Forming advice on gaming of health targets and mitigations

JW Jo Williams [redacted]
To Richard Hamblin

Reply Reply All Forward

Mon 29/04/2024 3:40 pm

You replied to this message on 29/04/2024 4:29 pm.

Kia ora Richard

We are working on a series of briefings for the Minister in anticipation of the health targets programme commencing on 1 July 2024. We have split up the work of drafting the next briefings with Health NZ. They will be drafting advice on supporting and balancing measures, while we are doing a piece for the Minister on gaming.

I would be keen to get your views on gaming and the risk of adverse consequences for the 5 health targets, including what should be monitored and how risks might be mitigated. I know you have done a lot of work in this area! As a starter, I am thinking about gaming as: 'activity aimed at hitting the target which cannot be justified in terms of improving workflow or patient outcomes'. Do you have any thoughts about that as a working definition?

Below is my starting outline for the briefing. Any thoughts you might have on any of these topics, I would be grateful to receive!

Gaming

- Understanding of behavioural incentives for gaming (likely ones in our health system)
- Likely areas for gaming, covering each of the targets
- General mitigations (eg feedback loops, disaggregated reporting), and target specific as appropriate
- What we expect from Health NZ (internal processes to check for gaming & responses, business rules)

Assurance

- Suggestions for where and when there should be an independent view (eg end of year audit, investigation of patterns of performance, role for HQSC)
- Quality of data and reporting process

Monitoring for adverse consequences

- The role of balancing and supporting measures and system monitoring (& what the Ministry will be looking for)
- Process HNZ is undertaking to establish these measures

If you have any research you think would be helpful for me to look at, or otherwise any starting ideas, please do let me know. I have also made contact with Health NZ and Te Aho o Te Kahu. I will send an invite out this week to arrange at least one meeting to discuss this together.

Please feel free to call me to discuss if that would be easier.

Ngā mihi nui

Jo Williams
Principal Advisor

RE: Forming advice on gaming of health targets and mitigations

Richard Hamblin
To 'Jo Williams'

Reply Reply All Forward

Mon 29/04/2024 4:30 pm

On the unintended consequences of publishing performance data in the public sector.pdf
2 MB

Rough estimate of ED pathway (very simplified.pptx
62 KB

Hi Jo

Yeah sure

Happy to take you through the research on this – best place to start is Peter Smith's seminal work from (eeek) 30 years ago (attached) – the point being that the unintended consequences are wider than gaming (although this is a real and destructive issue)

Of the five announced targets, three have obvious risks of gaming (the two elective waits and ED waiting times) We know from Tenbensel and from our own analysis that this happened in EDs last time. The real worry on electives is that with explicit rationing in place (which I believe remains the case) the score to "get on the list" is de facto raised. Even without this any WT time target that doesn't run referral to treatment risks the possibility of ox bow lakes (ref: Carol Propper some time in the mid 90s) between the measures points of the system. As a measure tightly coupled to its end goal imms is pretty sensible, I haven't had long enough to think about the cancer one to comment – but it has been of some value elsewhere (distributions inside the 31 days and access to "what?" are probably the detail in which the devil resides)

In terms of mitigation you have three major approaches to avoiding unintended consequences
1/ audit of data – often this can be done simply by looking at the distribution of results (discontinuity near target point demonstrates gaming) or use of balancing measures
2/ change of target measure or value (measure is more useful)
3/ a more comprehensive consideration of the system in which the target measure operates, what the influences are and thus the measures needed is probably of the most value – attached was one I knocked up around the ED target in conversation with DPMC a few months back – it may be of some use – the advantage of these is they give you a starting point about how you actually solve the problem rather than make the numbers look good…

Anyhow hope that's a reasonable starting point, very happy to talk further – I think your paper outline looks sensible and its an important paper I think

Best
R

RE: Measure sets including balancing measures for Health Targets 5th instalment Imms at 2yrs

Richard Hamblin
To 'Penny Andrew'

Reply Reply All Forward

Tue 23/07/2024 10:18 am

You forwarded this message on 23/07/2024 4:56 pm.

I have been through all of these measure sets, and have some general and specific comments.

General

Most of the measures are really contributory (i.e. measuring the operation of the system to hit the target) rather than balancing (i.e. checking for perverse unintended consequences) that's fine but I've suggested some balancing measures below where I think these might help

WRT to contributory measures I was slightly unsure where the milestone target levels and dates come from. Are these a/ based on modelling of the system operation in order to understand the required operation of different parts of the system in order to hit the target; b/ based on maintaining/ improving current position or c/ other. My only concern is if not a/ then how do you know the relationship between the contributory and headline measure well enough to set a target level? I guess in other words do you have to achieve all of these contributory level measures to hit the top one? If not why have the targets at this level?

Specific
ESPI 5: Potential balancing measures
1 Refused referrals (geographic variation, equity)
2 Distribution of time between FSA and decision to treat (would identify if a cohort of patients being "held" in an outpatient loop)
3 Median time waiting
4 90/5th percentile time waiting
5 ratio 90/5th percentile to median time waiting (3-5 derive from the theoretical work on waiting lists from King's Fund/ Audit Commission/David Speigelhalter about 25 years ago – still think this is the most convincing articulation of how elective rationing through waiting works.

ESPI 2: Potential balancing measures
1, 3, 4, 5 as above

Imms
I would recommend adding who is missing what i.e. % with all , % missing 1, % missing more, % missing all – logic is that this distinguishes between a child being slightly late for one versus the total anti-vax position – better describes the true nature of the position and progress and actions we need to take. With a register approach this should be possible.

FCT
The quality and pathways measures to some extent operate as balancing measures here – this make sense (with the milestone and date caveat above)

ED
These looked really good to me – you might want to consider something around a state of play either end of the acute journey (i.e. primary care and potentially ARC and community care) in order to inform interventions

Really happy to talk through – and on the safety paper

I will share these comments with Duncan Bliss