

**(In Progress) Working Paper**

**Estimates of Savings Possible if Commonwealth, State and Territory Health Systems were Rationalised into a Single National Health System (e.g. by Assigning Powers and Responsibilities for Health Care to the Commonwealth via a Constitutional Referendum)**

**OR**

**if the Commonwealth's Role in Health Reduces to one of Funding Only**

**Presentation**

by Mark Drummond

at the

**Australian Health Care Summit**

**Canberra, 19 August 2003**

**Journal Article** titled **‘Costing Constitutional Change: Estimating the costs of Five Variations on Australia’s Federal System’**

(Australian Journal of Public Administration, December 2002, pp. 43-56)

Sets out estimations of cost, relative to present political system, of government system reform options including:

- New States
  - Abolition of the States (i.e. integration of state, territory and federal governments and public sectors into a single national government and public sector, hence facilitating a national private sector, market etc.)
- 
- New States likely to cost \$billions per annum
  - Abolition of the States likely to save \$billions per annum

Data presented in published article was for total public sector, but underlying analysis was done to the level of the 14 standard Government Finance purpose areas, including health, education, public order and safety etc. (refer ABS Cat. 5512.0, government Finance Statistics, 1998-99 through 2001-02, following move to accrual accounting method)

So analysis enables estimations of cost, relative to present system, of health system reforms including:

- horizontal amalgamation/integration of state-territory health systems into a single nationwide state/territory level system, operating parallel to the Commonwealth system;
- horizontal and vertical amalgamation/integration of state, territory and Commonwealth health systems into a single national system

## **The Definitive (?) Solution ...**

Short of moving to a unified national government (by coalescing federal, state and territory governments), a single national health system could still be achieved through a Referendum seeking to add Health Care/Facilitation to the list of Commonwealth powers and responsibilities set out in Section 51 of the Commonwealth Constitution

... difficult for sure, but hardly impossible!

## **Something that can Definitely be Done**

And, short of adding Health Care to Section 51 of the Commonwealth Constitution, a single national health system could perhaps still be achieved by organising professional registration, education and training and consumer groups along national lines as per the National Health Reform Council (NHRC) which Professor John Dwyer referred to in his presentation this morning.

Getting a feel for the amount of  
waste in the present system

Numerical perspectives which suggest  
that \$1-2 billion or more can be saved  
in the public health sector alone

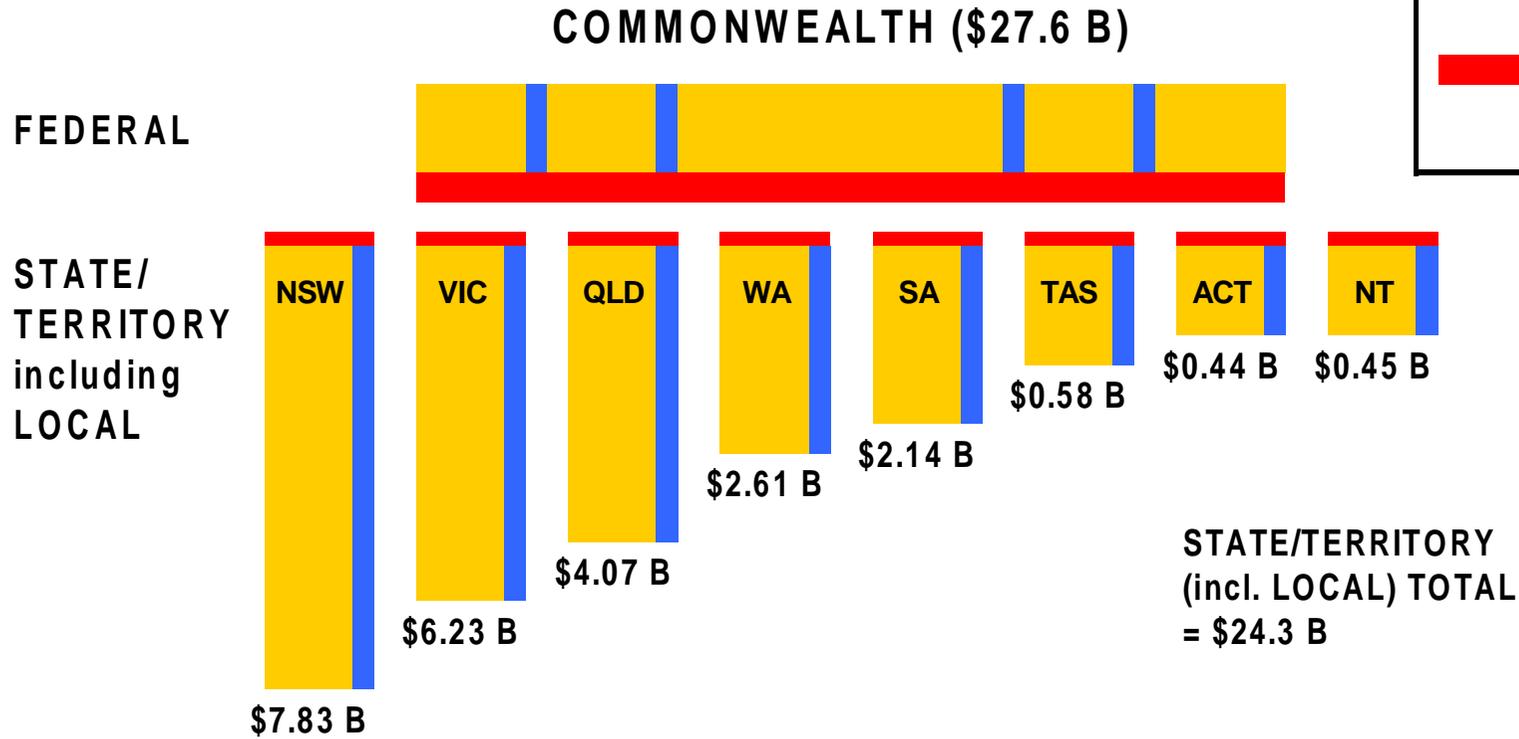
# THE PRESENT PUBLIC HEALTH SYSTEM (\$44.3 B total)

Figures shown are for 2001-02; source: ABS Cat. 5512.0, Tables 31 and 32, General Government Expenses by Purpose)

(Figures do not add up [i.e. \$24.3 B + \$27.6 B exceeds \$44.3 B] due to funding transfers/grants between levels of government)

**KEY**

- outcome facilitation
- horizontal waste (duplication, coordination)
- vertical waste (duplication, coordination)

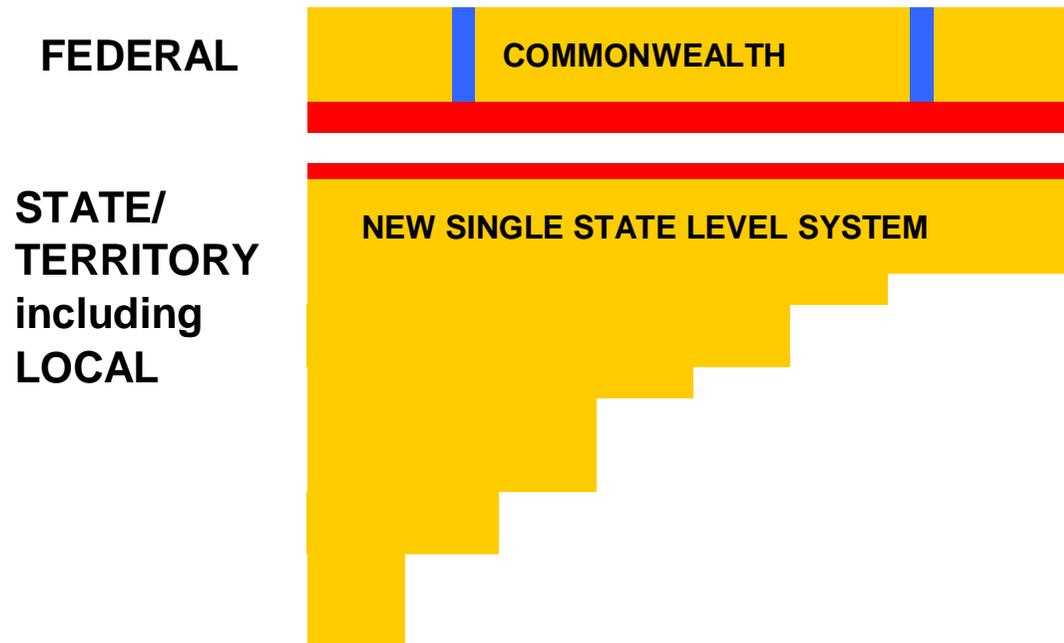
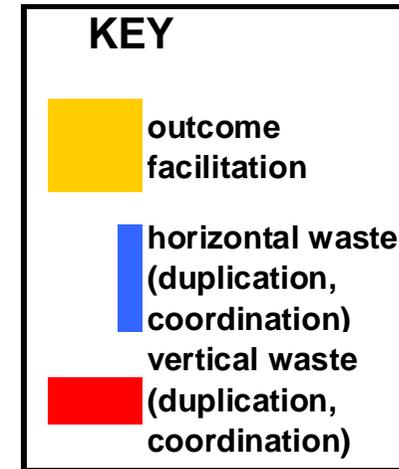


# DUAL NATIONAL MODEL (Fig. 1)

Following horizontal integration (and elimination of horizontal waste), leading to a single state/territory level system

## Estimated Savings: (relative to present system)

Total Public Sector:	~ \$10-20 billion per annum
Public and Private Sectors Combined:	~ \$15-30 billion per annum
Public Education Sector Only:	~ \$1-2 billion per annum
Public Health Sector Only:	~ \$1-2 billion per annum
Total Health Sector:	~ \$2 billion per annum

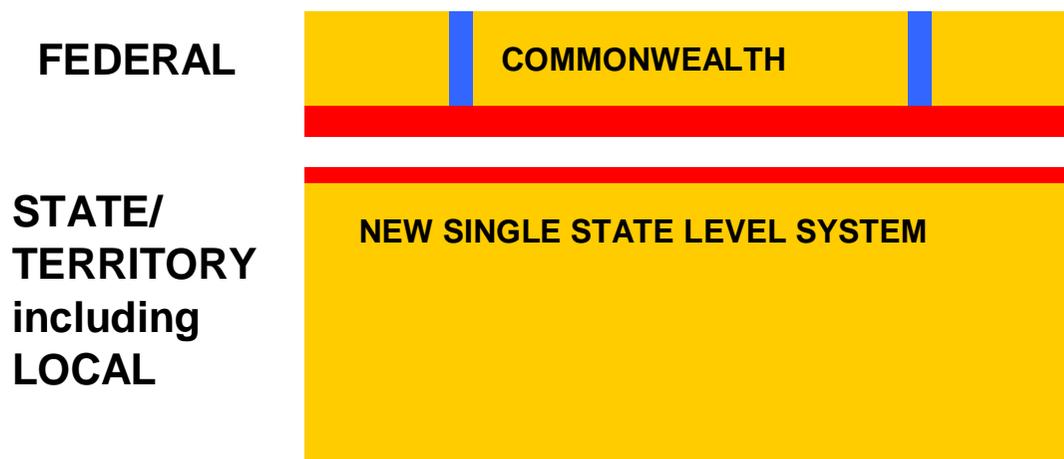
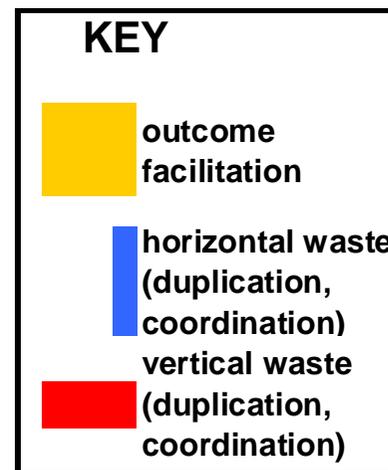


## DUAL NATIONAL MODEL (Fig. 2)

Following horizontal integration (and elimination of horizontal waste), leading to a single state/territory level system

### Estimated Savings: (relative to present system)

Total Public Sector:	~ \$10-20 billion per annum
Public and Private Sectors Combined:	~ \$15-30 billion per annum
Public Education Sector Only:	~ \$1-2 billion per annum
Public Health Sector Only:	~ \$1-2 billion per annum
Total Health Sector:	~ \$2 billion per annum

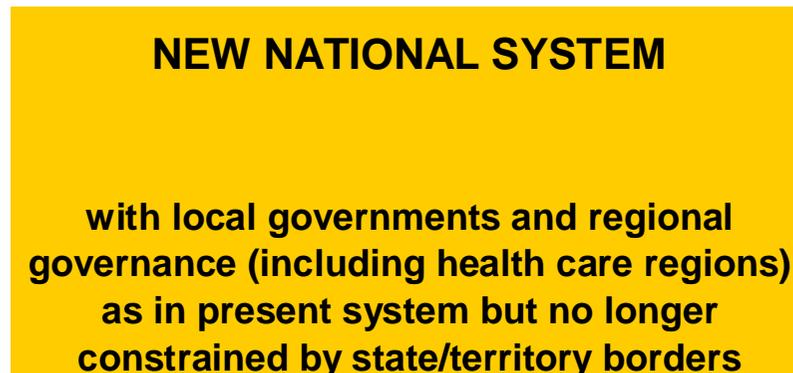
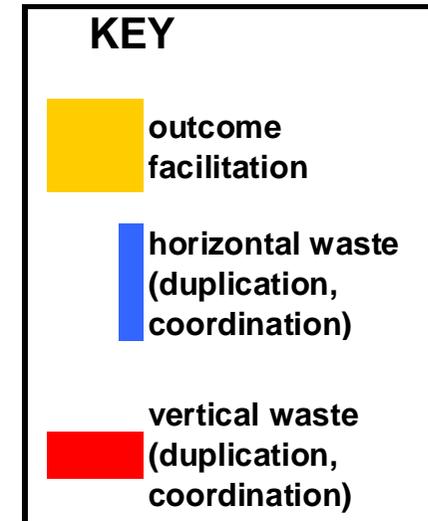


# NATIONAL-LOCAL MODEL

Following vertical integration, as well as horizontal integration, to a single national system

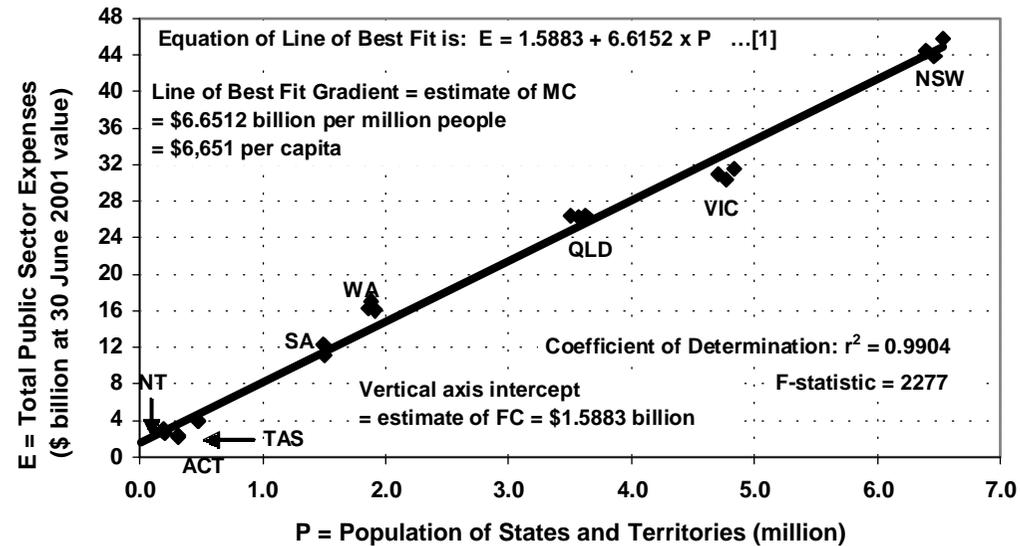
## Estimated Savings: (relative to present system)

Total Public Sector:	~ \$20-40 billion per annum
Public and Private Sectors Combined:	~ \$30-60 billion per annum
Public Education Sector Only:	~ \$2 billion per annum
Public Health Sector Only:	~ \$2-4 billion per annum
Total Health Sector:	~ \$3-4 billion per annum



## State and Territory Total Public Sector Expenses versus Population and Least Squares Line of Best Fit

(Figure 4, page 48, Australian Journal of Public Administration, Dec 2002)



Above leads to Horizontal Duplication Cost Savings estimate of  $7 \times \$1.5883 \text{ B} = \$11.12 \text{ B}$  per annum (for total public sector at the state/territory level)

Notes:

FC = fixed or overhead costs of state and territory public sectors

MC = marginal per capita costs of state and territory public sectors

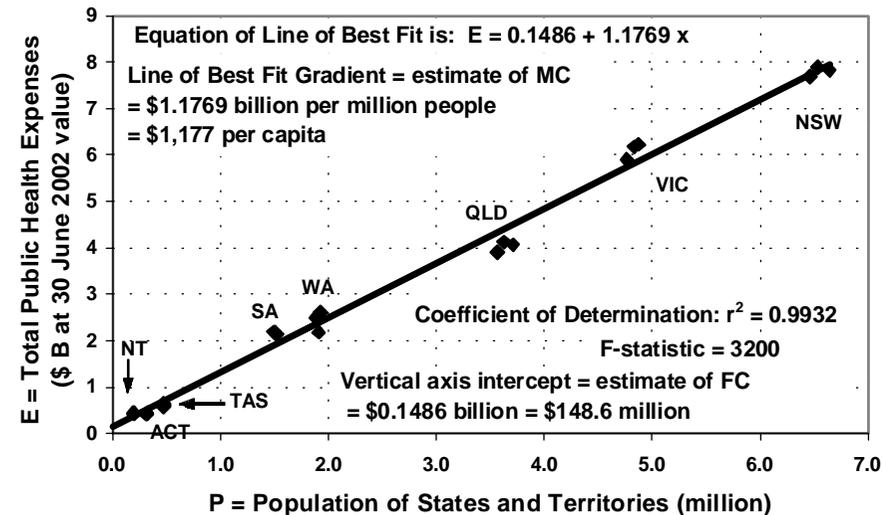
The coefficient of determination ( $r^2$ ) value of 0.9904 obtained shows that equation [1] fits and describe the state and territory public sector expenditure versus population relationship extremely well indeed. An  $r^2$  value of 1 (exactly) would indicate that the relationship was perfectly described by [1].

The F-statistic of 2277 indicates that the probability that the linear relationship here has arisen by chance is just  $1.04 \times 10^{-23}$ .

The 95% confidence interval of the \$11.12 billion figure is \$4.62 B to \$17.62 B.

## State and Territory Total Public Health Sector Expenses versus Population and Least Squares Line of Best Fit

(Similar to Figure 4, page 48, Australian Journal of Public Administration, Dec 2002)



**Above leads to Horizontal Duplication Cost Savings estimate of  $7 \times \$0.1486 \text{ B} = \$1.04 \text{ B}$  per annum (for total public health sector at the state/territory level)**

Notes:

FC = fixed or overhead costs of state and territory public health sectors

MC = marginal per capita costs of state and territory public health sectors

The coefficient of determination ( $r^2$ ) value of 0.9932 obtained shows that equation [1] fits and describe the state and territory public sector expenditure versus population relationship extremely well indeed. An  $r^2$  value of 1 (exactly) would indicate that the relationship was perfectly described by [1].

The F-statistic of 3200 indicates that the probability that the linear relationship here has arisen by chance is just  $2.54 \times 10^{-25}$ .

The 95% confidence interval of the \$1.04 billion figure is \$0.053 B to \$2.028 B.

Some two state (health sector) amalgamations that show the potential to save a lot of money (100s of \$millions):

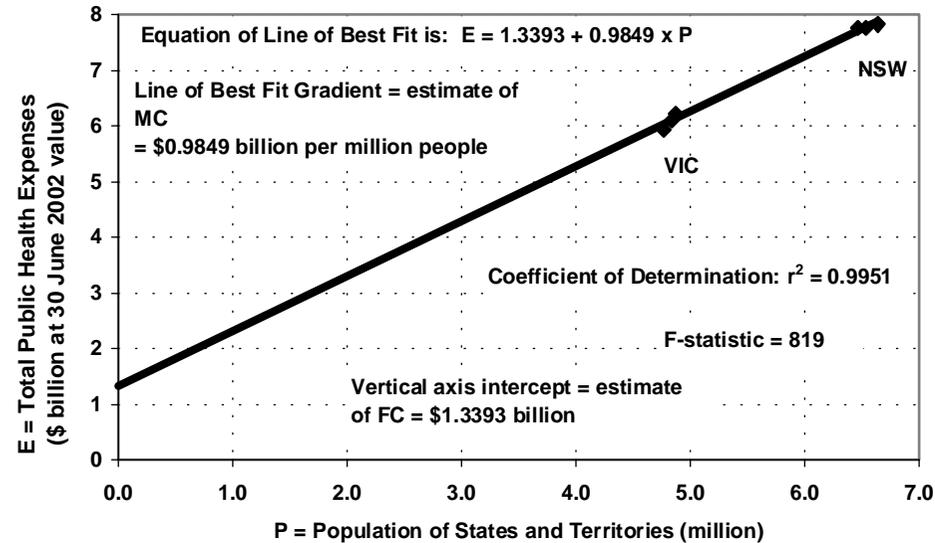
- **NSW-VIC public health sector amalgamation could save**  
~ \$1.3 B per annum
- **WA-SA public health sector amalgamation could save**  
~ \$1.2 B per annum
- **QLD-NT public health sector amalgamation could save**  
~ 0.23 B per annum

Figures suggest possible merit in gradual convergence to single national system via two at a time system integration/amalgamations

**If NSW and VIC amalgamated their public health sectors:**

...

**Total Public Health Sector Expenses versus Population and Least Squares Line of Best Fit – NSW and VIC Only**



**Above leads to the estimate that if the NSW and Victorian public health sectors amalgamated, Horizontal Duplication Cost Savings would be approximately  $1 \times \$1.3393 \text{ B} = \$1.3393 \text{ B}$  per annum**

Notes:

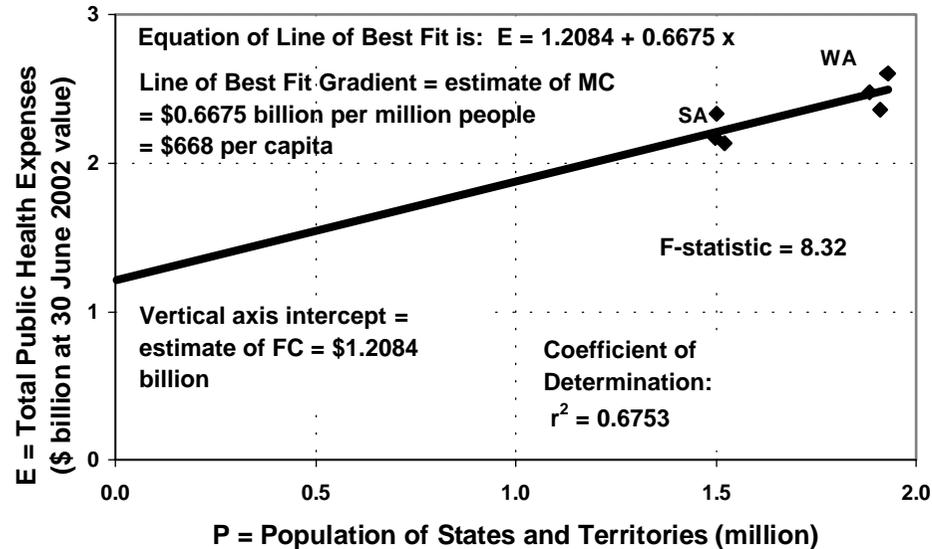
The F-statistic of 819 indicates that the probability that the linear relationship here has arisen by chance is just  $8.88 \times 10^{-6}$ .

The 95% confidence interval of the \$1.3393 billion figure is \$0.790 B to \$1.889 B.

**If WA and SA amalgamated their public health sectors:**

...

**Total Public Health Sector Expenses versus Population and Least Squares Line of Best Fit – WA and SA Only**



**Above leads to the estimate that if the WA and SA public health sectors amalgamated, Horizontal Duplication Cost Savings would be approximately  $1 \times \$1.2084 \text{ B} = \$1.2084 \text{ B}$  per annum**

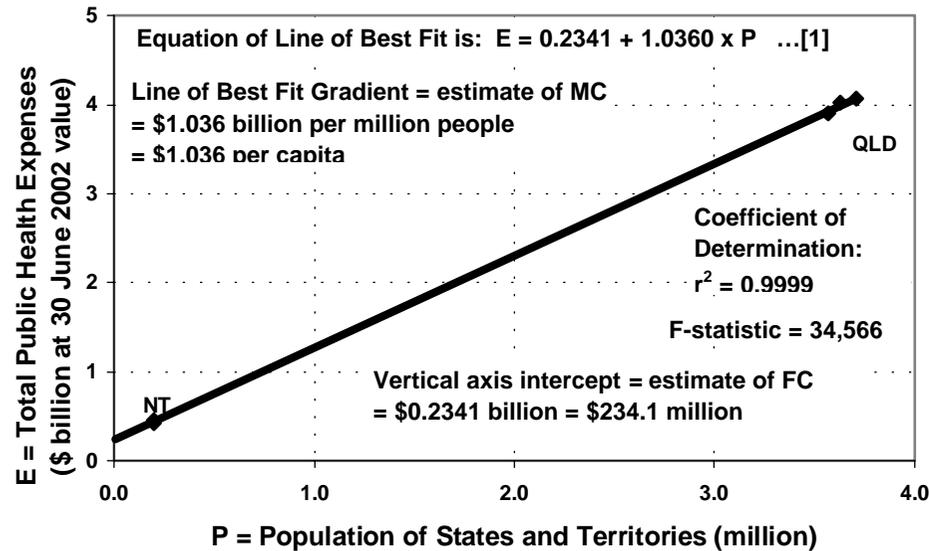
Notes:

The F-statistic of 8.32 indicates that the probability that the linear relationship here has arisen by chance is just 0.045.

The 95% confidence interval of the \$1.2084 billion figure is \$0.104 B to \$2.313 B.

If QLD and NT amalgamated their public health sectors:

...  
Total Public Health Sector Expenses versus Population and Least Squares Line of Best Fit – QLD and NT Only



Above leads to the estimate that if the QLD and NT public health sectors amalgamated, Horizontal Duplication Cost Savings would be approximately  $1 \times \$0.2341 \text{ B} = \$0.2341 \text{ B}$  per annum

Notes:

The F-statistic of 34,566 indicates that the probability that the linear relationship here has arisen by chance is just  $5.02 \times 10^{-9}$ .

The 95% confidence interval of the \$0.2341 billion figure is \$0.194 B to \$0.274 B.

# Estimated Savings Available Through Amalgamation of Pairs of State/Territory Public Health Sectors (\$million per annum)

**KEY**

 viable amalgamation

 non-viable amalgamation

	NSW	QLD	WA	VIC	SA	NT	TAS	ACT	
NSW		-666	224	1340	480	214	52	52	
QLD	-666		661	-2291	841	236	100	82	
WA	224	661		32	1153	213	12	27	
VIC	1340	-2291	32		377	201	15	28	
SA	480	841	1153	377		183	-98	-35	
NT	214	236	213	201	183		322	470	
TAS	52	100	12	15	-98	322		53	
ACT	52	82	27	28	-35	470	53		
<b>totals</b>	<b>1697</b>	<b>-1036</b>	<b>2323</b>	<b>-297</b>	<b>2901</b>	<b>1839</b>	<b>456</b>	<b>677</b>	<b>8561</b>
<b>ave. all</b>	<b>242</b>	<b>-148</b>	<b>332</b>	<b>-42</b>	<b>414</b>	<b>263</b>	<b>65</b>	<b>97</b>	
<b>ave. viables</b>	<b>284</b>	<b>137</b>	<b>683</b>	<b>578</b>	<b>664</b>	<b>211</b>	<b>15</b>	<b>52</b>	

Average savings from of all amalgamations (\$m): **152.9**

Average savings from just viable amalgamations (\$m): **369.9**

If the Commonwealth  
reduces to just a funding  
role ...

# IF THE COMMONWEALTH REDUCES TO JUST A FUNDING ROLE FOR HEALTH ...

At best, could eliminate all vertical waste (i.e. at both federal and state/territory levels), and all horizontal waste at just the Commonwealth level as well, and save in the order of \$1-2 billion per annum - possibly more noting the Commonwealth's substantially overlaying roles

But there'd be a risk of exacerbated horizontal waste, disharmony etc.

**KEY**

-  outcome facilitation
-  horizontal waste (duplication, coordination)
-  vertical waste (duplication, coordination)



# Some critical questions:

- At what cost do we defer to the “founding fathers” of our constitution? (Hint: think of a child with whooping cough, or the health challenges in rural and remote areas)
- Can non-constitutional reforms do the job that is required? Or is transferring health powers to the Commonwealth the only real solution? (Probable answers: NO to the 1<sup>st</sup> question, YES to the 2<sup>nd</sup>)