Professions Summit Series

Report of the Summit: Professions and Evidence-Informed Practice

Held at The Institution of Civil Engineers, London, 9 July 2013 supported by the Royal College of Surgeons and the Alliance for Useful Evidence



"For professionals, the ability to make judgments based on evidence and the skill sets needed to commission, analyse and articulate evidence for decision-makers and the risk for all whom the decision affects is really, really topical"

Introduction

The professions summits, of which this is the second, were inaugurated to form links and to share expertise between professions all of which have developed, sometimes over centuries, with little or no reference to each other. Since the mid-1990s joint work, for example between the police, the NHS and local government to tackle violence, has shown that the professions have a great deal to learn from each other for public and mutual benefit.

The first summit was held at the Royal College of Surgeons in 2012 when it was concluded that a series of informal, Chatham House Rule events focussing on particular issues of common concern, such as standard setting, leadership, research arrangements, professional development, ethics, and so on, would be the best way to facilitate this sharing process. A steering group was formed, comprising Richard Coackley, then president of the Institution of Civil Engineers, Sir Hugh Orde, president of the Association of Chief Police Officers, Harry Rich, chief executive of the Royal Institute

of British Architects, Trudi Elliott, Chief Executive of the Royal Town Planning Institute, Ken Durham, then chairman of the Head Teachers' Conference, and Professor Jonathan Shepherd, Royal College of Surgeons and Cardiff University as convener.

Different professions have more extensive expertise in some areas than others. Leadership for example, the subject of a forthcoming summit being organised by the Association of Chief Police Officers and the College of Policing, is an established theme throughout the training of schoolteachers, police officers and armed forces personnel. But some professions, like medicine, have come to this far later and arrangements are less well developed.

With regard to the application of evidence, evidence informed practice, there are different contrasts. Some professions have developed centres for evidence generation, medical and engineering schools for instance, and some have not. In nursing and school teaching, unlike in medicine however, the day a practitioner becomes an academic is usually the day the practitioner stops practicing on the ward and in the classroom, with consequences for the relevance and impact of their research. In medicine, cadres of practitioner academics, professors of surgery for instance, combine practice, research and the training of surgeons to the benefit, usually, of all three functions.

In short, the benefits, incentives and structures for applying evidence in the best way, including evidence on the value of life and time, need to be understood and built across all professions.

And there is expertise to be shared about the funding of practice orientated research as well. There is no equivalent of National Institute for Health Research funding – earmarked from the NHS *service* budget - in policing and the rehabilitation of offenders. In stark contrast with the Medical Research Council, the Economic and Social Research Council, the main UK funding body for research in education and crime and justice has no practitioners on its board.

National and internationally important organisations, of which the Institution of Civil Engineers where this evidence summit was held is an example, are powerful reminders how the instinct for self-improvement and ever higher standards, *to demand, disseminate and promote evidence about what works* which characterises every profession worth the name can be harnessed. This institution was funded and is sustained by practitioners. A stained glass window proclaims that "On the 2nd January 1818 a few engineers met at Kendal's coffee house and formed a society for the advancement of knowledge in civil engineering. The institution of civil engineers was thus founded". And it was here, in February 2013, that the new College of Policing was launched.

The role of the professions

"Communities where people feel that they are part of the change process"

The popularity of the summit and engagement in the issues of evidence informed practice by all the professions involved speaks for itself. No-one present dissented from the view that evidence is important. Evidence is sometimes thought of as an issue mainly for government because of the development by government of bodies like the National Institute for health and Clinical Excellence (NICE). But it is clear that those in a position to act on the basis of evidence, practitioners, are just as important. The strong collective view on this was obvious. Roles of the professions with regard to evidence were identified as:

- To exercise and communicate their values, art, science and craft
- To capitalise on their great credibility and instinct to improve. "I'm afraid that politicians are not often really believed."
- Generating and articulating the right questions only practitioners can do this

- To fill statistical skills gaps among professionals. With demands for transparency rightly increasing, practitioners need to be able to understand and interpret evidence
- To engage in policy and practice reviews
- To reflect on and act promptly to evidence.
- To be "practitioner-scientists in the High Street"
- To exercise discretion in the context of the evidence. "There can be no substitute for evidence-based practice clearly. But it can't be used to completely subvert individual judgment."

"We're in the same space together"

The role of evidence

"Professionals all have scope to improve"

Evidence was considered by all present to have a crucial role in guiding professional practice:

- To adjudicate between alternative solutions
- To minimise harm and maximise wellbeing
- To drive learning from failure and to understand what doesn't work
- To surprise, to challenge preconceptions, and very often to be counter intuitive. For example, at least 60,000 babies in the UK and other countries where estimates have been made died from cot death as a result of Dr Spock's advice in the 1960s that babies are put to bed on their stomachs: a real Holocaust based on advice which was not supported by empirical evidence but which was based on a theory.
- To drive prompt action (to be consequential)

"Accessing research is not enough"

Types of useful evidence

"Most sectors are research heavy but evidence light"

A great deal of research does not provide evidence which can be applied in practice. Generating evidence on effectiveness and cost benefit relies on field testing and a specific range of methods. Useful evidence comes in many forms which include:

- Evidence from controlled trials
- Evidence from the lab and from the real world on how systems can fail
- Faults reporting
- National evidence banks
- Systematic reviews of evidence

Evidence priorities

"It's all about experimentation to find solutions". "It's possible to run controlled trials on all kinds of nuts and bolts (potential solutions)...and you get results really quite fast".

Priorities identified reflect the importance both of particular types of evidence but also adoption of the right method for the setting and context in mind. Demand for evidence right across the professions was a recurring theme, including in medicine where the evidence ecosystem is perhaps, most developed. Priorities identified were:

- Context specific evidence
- Evidence on interactions between technology and people
- Communication of statistical principles, evidence and its meaning. Public confidence depends on this. Evidence doesn't necessarily speak for itself.
- More and better evidence in all sectors, including medicine where many interventions are still not founded on reliable evidence
- Improvements in methods/new methods/implementation science

"Some economists are slightly doubtful about (randomised controlled trials) but in general... they are much, much better than many of the other ways".

- Infiltrate government (get into the DNA of government; copy economists!)
- Nurture the professions; they know the right questions
- Strengthen links between practitioners and academics
- Rapid, low cost controlled trials
- Proper experiments
- Standard setting, recognising that standards serve different purposes: they can be norms, expectations or codification of knowledge.

"We're all often frustrated by the absence of evidence and the strong weight given to prejudiced beliefs and prior assumptions" "The public overestimates teenage pregnancies by 25 times"

Views on evidence futures

"It's getting better"

There was consensus that evidence and evidence visibility is becoming increasingly important across all sectors. Arrangements are necessary not just to synthesise evidence but also to generate new, reliable evidence, and for professional bodies to pump it to professionals primed to apply it:

- Links between professional bodies and government are improving.
- The new independent 'What Works' centres announced in 2013, which will synthesise evidence and publish policy and practice guidelines on education attainment, ageing better, local growth, crime reduction and effective early intervention are likely to increase reliance on evidence though the extent to which this happens depends on whether arrangements are also made to generate new evidence and to implement this evidence at the front line and in government.
- Rapid controlled trials are possible

"Good intentions are not enough"

Evidence demand

'The management of evidence is too important an issue to be left mainly to researchers'.

It's no good simply supplying evidence. Demand is perhaps more important since, history suggests, constructing the machinery to generate, disseminate and promote evidence depends in large part on the sustained resolve of professionals to raise standards. Existing institutions and new organisations such as the Society for Evidence based Policing, the Cabinet Office Behavioural Insights Unit and the proposed College of Teaching reflect increasing demand for evidence inside and outside government which can be used to improve performance.

• "Civil servants are desperate to use evidence".

- Welfare reforms exemplify increasing appetite to incorporate experimentation into legislation, so that new arrangements are tested and adapted according to reliable evidence.
- More evidence is needed to inform a future Comprehensive Spending Reviews; a better evidence timeline is needed.
- Appetite for evidence in some sectors is low: a culture shift is needed.

"I want to talk really about the lack of evidence. I'm not sure if I'm reassured or frightened by the fact that listening around the table a lot of people feel exactly the same in their own professions. I thought it was only in education but it obviously isn't."

Attitudes to evidence

"This is such a significant issue across the professions"

Because evidence often points to counterintuitive solutions, advocacy on this basis sometimes risks disbelief and even hostility. Attitudes which emerged included:

- Special advisors think they know but they often don't; advice is not the same as evidence
- Acting on evidence involves taking risks
- "There is science in everything we do".
- Test, learn, adapt
- Avoid temptation to spin or park the evidence. This has been done many times, especially in crises and other stressful circumstances
- Hold your nerve, apply the evidence.
- Avoid being prisoners of defunct evidence.
- Find out systematically what is already known before designing and embarking on further research.
- Publish the results of all research.

The summit facilitated many new contacts between the professions and the leaders of the professions. Many unexpected common interests and priorities were apparent. Every profession needs to build and sustain its own evidence ecosystem but many of the building blocks are already available and can be shared. The contributions of professionals to identify the right questions and implement the solutions promptly are crucial, as are the contributions of researchers to identify the right context-specific methods and the contributions of professional bodies to advocate evidence systems and disseminate and promote reliable evidence.

Capitalising on their great public credibility, the professions have good reason to collaborate to increase the visibility, understanding, status and supply of evidence. Collaboration should be bilateral or multi-lateral according to specific objectives. Perhaps the biggest surprise of the summit was the wide range of common interests and overlapping priorities. Interest in generating more and better evidence was universal.

<u>The next event in the Professions Summit series, on the subject of Leadership, will be held in autumn</u> 2013 hosted by The Association of Chief Police Officers. To express interest, contact Meredith Ettridge, Royal College of Surgeons, mettridge@rcseng.ac.uk, 02078696849,

Chair, convenor, report author and speakers

- Chair: Lord O'Donnell, former Head of the Civil Service and Cabinet Secretary.
- Convenor and report author: Professor Jonathan Shepherd CBE, Cardiff University/Royal College of Surgeons. <u>ShepherdJP@cardiff.ac.uk</u>
- Sir Iain Chalmers, James Lind Initiative/a founder of The Cochrane Collaboration.
- Philip Greenish CBE, Chief Executive, Royal Academy of Engineering.
- Chief Superintendent Alex Murray, Birmingham East Commander, West Midlands Police & Chair of Society for Evidence Based Policing.
- David Turrell CBE, Executive Head teacher, Sir Bernard Lovell School.



Participants

- Martin Astbury, Assembly President, Royal Pharmaceutical Society.
- Rob Beckley, Chief Operating Officer, College of Policing.
- Derek Bell, Professor of Education, The College of Teachers.
- Jonathan Breckon, Manager, Alliance for useful Evidence.
- Professor Barry Clarke, President, Institution of Civil Engineers.
- Jo Cleary, Board Chair, The College of Social Work.
- Richard Coackley, Immediate past president, Institution of Civil Engineers.
- Stephen Coleclough, President, Chartered Institute of Taxation.
- Kenneth Durham, Immediate past Chairman, Headmasters' and Headmistresses' Conference.
- Trudi Elliott, Chief Executive, Royal Town Planning Institute.
- Dr Anna ver der Gaag, Chair, Health and Professions Council. Dr Rita Gardner, Director, Royal Geographical Society.
- Diana Garnham, Chief Executive, The Science Council.

- Judith Hackitt, President, Institution of Chemical Engineers.
- Dr David Halpern, What Works National Advisor, Cabinet Office. Alan Hatfield, Director of Learning, Association of Chartered Accountants.
- Dr Laura Haynes, Head of Policy Research, Behavioural Insights Team, Cabinet Office.
- Desmond Hudson, Chief Executive, The Law Society. David Lewis, Chief of Staff, Association of Chief Police Officers.
- Grainia Long, Chief Executive, Chartered Institute of Housing.
- Maura McGowan QC, Chairman, The Bar Council.
- Annie Mauger, Chief Executive, Chartered Institute of Library and Information Professionals.
- Jacqui Molyneux, President, Royal College of Veterinary Surgeons.
- Ross Neilson, Cabinet Office Secretariat.
- Michael Newey, President, Royal Institute of Chartered Surveyors
- Dr Debbie Nolan, Vice President, Royal College of Anaesthetists.
- Brigadier Ian Rigden, Head of Research, MOD Development, Concepts and Doctrine Centre.
- Professor Andy Ross, Council member, Academy of Social Sciences.
- Hetan Shah, Executive Director, Royal Statistical Society.
- Hazel Stevenson McLaughlin, Deputy Chair, British Psychological Society Professional Practice Board.
- Mike Summersgill, President Elect, Chartered Institution of Water and Environmental Management.
- Sir Richard Thompson, President, Royal College of Physicians.
- Professor Sir John Tooke, President, Academy of Medical Sciences.
- Rachel Tuffin, Head of Research, College of Policing.
- Peter Ward, Chief Executive, British Dental Association.
- Dr Raphael Wilkins, President, College of Teachers.
- Jordan Junge, Alliance for Useful Evidence, Nesta.
- Meredith Ettridge, Policy Officer, Royal College of Surgeons.