Out of Hours RCGP Research Paper of the Year 2013

The Royal College of General Practitioners Research Paper of the Year Award showcases the excellence of research in primary health care conducted in the UK or Republic of Ireland. This year, prizes for the best papers published in 2013 were awarded in six categories aligned to the NIHR Clinical Research Network divisions with one overall winner. The winning papers include large, hugely ambitious studies using a range of sophisticated research methods. Notably this includes three randomised-controlled trials of complex interventions that are challenging to both implement and evaluate.

The 2013 Research Paper of the Year was awarded to Mark Ledwidge and colleagues for the STOP-HF trial of a screening programme using brain-type natriuretic peptide to identify asymptomatic patients at high risk of heart failure, followed by collaborative care to optimise their treatment.1 The intervention reduced left ventricular dysfunction, symptomatic heart failure, and hospital admissions. This approach of using screening and risk-prediction tools to identify high-risk patients who are then treated intensively and collaboratively by primary and secondary care, is very applicable to a range of other long-term conditions.

Two other category-winning papers exemplified the ability of primary care researchers to conduct rigorous trials, and in both cases they demonstrate the importance of undertaking research before what appear to be obviously good ideas are implemented too widely or enthusiastically. Hilary Pinnock and colleagues undertook a randomisedcontrolled trial of telemonitoring of patients with heart failure, using algorithms to alert clinicians to patients at risk of deterioration.² The intervention generated a substantial additional workload for clinicians but with no evidence of benefit in terms of the number of hospital admissions, patient quality of life, or any other outcome. In the WISE trial, Anne Kennedy et al, undertook a large cluster

randomised-controlled trial of a whole system approach to help general practices provide self-management support.3 The results showed that practices changed their ways of working to a variable extent, patients did not perceive much change in their care, and there was no evidence of benefit from the intervention.

Although these trials might be considered 'negative', the award panels chose them because they were well conducted and answered important questions. Finding that an intervention doesn't work is just as important as finding that it does, since that can help to avoid wasting resources on ineffective interventions and can stimulate the search for new and better approaches. These trials also demonstrate just how difficult it is to implement meaningful change in practice that leads to patient benefits. They fit a pattern in which early descriptive studies led by pioneers promise major benefits from an innovation, and yet subsequent largescale high quality trials in real-world settings fail to achieve the same results.

The remaining category-winning papers used a range of methods to address important problems. Rachel Dommett et al, used electronic medical records to identify 12 symptoms in childhood that were associated with an increased probability of a diagnosis of cancer.4 Fiona Matthews et al, repeated a 1991 MRC study of cognitive function and ageing some 20 years later, and found compelling evidence of a reduction in the prevalence of dementia, with fewer cases than would be predicted based on the growth in the elderly population.⁵ This could be at least partly due to improved treatment of vascular risk factors in primary care. Finally, Peter Murchie and colleagues demonstrated that patients who had initial diagnostic excision of a pigmented lesion in primary care were no more likely to have adverse outcomes, while experiencing fewer days in hospital, than those who had their

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excision in hospital.⁶ This tends to contradict current UK guidance to excise all pigmented lesions in secondary care.

Many of these winning papers challenge perceived wisdom. This is the purpose of research: to test ideas and hypotheses in order to develop better theories and interventions with the ultimate aim of improving patient care. The Research Paper of the Year demonstrates how effectively researchers in the UK and Ireland are rising to the challenge.

Chris Salisbury,

Chair, RCGP Research Paper of the Year, on behalf of the panel of judges, and Professor of Primary Health Care, Centre for Academic Primary Care, University of Bristol, Bristol.

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