

VIEWS AND REVIEWS



ACUTE PERSPECTIVE

David Oliver: Lies, damned lies, and the NHS

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My school maths teacher got us reading Darrell Huff's seminal *How to Lie with Statistics*. The lessons have endured. In a similar vein was a wonderful recent column in the *Observer* by the statistician David Spiegelhalter on nine ways people misuse numbers to support their arguments.¹ Three of these included recent examples from the NHS.

- Use total numbers rather than proportions. Remember government claims that more emergency department patients than ever were being seen within four hours?² This despite the percentage dropping to a new low as activity rose,³ which Jeremy Hunt later conceded.⁴
- Casually imply causation from correlation. Consider categorical government claims that 6000,⁵ then 11 000 "excess weekend deaths" in hospital were caused by staffing, with no credible data to back this assertion.⁶
- Choose your definitions carefully. Check the claim and counterclaim in 2014's prime minister's questions about the number of NHS nurses, depending on the debaters' choice of time frame.^{7 8}

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Spiegelhalter listed six other tricks. I've seen the following five repeatedly employed regarding the NHS.

- Don't provide relevant context. Remember government claims that an additional £3.8bn had been given to social care thanks to the Better Care Fund? This ignored far larger budgetary cuts and played down the transfer of all funds from existing NHS budgets.^{9 10}
- Prematurely announce the success of a policy initiative using unofficial selected data. The coalition government pushed a "three million lives" telecare and telehealth campaign and funded independent "whole systems demonstrator" trials.¹¹ Officials announced major benefits before peer reviewed publication and urged mass implementation.¹²⁻¹⁵ The eventual trial results were largely null.¹⁶

- Make the numbers look big (but not too big). For example, a Daily Telegraph article claimed that "EU health tourists cost the NHS £2m a day." This amount vanishes next to the total NHS annual spend of about £120bn.¹⁷
- Exaggerate the importance of a possible illusory change. The government has given local authorities powers to charge an extra 2% council tax to fund social care.¹⁸ But the total raised won't get close to the funding gap, and property values show that this further disadvantages the most deprived areas.¹⁹
- If all else fails, make the numbers up. This year the Department of Health announced that the English NHS was getting the sixth biggest funding increase in its history.²⁰ Comparable data are available only since 1975-76, and the King's Fund showed this year's increase to be the 28th largest in real terms.²¹ I've yet to see a convincing explanation or defence of this claim.

Doctors have some training in critical appraisal of evidence and statistics. Best be vigilant, then, and use it beyond research and clinical practice.

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