

Dr Rod Jones (ACMA)

Statistical Advisor

Rod has a B.Sc. (Hon) in Microbiology/Biochemistry and a Ph.D. in Chemical Engineering; is a chartered management accountant (ACMA) and has completed the Hewlett Packard course in Total Quality Management. His career outside the NHS covers 7 years in academia (Biochemical Engineering) and 10 years in industry as a group process development engineer for blue-chip fmcg plc's and as general manager of an international laboratory proficiency testing organisation.

He has over 18 years experience in healthcare (commencing as Assistant Director of Information at the Royal Berkshire Hospital) both within the NHS and as an independent consultant covering Acute & Community involving Finance, Information, Contracting, Commissioning, Performance Management and Service Planning.

Healthcare Analysis & Forecasting (HCAF) was established in 1995 with clients including Trusts, PCTs, SHAs, Prudential and Glaxo plc. A disease management study in gastrointestinal bleeding & ulcers won an international award within Glaxo plc. In 1996 he completed a review of bed requirements for the Royal Berkshire Hospital. The forecast bed numbers were contested by the local health authority and a smaller hospital was built. The Trust eventually submitted a further business case (due to chronic bed shortages) to bring bed provision in line with the original forecast.

During 2001/02 he was involved in the Hospital Operational Intelligence Project (HOIP) investigating best practice in the use of operational intelligence to match capacity with demand. He was Statistical Advisor to the Thames Valley Strategic Health Authority from its inception, has provided support to the Met Office Health Forecasting Unit and provides advice to a range of Trusts, PCTs and SHAs.

Rod has developed unique expertise in:

- The actuarial basis of financial risk for capitation funded healthcare purchasers and the formulation of inter-PCT risk instruments to minimise this risk
- Forecasting emergency admissions and bed demand
- Optimising hospital bed pools
- Evaluation of apparent excess levels of acute intervention
- Limitations of the HRG tariff and the adequacy of Trust costing & pricing processes
- Statistical stress testing of the assumptions behind business cases

His research has led to the development of many innovative and new methods for understanding the operational and financial challenges in healthcare. He is the author of hundreds of papers, articles & reports, is an invited speaker at national conferences, is a member of the editorial board of the British Journal of Healthcare Management and runs a regular feature 'Money Matters' which investigates the application of statistical methods and trends into the understanding of how costs behave in the real world of health care.

Recent Projects

- A review of bed requirements for a large Australian tertiary hospital
- Analytical support to a series of reviews of elderly services for PCTs and an SHA
- Analysis of costs within HRG covering cancer services for a cancer network
- Review of bed requirements for two outer London hospitals
- Forecast day surgery capacity required for a new day surgery unit at a FT
- Support to a SHA regarding assessment of financial risk implied in PCT commissioning plans
- Calculation of additional beds required to support single sex accommodation
- Forecast outpatient & inpatient attendances (NHS & private) at a proposed new community/acute site
- A review of maternity beds and costs at a number of hospitals
- Forecasts for births at local authority level for a PCT
- A review of specialty bed pools at a Foundation Trust hospital
- A capacity planning tool for a Foundation Trust hospital
- A review of hospital reference costs and resulting LDP challenge for a group of three PCTs
- Analytical support to the Marie Curie end of life DCP care project
- Financial risk in healthcare purchasing
- A review of hospital counting & coding for a consortium of eight PCTs
- Supporting analysis for a community hospitals review
- Financial & operational analysis for early achievement of 18 weeks in NHS South Central
- A review of admission rates for two PCT's using OPCS procedure codes
- Detailed small area analysis of admissions sensitive to primary care intervention for a PCT
- Analysis of financial pressures at Isle of Wight Healthcare due to conflicting assumptions within the national tariff and the capitation formula
- Support for Specialist Commissioning at an SHA
- Modelling of activity required for next years contract for two PCTs
- Specialty-specific costs in the NHS HRG tariff and implications to perceived efficiency.

Prior Projects

- A review of alternative sites for a new hospital using small area geo-demographic modelling. Some 35 alternative configurations including acute and satellite sites were evaluated.
- Forecast shortfall in admissions at two Independent Sector Treatment Centres based on travel time and competition with other sites.
- A review investigating methods the extent of abuse of the definition of 'day case' across English providers for a SHA.
- Detailed support to the LDP process at South Central SHA
- Detailed support to the LDP process at Thames Valley SHA
- Advise on the limitations of various DH capacity & demand models to enable the SHA to give a measured response.
- A review of outpatient to inpatient conversion rates for GP practices in a SHA.
- A review of admission rates across Thames Valley SHA using small area geo-demographic methods.
- Analysis of demand and capacity at Orthopaedic departments supporting the TV SHA review of Orthopaedics.
- Statistical support to the TV SHA review of Paediatric deaths at the ORH
- Analytical support to the TV SHA community matrons project
- Analytical support to a review of healthcare services in Hertfordshire
- Capacity planning support to acute trusts (multiple sites)
- Review of bed requirements (multiple sites)

Healthcare Publications

Abbreviations: *HSJ* = *Health Service Journal*; *BJHCM* = *British Journal of Healthcare Management*

All *BJHCM* articles can be downloaded using an NHS Athens login on the *BJHCM* website www.bjhcm.co.uk
Key references are highlighted in violet

Funding & the Funding Formula (also see the 'Benchmarking' series <http://www.hcaf.biz/forecastingdemand.html>)

Jones R (1994) GP Fundholding: Readies reckoner. *HSJ* 104 (10th Feb): 31 – Limitations in GP fundholding budgets.
Jones R (2011) Infectious outbreaks and the capitation formula. *BJHCM* 17(1): 36-38.

Data Quality

Jones R (1995) Check your outpatient data. *Fundholding* 4(6): 24-25.
Jones R (1996) Getting the best from hospital patient information. *Healthcare Analysis & Forecasting*, Camberley, UK.
<http://www.hcaf.biz/Recent/Handbook.pdf>
Beauchant S and Jones R (1997) Socio-economic and demographic factors in patient non-attendance. *BJHCM* 3(10): 523-528
Jones R (2007) A level playing field? A discussion document for PCT's exploring the implications of how events get counted at acute trusts. *Healthcare Analysis & Forecasting*, Camberley, UK. <http://www.hcaf.biz/For%20PCTs/Microsoft%20Word%20-%20Level%20playing%20field.pdf>

Forecasting Year End from Mid-Year Activity & Costs (<http://www.hcaf.biz/forecastingdemand.html>)

Jones R (1996) Estimation of annual activity and the use of activity multipliers. *Health Informatics* 2, 71-77.
Jones R (1996) How many patients next year? *Healthcare Analysis & Forecasting*, Camberley, UK.
Jones R (2010) Forecasting year-end activity. *BJHCM* 16(7): 350-351.
Jones R (2010) Forecasting demand. *BJHCM* 16(8): 392-393.

Understanding Emergency Admissions (<http://www.hcaf.biz/emergencymadmissions.html>)

Jones R (1997) Emergency admissions: Admissions of difficulty *HSJ* 107(5546): 28-31
Jones R (2009) Trends in emergency admissions. *BJHCM* 15(4): 188-196.
Jones R (2009) Cycles in emergency admissions. *BJHCM* 15(5): 239-246.
Jones R (2009) Emergency admissions and hospital beds. *BJHCM* 15(6): 289-296.
Jones R (2009) Emergency admissions and financial risk. *BJHCM* 15(7): 344-350.
Jones R (2010) Unexpected, periodic and permanent increase in medical inpatient care: man-made or new disease. *Medical Hypotheses* 74: 978-83.
Jones R (2010) Can time-related patterns in diagnosis for hospital admission help identify common root causes for disease expression. *Medical Hypotheses* 75: 148-154.
Jones R (2010) The case for recurring outbreaks of a new type of infectious disease across all parts of the United Kingdom. *Medical Hypotheses* 75(5): 452-457.
Jones R (2010) Emergency preparedness. *BJHCM* 16 (2): 94-95.
Jones R (2010) Forecasting emergency department attendances. *BJHCM* 16(10): 495-496.
Jones R (2010) Gender ratio and hospital admissions. *BJHCM* 16(11): 541.
Jones R (2011) Cycles in gender-related costs for long-term conditions. *BJHCM* 17(3): 124-125.
Jones R (2011) CMV and health care costs. *BJHCM* 17(4): 168-169.

Understanding Hospital Bed Planning & Occupancy (<http://www.hcaf.biz/hospitalbeds.html> also <http://www.hcaf.biz/Hospitalefficiency.html>)

Jones R (2001) Bed occupancy: Don't take it lying down. *HSJ* 111(5752): 28-31
Jones R (2001) New approaches to bed utilisation – making queuing theory practical. Presented at 'New Techniques for Health and Social Care'. Harrogate Management Centre Conference 27th Sep, 2001. Available from: www.hcaf.biz
Jones R (2003) Bed management - Tools to aid the correct allocation of hospital beds. Presented at 'Re-thinking bed management – opportunities and challenges'. Harrogate Management Centre Conference, 27th January, 2003. Available from: www.hcaf.biz
Jones R (2009) Building smaller hospitals. *BJHCM* 15(10): 511-512.
Jones R (2009) Length of stay efficiency. *BJHCM* 15(11): 563-564.
Jones R (2009) Crafting efficient bed pools. *BJHCM* 15(12): 614-616.
Jones R (2010) Myths of ideal hospital size. *Medical Journal of Australia* 193(5): 298-300.
Jones R (2010) Benchmarking length of stay. *BJHCM* 16(5): 248-250.
Jones R (2011) Does hospital bed demand depend more on death than demography? *BJHCM* 17(5): 190-197.
Jones R (2011) Bed days per death: a new performance measure. *BJHCM* 17(5): 213
Jones R (2011) Hospital bed occupancy demystified and why hospitals of different size and complexity must operate at different average occupancy. *BJHCM* 17(6): 242-248.
Jones R (2011) A&E performance and inpatient bed occupancy. *BJHCM* 17(6): 256-257
Jones R (2011) Bed occupancy – the impact on hospital planning. *BJHCM* 17(7): 307-313
Jones R (2011) Factors determining the need for single room accommodation in hospital. *BJHCM* 17(7): 316-317
Jones R (2011) Factors influencing demand for hospital beds in English Primary Care Organisations. *BJHCM* (submitted)
Jones R (2011) The simple guide to maternity bed occupancy. *British Journal of Midwifery* (submitted)

Commissioning to Achieve a Waiting Time Target (<http://www.hcaf.biz/capacitymanagement.html>)

Jones R (2000) Outpatient appointments: Feeling a bit peaky. *HSJ* 110(5732): 28-31
Jones R (2001) Outpatient waiting time: A pretty little sum. *HSJ* 111(5740): 28-31
Jones R (2001) Guaranteed waiting times: Quick, quick, slow. *HSJ* 111(5778): 20-24
Jones R (2009) What next for 18 weeks? *BJHCM* 15(8): 404-405.
Jones R (2009) How to maintain 18 weeks. *BJHCM* 15(9): 456-457.
Jones R (2011) Cycles in inpatient waiting time. *BJHCM* 17(2): 80-81.

Financial Risk in Healthcare (<http://www.hcaf.biz/financialrisk.html>)

Jones R (2004) Financial risk in healthcare provision and contracts. Proceedings of the 2004 Crystal Ball User Conference, June 16-18th, 2004. Denver, Colorado, USA. Available from: www.hcaf.biz
Jones R (2008) Financial risk in practice based commissioning. *BJHCM* 14(5): 199-204.
Jones R (2008) Financial risk in health purchasing Risk pools. *BJHCM* 14(6): 240-245.
Jones R (2008) Financial risk at the PCT/PBC Interface. *BJHCM* 14(7): 288-293.
Jones R (2009) The actuarial basis for financial risk in practice-based commissioning and implications to managing budgets. *Primary Health Care Research & Development* 10(3): 245-253.
Jones R (2010) What is the financial risk in GP Commissioning? *British Journal of General Practice* 60(578): 700-701.
Jones R (2010) Cyclic factors behind NHS deficits and surpluses. *BJHCM* 16(1): 48-50.
Jones R (2010) Do NHS cost pressures follow long-term patterns? *BJHCM* 16(4): 192-194.
Jones R (2010) Nature of health care costs and financial risk in commissioning. *BJHCM* 16(9): 424-430.
Jones R (2010) Trends in programme budget expenditure. *BJHCM* 16(11): 518-526.
Jones R (2011) Cycles in inpatient waiting time. *BJHCM* 17(2): 80-81.

Limitations of the HRG Tariff (<http://www.hcaf.biz/HRGPbR.html>)

Jones R (2008) Limitations of the HRG tariff: excess bed days. *BJHCM* 14(8): 354-355.
Jones R (2008) Limitations of the HRG tariff: day cases. *BJHCM* 14(9): 402-404.
Jones R (2008) A case of the emperor's new clothes? *BJHCM* 14(10): 460-461.
Jones R (2008) Limitations of the HRG tariff: the trim point. *BJHCM* 14(11): 510-513.
Jones R (2008) Costing orthopaedic interventions. *BJHCM* 14(12): 539-547
Jones R (2009) Limitations of the HRG tariff: efficiency. *BJHCM* 15(1): 40-43.
Jones R (2009) Limitations of the HRG tariff: the RCI. *BJHCM* 15(2): 92-95.
Jones R (2009) Limitations of the HRG tariff: local adjustments. *BJHCM* 15(3): 144-147
Jones R (2010) A maximum price tariff. *BJHCM* 16 (3): 146-147.
Jones R (2010) Nature of health care costs and the HRG tariff. *BJHCM* 16(9): 451-452.
Jones R (2010) Emergency assessment tariff: lessons learned. *BJHCM* 16(12): 574-583.
Jones R (2010) High efficiency or unfair financial gain? *BJHCM* 16(12): 585-586.
Jones R (2011) Impact of the A&E targets in England. *BJHCM* 17(1): 16-22.
Jones R (2011) Costs of paediatric assessment *BJHCM* 17(2): 57-63.

HCAF conduct small to medium projects where very high levels of NHS experience or expertise is required to elucidate the real cause of the problem. HCAF also provide actuarial services to commissioning groups wishing to share financial risk.

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