZ, road transport linked to

- > 2,200 premature deaths /year due to air pollution
- >9,200 hospitalisations for respiratory and cardiac diseases
- >13,000 cases of childhood asthma attributed to vehicle emissions
- New Zealanders spend ~81% travel time in motor vehicles vs 10% walking, 5% public transport and 2% cycling
- >50% of adults not meeting physical activity guide
- Physical inactivity contributes to 9% of all deaths

Data from MoH, MoT, NZTA, EHINZ

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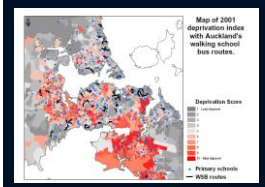
Why treat people only to send them back to the conditions that made them sick in the first place?
Sir Michael Marmot



Collins and Kearns, 2002

Traffic calming measures more common in Auckland Central schools compared with South Auckland where risks of child pedestrian injuries are higher, increasing current inequities

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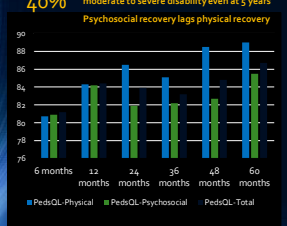
RESTORE Project: 199 children with major trauma in Victoria, Australia, followed for 5 years
S Ameratunga, B Gabbe, colleagues at Monash University

40% moderate to severe disability even at 5 years

Psychosocial recovery lags physical recovery



The societal cost of unintentional childhood injuries in Aotearoa
Michael Young, Tom Love, Mahina Wilson, Nicola Atatoa, Michael Reyland

2021

Tamariki Māori and Pacific children (cf. other NZ children)
- More likely to be hospitalised for injury
- less likely to have ACC claims
- their families have greater losses in discretionary income

Long-term outcomes of Traumatic Brain Injury in Christchurch Birth Cohort study
A McKinlay and colleagues
Australian Psychologist 49(6):p 323-327, Dec 2014

At 25 years follow-up, children hospitalised for a mild head injury significantly more likely to have conduct/behavioural problems, substance use problems, psychiatric diagnoses, be arrested for violence and other offenses.

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Prevalence and predictors of post-traumatic stress symptoms in 2200 hospitalised and non-hospitalised injured New Zealanders

Shanthi Ameratunga[1,2], Ari Samaranayaka[3], Emma H Wyeth[4], Gabrielle Davie[5], Rebbecca Lilley[3], Suzanne Wilson[3], Jesse Kokaua[6] and Sarah Derrett[4,5]

Australian & New Zealand Journal of Psychiatry 2021, Vol. 56(10) 1244–1256
DOI: 10.1177/0004867421 1067697

Of 2200 ACC claimants participating in this study, PTSD symptoms noted among 17% of hospitalised and 12% of non-hospitalised injury survivors

Systematic Reviews of the literature

Post-traumatic stress associated with huge costs from lost productivity
- Lower likelihood of returning to work
- Poorer performance at work
- Absenteeism
- Delayed recovery

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We won't be able to treat our way out of this crisis

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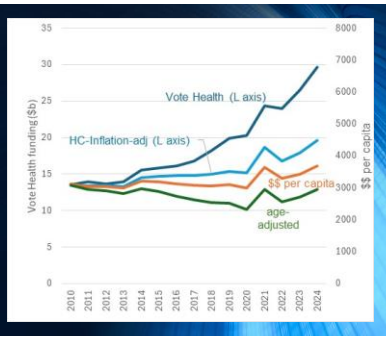
Vote Health Funding

In the past 14 years,
Headline figure looks high but when adjusted for inflation and population growth, health funding from the public purse has been static or declining

Dr Gary Jackson
Health NZ



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What is driving the healthcare service demand growth?
(Modelling led by Dr Gary Jackson, Health NZ)

- Increased survival – rising life expectancy, but more people living with comorbidities
- People with comorbidities more likely to present to primary care and to be admitted
- People with comorbidities more complex, more care needed, higher case weights = cost more
- Increase in frail elderly, complex patients
- Increase in diabetes/obesity-complicated care
- Changes in thresholds – technology/technique/medication changes allowing more to be treated
- Inequity – concentrations of ill-health

We have to aim to forestall / prevent / divert these pressures by considering something other than hospital admission!

Modelling assumption: ~0.6% pa volume or 1.2% pa case weights need to be added per year on top of demographic projection to estimate demand pressure.

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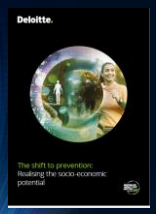

- Prevention is an economic and social imperative that delivers major returns across all life stages. Earlier interventions yield higher returns.
- Short-term funding cycles and narrow appraisals focus on immediate NHS costs and a limited period of life, overlooking the lifelong and cross-sector benefits of prevention – such as increased productivity, reduced social care costs, and improved wellbeing. Until funding and appraisal frameworks capture these wider, long-term gains, prevention will remain undervalued and underfunded.
- To achieve sustainable impact, funding should shift from siloed, short-term budgets to collaborative, cross-sector investment that drives long-term health and economic resilience.

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Inclusive Streets

How do transport systems influence opportunities for physical activity, social participation and wellbeing of disabled people and older residents in Tāmaki Makaurau?

Anneka Anderson, Bridget Doran, Mythily Meher, Malakai Ofanoa, Roshini Peiris-John, Julie Spray, Janine Wiles, Esther Willing, Karen Witten, Whaea Dolly Paul, Whaea Julie Wade, Shanthi Ameratunga (PI)

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Historical infrastructural decisions have ongoing, intergenerational, and inequitable consequences for wellbeing.

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"I'd like to make a lot of journeys. But I depend on other people because there's no buses. No way out.

Some people, not like me you know. They walk up to, because they're capable of walking up to the bridge. To catch a bus to go all over. You know, wherever the pension card takes you. And if you're not in like, if you're, not capable of doing that, then, it's look outside the window. Yeah see the big world then. Hello, here I am!"

Whaea Marama

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- Being able to access the Glen Innes community makes a real difference to wellbeing.
- This group was both the youngest and the least healthy of the four sites.
- Many participants expressed a love and care for Glen Innes, its shops, community, and environment.

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"Even if I go in the op shop makes my spirit already lift up, distract from the pain. So you are doing things that distracts you from your suffering, and if you are mobile, it is easier, it is easier than reading books. That is why I like to go out, get more distraction, distraction from… it is not suffering, but it is."

Mario

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Mind the intersections! People, places, plans and practices

- When we design infrastructure and service designs, what we privilege for some may have devastating consequences for others, powerfully impacting physical and social wellbeing.
- Many axes of marginalisation (older age, disability, low income, minoritised ethnicity) intersect and intensify differences.
- There are interdependencies, eg, decarbonisation, healthy futures, resilient communities
- Our monitoring programs, accountability measures, consultation processes, and professional practices can produce, reproduce, and amplify these inequities.

Who are we consulting with?
(Who complains? Who doesn't?)
How do we use an equity lens to address policy and practice gaps?
What does Te Tiriti mean in our interactions?

How do we measure trips not made?

Almost all these challenges also confront practices of health professionals every day!

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"The strategic omissions in building a model [theory] almost always involve throwing away some real information… and yet once you have a model it is almost impossible to avoid seeing the world in terms of that model – which means focusing on the forces and effects of your model can represent and ignoring or giving short shrift to those it cannot. The result is that the very act of modelling has the effect of destroying knowledge as well as creating it. A successful model enhances our vision but it also creates blindspots."

Paul Krugman

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