

understand how ADHD can affect the whole family. The students also gained insight into the difficulties of doing research in the community, including organising families to keep appointments and persuading children to complete cognitive tests when they wanted to play with toys.

Just as hospice placements can have an important educational impact,<sup>1</sup> so our students experienced first-hand the challenges of community-based research and also had an opportunity to learn about children with ADHD. ■

ALISON POULTON

Senior lecturer in paediatrics, University of Sydney, Sydney, Australia

REBECCA TENG JING YAP

Medical student, Sydney Medical School Nepean, Sydney, Australia

JUSKARAN SINGH SANDHU

Medical student, Sydney Medical School Nepean, Sydney, Australia

STEPHANIE GUI YUN NG

Medical student, Sydney Medical School Nepean, Sydney, Australia

MITHMA BISEKA FERNANDO

Medical student, Sydney Medical School Nepean, Sydney, Australia

PIPPA OAKESHOTT

Professor of general practice, St George's, University of London, London, UK

## References

- 1 Frearson S. Perceived educational impact, challenges and opportunities of hospice placements for foundation year doctors: a qualitative study. *Future Healthcare Journal* 2019;6:56–60.
- 2 Sawyer MG, Reece CE, Sawyer ACP, Johnson SE, Lawrence D. Has the prevalence of child and adolescent mental disorders in Australia changed between 1998 and 2013 to 2014? *J Am Acad Child Adolesc Psychiatry* 2018;57:343–50.e5.
- 3 Tatlow-Golden M, Prihodova L, Gavin B, Cullen W, McNicholas F. What do general practitioners know about ADHD? Attitudes and knowledge among first-contact gatekeepers: systematic narrative review. *BMC Fam Pract* 2016;17:129.

## Clinician cognitive overload

Editor – The October 2018 edition of *Future Healthcare Journal* includes two editorials and seven articles under the theme 'Systems approach to healthcare'; healthcare systems engineering (HCSE) for complex adaptive system (CAS) analysis and design – conjoining the disciplines of systems engineering with medicine and healthcare, both academically and in practice.

The HCSE for CAS approach to medical practice and healthcare delivery offers great promise for the much-improved cost-effectiveness of healthcare, but only if the manual- and document-dependent tools and methods described are augmented with state-of-the-art information technology (IT). In this way, not only will the HCSE for CAS potential to achieve cost-effective healthcare improvement be realised but so also will significant opportunities for case outcome optimisation and medical mistake mitigation (medical mistakes being currently the third-leading cause of preventable patient deaths in the United States of America).<sup>1</sup>

I posit that because the root cause of medical mistakes is 'clinician cognitive overload' created by medical practice requirements executed in chaotic healthcare venues and because

traditional medical mistake mitigation methods (eg checklists and other heuristics promulgated by patient safety organisations)<sup>2–4</sup> exacerbate cognitive overload, therefore IT in the form of mobile applications, 'apps', is needed to provide real-time and cost-effective cognitive support. Furthermore, healthcare subject matter experts now can create and operate these apps using commercially available cloud-based software solutions known as mobile app development platforms (MADP) as described by the global business analyst firms such as Gartner and Forrester. ■

J PETER MELROSE

Founder and chief executive officer, CHARTSaaS, Fort Mill, USA

## References

- 1 Makary MA, Daniel M. Medical error – the third leading cause of death in the US. *BMJ* 2016;353:i2139.
- 2 The Joint Commission Center for Transforming Healthcare. *Robust Process Improvement*. JCCTH, 2019. [www.centerfortransforming-healthcare.org/what-we-offer/high-reliability-training](http://www.centerfortransforming-healthcare.org/what-we-offer/high-reliability-training)
- 3 Armstrong Institute for Patient Safety and Quality. *CUSP tools and resources*. The Johns Hopkins University. [www.hopkinsmedicine.org/armstrong\\_institute/training\\_services/workshops/cusp\\_implementation\\_training/cusp\\_guidance.html](http://www.hopkinsmedicine.org/armstrong_institute/training_services/workshops/cusp_implementation_training/cusp_guidance.html)
- 4 Patient Safety Movement Foundation. *Actionable Patient Safety Solutions (APSS)*. Patient Safety Movement Foundation. <https://patientsafetymovement.org/actionable-solutions/actionable-patient-safety-solutions-aps>

## Non-training clinical fellowships

Editor – We read with interest the paper by Jalal *et al.*<sup>1</sup> Sherwood Forest Hospitals, has provided non-training clinical fellowships since 2002.<sup>2</sup> An account of how it addresses the issues raised in the paper by Jalal *et al.* has been reported.<sup>3</sup>

Many overseas doctors are trained through traditional undergraduate medical curricula which do not emphasise communication and leadership skills, in contrast to significant emphasis on communication and leadership skills in the UK. It is a significant cultural shift for them to make the transition to settings where skills of communication and teamwork are given high priority in the clinical setting and assessed through work place based assessments using an electronic portfolio.

Our programme addressed this challenge through 8 weeks of a supervised supernumerary period in a supported environment, designed to expose the clinical fellows gradually to the work environment through an extended period of induction mentoring and coaching with a gradual transition to the new work environment to enable the fellows overcome language, communication, clinical and work-cultural challenges and adapt to the UK healthcare system.

Overseas doctors, who are employed in non-training positions, do not by right receive the training and educational opportunities offered to trainees in the National Training Programme and are not monitored by the Guardian for Safe Working Hours. Our programme addressed this issue by providing a study leave allocation, protected time for personal and professional development as well as deployment of the *gripes* tool.<sup>4</sup>

Leadership, management and educational governance of the Clinical Development Fellowship Programme is through a committee comprising the executive medical director, director of postgraduate medical education and senior human resources staff.

The success of the programme was reflected in the programme outcomes which showed that 49% of fellows gained a training