

## GP's SmartVax app raises the standard

**DR ALAN LEEB** GP, ILLAWARA MEDICAL CENTRE

### Q. Congratulations on winning the Peter Mudge Medal at the 2104 RACGP Awards for your innovative paediatric vaccine safety monitoring system? What inspired the development of SmartVax?

AL: The abrupt suspension of seasonal influenza vaccine in children on 22 April 2010 following an increase in adverse events came as a big surprise to us at the Illawarra Medical Centre. We were unaware that more than 100 of our children had experienced reactions. There had to be a better way of adverse event surveillance!

#### Q. How does it work, and what are its benefits?

AL: SmartVax is an app which uses SMS and smartphone technology to actively monitor vaccine safety in real time. It sends a series of SMS messages to all patients vaccinated, enquiring if patients have experienced an adverse event. Those who have are invited to complete an online survey. This data is collated and uploaded to the WA Health Department whose role is to monitor for increased rates of reaction.

## **Q.** What were the challenges faced in developing the system?

AL: I am fortunate to be part of an exceptional team. CDCD WA Health has been pivotal in the development, support and guidance of the project. Ian Peters, software developer, has had extensive experience with medical software which is matched by his enthusiasm and ability to problem solve. SmartVax has evolved over the past four years to where it is today.

#### Q. What is the next step for SmartVax?

AL: I firmly believe that General Practice has a duty of care to actively monitor for adverse events following immunisation, and in turn provide data which will inform relevant health authorities and our patients of the ongoing safety of vaccination. Our aim is to establish a broad network of general practices and health clinics monitoring and managing adverse reactions at a local level and then uploading aggregated data to state health for ongoing monitoring. This is core General Practice – it is the standard of care.

## Q. How would you pitch SmartVax to a room full of Vaccine Refusers?

AL: Immunisation is recognised as one of the most effective medical interventions to prevent disease and saves millions of lives each year. All vaccines may have side effects, most are mild, but serious adverse reactions can occur. We believe that the advantages of immunisation far outweigh any potential adverse events. Most vaccines are given early in life when infection, underlying congenital or neurological conditions and other illnesses are common. Because so many vaccines are given each day, it is inevitable that minor and major health events occur. SmartVax can help us make this important distinction of AEFI from health events.

#### Q. Why do you believe WA performs so poorly in the overall percentages of children assessed as fully immunised?

AL: I don't think WA does perform poorly! Based on the most recent Australian Childhood Immunisation Register (ACIR) data, WA is at an all-time high, with more than 90 per cent of children fully immunised. This demonstrates a big gain based on all the hard work by health professionals across the State. However, WA does appear to lag behind other states and one of the reasons may be that we have a higher proportion of children who have migrated to Australia from overseas. Most of these children have not received all the immunisations required to be considered 'fully vaccinated' by Australian standards, and others may not have had their immunisation histories entered into the ACIR. It is very important that immunisation providers make an extra effort to ensure that the children in their practice who were born overseas get caught up on any missing vaccinations and that their data is uploaded to ACIR.

# Q. Should unimmunised children be prevented from attending WA childcare centres? How else can we boost WA's immunisation rates?

AL: While I support the concept of enforcing childcare enrolment immunisation record checks, I don't think we need to go so far as to bar children from attending daycare if they are not fully vaccinated. It has potential to polarise the community and is unfair to the children. Strengthening childcare enrolment immunisation checks, similar to what has happened in New South Wales, would help identify children who are behind on their vaccinations and serve to remind their parents of the importance of immunisations. GPs and practice nurses are key to improving immunisations rates in WA because over 60 per cent of all childhood immunisations are administered in GP practices. General Practice must be supported in their excellent effort to maintain high levels of immunisation.

#### Q. If you were Minister of Health...

AL: I would revoke the short-sighted cancellation of General Practice immunisation incentives. As a direct effect of these incentives introduced in the early 1990s, childhood immunisation rates rose from about 65 per cent to the current level of about 91 per cent. General Practice is pivotal to an immunisation program and should be adequately funded to deliver comprehensive immunisation services.

#### Q. How do you unwind after a long day's work?

AL: With a great big cuddle from my grandchildren.

#### Q. Your mother always told you...

AL: Always treat the patient, not the disease. ■