



Stephen Wilson **health sector profile**

Stephen Wilson is a richly skilled researcher, analyst, innovator and consultant, with a rare blend of expertise in privacy, cyber security, policy and governance across all levels of the health sector. He bridges technology, business and governance, with sophisticated but practical consulting on e-health security and privacy solutions. His career spans 30 years in advisory and R&D leadership roles, in Australia and the USA. For most of that time he has been involved in healthcare. For the past 22 years he has specialised in digital identity and privacy. His advisory clients include state & federal health departments, public sector human services organisations, public and private insurers, peak bodies, and numerous healthcare IT start-up businesses.

Stephen has long been involved in public policy for authentication and privacy. He was an invited member of the Australian Law Reform Commission Developing Technology Advisory Sub-committee (2007-08), and a Ministerial appointment to the National Electronic Authentication Council (1998-2001). He is a foundation member of the Australia-New Zealand chapter of the International Association of Privacy Professionals (iapp-ANZ).

Stephen has authored numerous submissions to government inquiries on health & human services topics including the draft National Health Privacy Code (2003) and the Health & Welfare Access Card (2007). He has a substantial body of publications including academic and peer-reviewed papers on electronic health records, health identifiers and privacy. Stephen holds Bachelor's degrees in Science and Electrical Engineering; he is currently undertaking a PhD on the ecology of identity, with the Australian Centre of Cyber Security (UNSW, Canberra).

Health sector experience

- **Community pharmacy body (confidential) 2016-17:** Privacy Impact Assessment (PIA) and privacy training program for this peak body developing nation-wide Big Data systems for prescription medication management and research
- **Health insurer (confidential), US 2016:** privacy and consumer affairs strategy for the introduction of mobile biometrics to tens of millions of customers
- **International Council of Ophthalmologists, US 2014:** Intellectual property strategy, to help realise better returns on diagnostic codes and terminology
- **Dept of Health (Victoria) Web Transformation Program 2014:** Privacy Management Plan and PIA of new public web site and CRM
- **Dept of Health Victoria Seniors Program 2014:** Multiple PIAs of a new cloud computing solutions; Privacy Management & Communications Plans
- **Personally Controlled Electronic Health Record program 2014:** security review under Australian legislated Information Privacy Principles of national EHR
- **Queensland Health 2013:** Series of PIAs for an Electronic Medical Records Viewer and for Integrated Electronic Health Records (iEMR) systems
- **National E-Health Transition Authority NEHTA 2011-12:** Acting PKI Manager for National Authentication for Health Services (NASH); Gatekeeper Accreditation Plan; CP/CPS; provider registration Risk Assessment
- **Victoria HealthSMART 2011:** PIA for state-wide Cerner Clinical Application

- **NEHTA 2011:** Threat & Risk Assessment of electronic signature patterns for a comprehensive range of archetypal e-health use cases and applications
- **Queensland Health 2010-11:** a new suite of privacy tools for a number of multiple e-health projects
- **South Australia Health 2008-11:** Identity management adviser: reviewed smartcard & biometric pilots; PKI for enterprise wide identity management strategy; developed Certificate Policy & Certification Practice Statement and User Ts&Cs for enterprise PKI, designed and supervised Root key signing ceremony
- **NEHTA eHealth IT Testing Working Group 2010-11:** helping NEHTA plan and implement a national accreditation scheme for health software testing
- **Victoria HealthSMART Program 2009:** PIA for a state-wide integrated Patient and Client Management System
- **Joint Standing Committee on Health Informatics Standards (JSCHIS) 2009:** Strategic review of eHealth standards priorities to inform national planning
- **NEHTA 2007:** developed the business case for NASH, and an initial fast-track procurement strategy
- **groupNetwork 2009:** strategic security plan for an e-health start-up
- **Australian General Practice Network 2006:** privacy and security expert on development of the Divisions National Information Management Plan
- **Medicare Australia Health eSignature Authority (HeSA), 2005-06:** developed new automated digital certificate processes for healthcare professionals; piloted rollout of smartcard-based digital credentials at a large public hospital
- **NSW Human Services Better Service Delivery Programme 2005:** security policy review and upgrade; security architecture review
- **Ozdocsonline 2002-05:** Project Manager for a Commonwealth ITOL funded project to develop a new online care planning tool; Principal security adviser for a GP-patient portal and general practice B2B platform
- **Medicare Australia HeSA 2002-03:** Technical Account Manager and Principal Consultant on PKI business processes and Gatekeeper accreditation
- **Northern Sydney Area Health Service 2003:** PKI strategy for patient records
- **NSW Health 2001:** Subject matter expert on authentication in developing a new Security Policy for electronic personal health information
- **National Health Privacy Code 2003:** wrote a comprehensive response to the Department of Health and Ageing's draft privacy code.
- **Patented health PKI registration process 2002:** Australian patent 743570
- **Standards Australia Health Informatics 2004-10** Committee IT-14-4
- **National Electronic Authentication Council 1998-2001** (member)
- **Privacy Commissioner's PKI Reference Group 2001** (member)
- **Medical device industry USA 1992-1995:** three years in the USA with leading pacemaker firm Telectronics, in R&D management, regulatory affairs, product marketing, clinical study support, and QA
- **Medical device software development 1987-1992:** four years with Telectronics in Sydney working in implantable defibrillator software development and R&D management
- **Implantable defibrillator patents** US 5144947, 5251625 and 5292339.

Selected health related publications and presentations

- *How Healthy is Blockchain Technology?* HIMSS Asia Pac Conference, Singapore, Sept 13, 2017 (awarded Best Paper of the conference)
- *Biometrics, Privacy and the Biometrics Institute Trust Mark* Global Privacy Enforcement Network, October 2015
- *Data protection: Big data held to privacy laws, too* Nature v519, 414, 26 Mar 2015
- *Applying Information Privacy Norms to Re-Identification Demonstrations*, Symposium on the Law, Ethics and Science of Re-Identification Demonstrations, Harvard Law School, May 2013
- *Designing Privacy By Design: hybrid Privacy & Security Risk Assessment* AusCERT 2013
- *Legal Limits to [DNA] Data Re-Identification*, Science 8 Feb 2013: V 339.6120 p 647
- *Smart Technologies to safeguard e-health*, Managing Patient Confidentiality and Information Governance, Melbourne, 2012
- *A Fresh Look at 'Balancing' Patient Privacy & Clinical Safety*, Managing Patient Confidentiality and Information Governance, Melbourne, 2011
- *A bigger threat to patient privacy when doctors use Facebook* BMJ Journal of Medical Ethics, 20 Dec 2010
- *When worlds collide: Managing privacy in joined-up service & payment environments*, Human Services Delivery & Payment Reform Summit, Canberra, 2010
- *Anonymity & Pseudonymity in eResearch via smartcards and Public Key Infrastructure* eResearch Australasia conference, Manly, 2009
- *A new manifesto for smartcards as national information infrastructure*, 5th Homeland Security Conference Canberra, 2006
- *Smartcards and PKI at Medicare Australia* AEEMA ICT Forums, Sydney 2006
- *Patient Privacy and Security – Not a zero sum game!* Wilson, Connolly & Denney-Wilson, Journal Australian Epidemiology Assoc. V12.1, 2005
- *A novel application of PKI smartcards to anonymise Health Identifiers* AusCERT2005 Academic Refereed Paper Stream May 2005
- *PKI State of Play* Argus Foundation Forum, Canberra, 2004
- *Privacy and security panel* AFR Health Congress, Sydney, 2004
- *Secure web-based services linking patients and GPs* AFR Health Congress, Sydney, 2004
- *PKI without tears* American Bar Association eBlast, 2003
- *Ozdocsonline - A Case Study in Security & Privacy for a Doctor-patient Web-based Communication Tool* HIC/RACGP Computing Conference, Sydney, 2003.
- *PKI in e-health* New Zealand Department of Health briefing, Wellington, 2003
- *A private sector perspective on PKI* Health Informatics HIC2001, Canberra, 2001
- *Electronic Trust in Online Healthcare* ISSA World Market Series Business Briefing on Global InfoSecurity, 2001
- *Electronic medical documentation of the future* 8th Annual Malaysian National Healthcare Conference, Kuala Lumpur, 2000.