LETTERS

Which medicines do young children access from blister packs?

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To the Editor: Although there are few deaths due to poisoning in Australian children, from 1993 to 1997 there was an average of more than 2500 admissions to hospital per year for assessment of poisoning with medicines in children younger than 5 years.[1]

Child-resistant packaging has been effective in preventing accidental poisoning with prescription medicines and aspirin in young children in the United States.[2,3] In the US, both reclosable and non-reclosable (blister or strip) packaging used for pharmaceuticals required to be in child-resistant packaging is tested to confirm its effectiveness in preventing access by children.[4] In Australia, only reclosable packaging is required to be child-tested. Blister or strip packaging, which has not usually been child-tested, is accepted as an alternative to child-resistant reclosable packaging.[5]

We conducted a study at the New South Wales Poisons Information Centre (NSWPIC) over 9 weeks from 18 July to 17 September 2003. Our aims were to ascertain which medicines children younger than 5 years access directly from blister or strip packaging, and whether assessment at a hospital was recommended. The study was approved by the Ethics Committee of the Children's Hospital, Westmead.

Callers ringing about a suspected accidental ingestion of a solid dose medicine in a child younger than 5 years were asked whether the child accessed the medicine directly from a blister or strip pack. There were 318 accidental exposures to solid dose medicines in these children during the study period. In 186 exposures (58%), the caller said the medicine was normally in a blister or strip pack and the child obtained it directly from the pack.

A wide range of medicines (40 different drugs or drug groups) were associated with the exposures; the most common were oral contraceptives (49 exposures) and paracetamol (27 exposures). Some of the exposures involved medicines that can cause severe toxicity when children ingest a small number of dose units, such as clonidine, olanzapine, narcotic analgesics, and tricyclic antidepressants.

In 36 exposures where the child obtained the medicine directly from the pack, the caller was advised to take the child to hospital (Box). Many of the medicines associated with these exposures (eg, paracetamol, preparations containing narcotic analgesics, antidepressants, antihistamines, iron and clonidine) are required to be in child-resistant packaging.[5]

Our study shows that blister or strip packs currently in use did not prevent children accessing drugs. This finding calls into question whether blister or strip packaging that has not been child-tested presents an adequate safety barrier.

No outcomes of drug ingestion are known in this study, which is a limitation. However, assessment of these children in hospital represents a financial burden to the health care system regardless of the outcome. Further studies would be required to quantify the harm associated with exposures to medications packaged in blister or strip packaging in young children and to assess the effectiveness of such packaging in the prevention of poisoning.

Drugs accessed from blister or strip packs where child required referral to hospital

Drug or drug group	Number of exposures
Paracetamol	8
Paracetamol/narcotic combination analgesics	3
Selective serotonin re-uptake inhibitors	3
Antidepressant: other/unknown	2
Antiemetics	2
Antihistamines	2
Cough/cold preparations, no paracetamol	2
Iron	2
Other (eg, clonidine, olanzapine)	12
Total	**36**

Acknowledgement: The support of Judith Kirby and the specialists in poisons information at the NSWPIC is gratefully acknowledged.

1 O'Connor P. Accidental poisoning of preschool children from medicinal substances, Australia. Injury Research and Statistics Series No. 9. Adelaide: Australian Institute of Health and Welfare, 2002. (AIHW Catalogue No. INJCAT39.) Available at: http://www.nisu.flinders.edu.au/pubs/reports/2001/injcat39.pdf (accessed Nov 2004).
2 Rodgers GB. The safety effects of child-resistant packaging for oral prescription drugs. Two decades of experience. *JAMA* 1996; 275: 1661-1665.
3 Rodgers GB. The effectiveness of child-resistant packaging for aspirin. *Arch Pediatr Adolesc Med* 2002; 156: 929-933.
4 United States Consumer Product Safety Commission. Testing procedure for special packaging. In: Federal Regulations Associated with the Poison Prevention Packaging Act. Title 16 CFR Part 1700.20. Available at: http://www.access.gpo.gov/nara/cfr/waisidx_04/16cfr1700_04.html (accessed Nov 2004).
5 Therapeutic Goods Order No. 65. Child-resistant packaging for therapeutic goods. Canberra: Commonwealth of Australia, 2004. Available at: http://www.tga.gov.au/docs/html/tgo/tgo65.htm (accessed November 2004). ❑

Low-carbohydrate diets in Australia: prevalence and public perceptions

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To the Editor: Low-carbohydrate diets have re-emerged into the public spotlight and are enjoying widespread popularity. However, current evidence indicates that low-carbohydrate diets have no significant advantage over more traditional energy-restricted diets for long-term weight loss and maintenance.[1-3] While these diets have shown short-term efficacy in modifying some lipid parameters and measures of insulin sensitivity, questions remain about the risk of adverse effects with long-term carbohydrate restriction.[4]

The scientific literature has not addressed the questions of how the general public perceive these diets, and what dieting approaches they adopt. Dieting perceptions and practices within the community may be far removed from the strictly controlled situation of published research.

A national telephone survey of 1200 adults aged 18 years and over was conducted by the private market research company Newspoll from 6 to 8 August 2004. The survey asked about knowledge of and attitudes to carbohydrates and dieting. Telephone numbers were randomly selected, with a quota for capital city and non-capital city areas. Selection of an individual in each household was based on the last birthday. Response rate to the survey was 11%. Sex, age, marital status and working status demographics were representative of the Australian adult population.

The main findings are summarised in the Box. Most of those surveyed correctly identified foods such as pasta and bread as "carbohydrate foods". Only a third of people identified soft drinks and lollies as carbohydrate foods, and 20% incorrectly identified cheese and eggs as carbohydrate foods. Almost 17% of people had either tried, or intended to try, a low-carbohydrate diet, with women more likely to have tried this diet. Half of those surveyed believed that carbohydrate foods should make up a quarter or less of the daily diet (current health recommendations are that about half the diet should comprise carbohydrates). Almost 70% of those surveyed believed they needed to cut back on carbohydrates to lose weight.

Based on this survey, low-carbohydrate dieting practices are as widespread in Australia as in the United States.[5] Interestingly, the US study noted a greater propensity to use carbohydrate-reduced diets among those who were obese, had diabetes, hypertension or high cholesterol.

Our data demonstrated widespread misunderstanding of what constitutes a high-carbohydrate food, which may leave many individuals at risk of choosing a diet that selectively excludes wholegrain foods, fruits and some dairy products. Health professionals should be aware that low-carbohydrate diets remain popular, that the people who are following these diets may represent a more "at risk" population, and that the food choices made by those following this dietary pattern may have adverse long-term health effects.

Competing interests: The Newspoll survey was commissioned by GoGrains (a nutrition communication initiative established for the Australian grains industry). The complete and unedited results from the survey were provided to the authors by GoGrains for independent analysis and scientific reporting without restriction. The authors were not involved in designing or conducting the survey, and have no commercial or personal relationship with GoGrains or the Australian grains industry.

1 Wyatt HR, Seagle HM, Grunwald GK, et al. Long-term weight loss and very low carbohydrate diets. *Obes Res* 2000; 8 Suppl 1: 87S.

2 Stern L, Iqbal N, Seshadri P, et al. The effects of low-carbohydrate versus conventional weight loss diets in severely obese adults: one-year follow-up of a randomized trial. *Ann Int Med* 2004; 140: 778-785.

3 Foster GD, Wyatt HR, Hill JO, et al. A randomized trial of a low-carbohydrate diet for obesity. *N Eng J Med* 2003; 348: 2082-2090.

4 Bilsborough SA, Crowe TC. Low-carbohydrate diets. What are the long-term health implications? *Asia Pac J Clin Nutr* 2003; 12: 396-404.

5 NPD Foodworld. Carbohydrate consumption patterns. Rosemont, Ill: The NPD Group Inc, 2004. Available at: http://www.npdfoodworld.com/foodServlet?nextpage=pr_body.html&content_id=865 (accessed Dec 2004). ❑

Respondents' knowledge of and attitudes to carbohydrate foods and low-carbohydrate dieting

Question	Total ($n = 1200$)	Men ($n = 600$)	Women ($n = 600$)
Which of the following foods, if any, do you regard as carbohydrate foods?			
Bread	89%	85%	93%
Pasta	90%	88%	93%
Rice	80%	76%	83%
Breakfast cereal	79%	77%	80%
Lollies	35%	36%	35%
Soft drink	34%	31%	36%
Cheese	20%	22%	19%
Eggs	18%	20%	16%
Have you tried or do you intend to try the Atkins diet, or some other low-carbohydrate diet?	17%	11%	22%
Based on official recommended guidelines for a healthy diet, about how much of a person's diet should be made up of foods such as bread, breakfast cereal, pasta and rice?			
Less than a quarter	7%	7%	7%
About a quarter	43%	34%	51%
About half	29%	31%	26%
About three quarters	6%	8%	4%

Tramadol and seizures

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To the Editor: Labate and colleagues note that tramadol is the most frequently suspected cause of provoked seizures at their First Seizure Clinic.[1]

Early in 2003, the Adverse Drug Reactions Advisory Committee (ADRAC) reported to Australian prescribers the results of the first 4 years of experience with tramadol in Australia.[2] At the time, ADRAC noted that 26 cases of convulsions had been reported among a total of 354 reports on tramadol.

By January 2005, ADRAC had received a total of 921 reports involving tramadol, of which 66 described convulsions. (Labate et al reported that 83 cases of convulsions associated with tramadol had been reported to ADRAC. This is incorrect, but the mistake probably resulted from an error in interpretation of information supplied by the Adverse Drug Reactions Unit.) In 27 cases, tramadol was the only suspected drug, but in the other 39 cases there were various other suspected drugs. This included 20 reports in which there was a suspected drug interaction. Both oral and injected tramadol have been implicated.

The product information for tramadol states that convulsions have been reported in patients using tramadol at the recommended dose levels and that the risk may be greater when doses of tramadol exceed the recommended limits.[3] In addition, tramadol may increase the seizure risk in patients taking other medications that lower the seizure threshold. Drugs specifically mentioned in this context include the selective serotonin reuptake inhibitors, tricyclic antidepressants and antipsychotic drugs. In the 39 cases reported to ADRAC in which there were one or more suspected drugs in addition to tramadol, tramadol was being used with selective serotonin reuptake inhibitors (10 cases), tricyclic antidepressants (6 cases) and, in 13 cases, other drugs that may also have the potential to lower the seizure threshold, such as pethidine (2 cases), venlafaxine (2), propofol (2) and bupropion (2). In two of the cases in which tramadol was the only suspected cause and two of the cases with multiple suspected causes, the patients were also taking anticonvulsant drugs for seizure control.

ADRAC data indicate that, although tramadol alone can induce seizures, these are more likely to occur in the setting of the concomitant use of other drugs that also have the potential to lower the seizure threshold.

1 Labate A, Newton MR, Vernon GM, Berkovic SF. Tramadol and new-onset seizures [letter]. *Med J Aust* 2005; 182: 42-43.
2 Adverse Drug Reactions Advisory Committee. Tramadol – four years' experience. *Aust Adverse Drug React Bull* 2003; 22: 2.
3 Tramal product information. Melbourne: CSL Limited, 27 November 2002. ❑

Bedwetting and toileting problems in children

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To the Editor: I was interested to read the article about managing nocturnal enuresis in children,[1] but was surprised and disappointed that there was no mention of the place of medical hypnotherapy.

Hypnotherapy can be particularly valuable in the treatment of monosymptomatic nocturnal enuresis in children aged from 7 or 8 years upwards, and has the advantage of being completely non-invasive with no side effects. It focuses on empowering the children to take control of their own bodily functions.[2]

Hypnotherapy is also of value in the management of nocturnal enuresis associated with day-time symptoms, such as urgency with or without incontinence, and can also be used to enhance the efficacy of treatments like enuresis alarm systems.

While there are few well documented comparative studies[3] on the benefits of hypnosis versus other treatments for nocturnal enuresis, there are numerous anecdotal reports and studies involving a series of patients being successfully treated with hypnotherapy.

Hypnosis should only be used by properly trained doctors or psychologists who have access to the full range of medical investigations.

Hypnosis is of course not a panacea, but is an excellent first-choice treatment for monosymptomatic nocturnal enuresis, the commonest type seen by general practitioners. If, after three or four treatment sessions, hypnosis is not effective, other approaches can be employed.

A quick search of the internet using the terms "enuresis and hypnotherapy" will reveal over 700 sites with information on the subject, and there are several highly respected professional journals that publish clinical and research papers and articles on the use of hypnosis in medicine and psychology. All of these are published by reputable professional societies whose membership is limited to registered health professionals.

The Australian Society of Hypnosis (http://www.ozhypnosis.com.au) conducts ongoing training courses in all states of Australia for graduates in medicine, psychology and dentistry.

Hypnotherapy is now becoming more and more accepted worldwide as a valuable and legitimate tool that can be used, in conjunction with the more traditional approaches, in a wide variety of medical and psychological problems.

It is a great pity that many clinicians are either not aware of its value or are still loathe to accept it because of negative connotations associated with its use for entertainment purposes and in the hands of non-professional therapists.

1 Caldwell PHY, Edgar D, Hodson E, Craig JC. 4. Bedwetting and toileting problems in children. *Med J Aust* 2005; 182: 190-195.
2 Olness K. The use of self-hypnosis in the treatment of childhood nocturnal enuresis: A report on 40 patients. *Clin Pediatr (Phila)* 1975; 14: 273-275, 278-279.
3 Banerjee S, Srivastav A. Hypnosis and self-hypnosis in the management of nocturnal enuresis: a comparative study with imipramine. *Am J Clin Hypn* 1993; 36: 113-119. ❑

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In reply: Thank you for your interesting comments regarding hypnotherapy in the treatment of nocturnal enuresis in children.

There are a number of therapies, such as hypnotherapy, electrotherapy and acupuncture, which show great promise for the management of nocturnal enuresis. We only included in our article[1] treatments that were supported by evidence from well documented comparative studies. Using comprehensive search strategies, we have not found comparative studies for these complementary therapies.

We would be very interested to be directed to studies that have formally evaluated other interventions. There is a huge need for randomised controlled trials comparing alternative treatment strategies with conventional therapy in this area.

1 Caldwell PHY, Edgar D, Hodson E, Craig JC. 4. Bedwetting and toileting problems in children. *Med J Aust* 2005; 182: 190-195. ❑

Genetic risk estimation by health care professionals

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To the Editor: Genetic risk estimation is a key element of the practice of clinical geneticists and genetic counsellors. Given this, it was with some concern that we read the findings of Bonke and colleagues regarding the performance of (mainly European) geneticists and counsellors in the application of Bayesian analysis to risk estimation.[1]

Bayesian analysis is taught as part of Australasian training in both clinical genetics and genetic counselling, and has been for as long as there have been formal programs. Thus, most Australian geneticists and counsellors should be familiar with the application of Bayes' theorem to risk estimation.

In actual clinical practice, it is rare to need to perform this type of analysis. This is partly because of the rapid progress in molecular genetic testing, which often obviates the need for such calculations, and partly because situations in which Bayesian analysis is clinically helpful are uncommon. Pedigrees like those in the study by Bonke et al do not come along often; when they do, the modification of prior risk by Bayesian analysis is not often important. For example, modification of a risk from 50% to 33% or from 25% to 17% (as in two of the examples used by Bonke et al) is unlikely to alter decision-making for the families involved. Specifically, as these examples all involve testing for Huntington's disease, in which molecular analysis is usually quite straightforward, we would expect very few individu-

als would decide whether to proceed with testing based on being given information about modification of risk expressed this way.

Moreover, when you are not performing this type of calculation regularly, it is time-consuming to do. It seems possible that many of those who completed the questionnaire would have taken greater care, and achieved greater accuracy, if faced by a real clinical situation. Nonetheless, for those of us who are involved in training clinical geneticists and genetic counsellors, the article is a useful reminder of the importance of this skill, and we will communicate with supervisors to reinforce the importance of teaching Bayesian analysis to our trainees.

Competing interests: None identified.

1 Bonke B, Tibben A, Lindhout D, et al. Genetic risk estimation by healthcare professionals. *Med J Aust* 2005; 182: 116-118. ❑

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In reply: Geneticists and counsellors must be able to calculate risks according to professional standards, regardless of whether modified risks lead to decision changes. Does training in genetic risk calculation help? Only 21% of our respondents who had had such training recently (< 3 years ago) estimated all target risks correctly. In response to Kirk et al, calculating conditional risks need not be time-consuming in scenarios similar to our target pedigrees,[1] and is often helpful when at-risk (grand)parents do not wish to be tested but their offspring do.

Given n children at 25% prior risk tested negative and no other (grand)children tested, the conditional risk for at-risk individuals in generation g (with $g = 0$ at 50% prior risk, $g = 1$ at 25% prior risk, etc) is $1/[2^g(2^n+1)]$. Thus, in target #4 ($n = 1$), the father's risk ($g = 0$) equals $1/[2^0(2^1+1)] = 0.33$. In target #9 ($n = 2$), the unborn's risk ($g = 2$) equals $1/[2^2(2^2+1)] = 0.05$.

Similar formulas for more complicated scenarios are available upon request. In calculating risks, however, care must be taken that the pedigrees and target individuals are comparable to our scenarios. In target #7, for instance, the risk for the untested aunt does not increase simply because of the decreased risk for her brother (gambler's fallacy).[2]

1 Bonke B, Tibben A, Lindhout D, et al. Genetic risk estimation by healthcare professionals. *Med J Aust* 2005; 182: 116-118.
2 Tversky A, Kahneman D. Judgment under uncertainty: heuristics and biases. *Science* 1974; 185: 1124-1131. ❑

Is the Framingham coronary heart disease absolute risk function applicable to Aboriginal people?

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To the Editor: Wang and Hoy[1] deserve much credit for highlighting yet again the poor state of health of Indigenous Australians. However, their conclusion that the Framingham equation underestimated risk and that better prediction equations are needed may miss the point.

The Framingham equations work well in other populations if the aim is to rank groups of individuals into higher or lower risk categories. Box 4 in the article by Wang and Hoy shows that they do this pretty well across increasing age groups. Framingham equations fall down when they are used to estimate absolute risk in populations whose coronary heart disease (CHD) rates are different from those in the Framingham study. Some years ago, we showed that adjusting

the Framingham risk estimates in line with the overall incidence of CHD in the population modestly improved their performance.[2]

This is all very nice, but is better risk estimation the solution? We don't estimate risk in other high-risk groups (eg, patients with CHD), because all are at high risk and all need risk factor reduction. A brief look at the risk factor profile in Box 2 of Wang and Hoy's article reveals an alarming picture of uncontrolled CHD risk factors in a relatively young population (average age, 33–36 years). Cigarette smoking, dyslipidaemia, diabetes and overweight prevail.

Perhaps, rather than concentrating on quantifying the exact risk in such a high-risk population, we should look at the reasons for the high rates of risk factors. What motivates some Indigenous people to smoke more, be more overweight and have a higher incidence of dyslipidaemia and diabetes than other Australians?[3,4] Do they feel disenfranchised when governments infer they are "dirty" by tying financial aid to face-washing?[5] Do they have attractive employment opportunities? Do they have enough sense of control over their lives to reduce their need to indulge in cigarettes and other short-term pleasures? Are there adequate supplies of healthy foods that they like? These factors may differ, as some rural Aboriginal communities have much lower rates of smoking, overweight and diabetes[6] than others. Exploring these issues will aid preventive methods aimed at the whole community.

In the meantime, I would suggest that the Framingham equation does rank members of this community — into modest, high, and very high risk (the average 45–54-year-old has a 20% risk of a CHD event over 10 years[1]). This may help guide the medical treatment of risk factors and the pursuit of the medical model of prevention while social changes dictated by Aboriginal communities take effect.

1 Wang Z, Hoy WE. Is the Framingham coronary heart disease absolute risk function applicable to Aboriginal people? *Med J Aust* 2005; 182: 66-69.
2 Kinlay S, O'Connell D, Evans D, Francis L. The validity of estimating heart disease reduction from a Framingham logistic equation. *J Clin Epidemiol* 1992; 45: 553-560.
3 Guest CS, O'Dea K, Larkins RG. Blood pressure, lipids and other risk factors for cardiovascular disease in Aborigines and persons of European descent of southeastern Australia. *Aust J Public Health* 1994; 18: 79-86.
4 Thompson PL, Bradshaw PJ, Veroni M, Wilkes ET. Cardiovascular risk among urban Aboriginal people. *Med J Aust* 2003; 179: 143-146.
5 Behrendt L. Nothing mutual about denying Aborigines a voice. *The Sydney Morning Herald* 2004; 8 Dec : 13.
6 Gault A, O'Dea K, Rowley KG, et al. Abnormal glucose tolerance and other coronary heart disease risk factors in an isolated aboriginal community in central Australia. *Diabetes Care* 1996; 19: 1269-1273. ❑

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In reply: We agree with Kinlay that it is important to prevent risk factors at the population level (a population strategy). However, there is also a need to properly identify high-risk individuals who require immediate medical intervention (a high-risk strategy) and to understand the full spectrum of factors that determine such risk.

The primary focus of our study was to assess whether the widely used Framingham risk functions were applicable to Aboriginal people in remote communities. Our data show that the Framingham functions significantly underestimated the risk of coronary heart disease (CHD).[1] The high CHD risk in Aboriginal people cannot be fully explained by traditional risk factors. Some major risk factors such as abnormal total cholesterol level and obesity in the study population are actually not as prevalent as those in the general Australian population.[2] Evaluation of traditional risk factors and identification of novel factors in this population are useful for the development of intervention strategies. Novel factors such as infection, inflammation, albuminuria and low birthweight have been suggested as predictors of CHD risk in this population.[3,4]

Kinlay suggests that Framingham functions should be used to predict CHD risk in Aboriginal people. We disagree. Guidelines for the management of Aboriginal people need to recognise the serious underestimation of risk that the Framingham formulas provide.

We agree that some high-risk groups, such as patients with established CHD, do not need additional risk estimates. With our current knowledge, however, we can not say whether the whole Aboriginal community should be treated as a very high-risk population.

1 Wang Z, Hoy WE. Is the Framingham coronary heart disease absolute risk function applicable to Aboriginal people? *Med J Aust* 2005; 182: 66-69.
2 Wang Z, Hoy W. Hypertension, dyslipidaemia, body mass index, diabetes and smoking status in Aboriginal Australians in a remote community. *Ethn Dis* 2003; 13: 324-330.
3 McDonald S, Maguire G, Duarte N, et al. C-reactive protein, cardiovascular risk, and renal disease in a remote Australian Aboriginal community. *Clin Sci* 2004; 106: 121-128.
4 Wang Z, Hoy W. Albuminuria and incident coronary heart disease in Australian Aboriginal people. *Kidney Int* 2005. In press. ❑

Inequalities in the provision of bariatric surgery for morbid obesity in Australia

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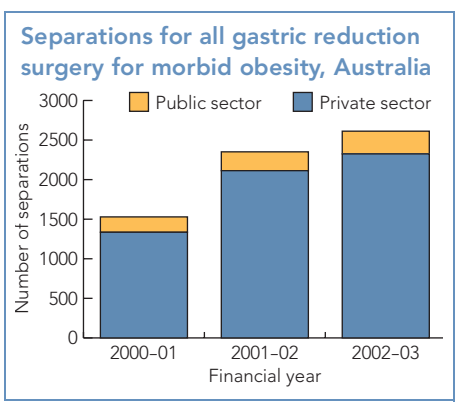
To the Editor: We support the warning of Talbot and colleagues regarding the inequities of the current system for provision of bariatric surgery to the morbidly obese in Australia.[1]

We recently analysed data on the number of separations for bariatric surgery for morbid obesity in Australia. The two most common procedures in Australia are gastric reduction surgery (procedure code 30511, which includes gastric stapling, laparoscopic adjustable gastric banding [LAGB] and gastroplasty) and gastric bypass surgery (procedure code 30512). The number of separations for procedure 30512 has remained quite stable and relatively low (around 200 a year) over the past few years. By contrast, the number of separations for procedure 30511 has been continually increasing. While the exact number of LAGB procedures can not be identified from this single code, it is assumed that the majority of the increase is due to LAGB, as it is a less invasive procedure and therefore generally more acceptable to patients.[2] However, the number of separations for gastric reduction surgery in public hospitals is low and has



remained so. In the financial year 2000–01 there were 1529 separations for gastric reduction for morbid obesity across Australia, only 194 (13%) of which were performed in public hospitals (see Box). In 2001–02 the total number increased to 2351, but the number performed in public hospitals increased only marginally, to 238 (10% of the overall number). In 2002–03, the last year of available data, there were 2612 separations, of which only 287 (11%) were performed in public hospitals (unpublished data, courtesy of the Australian Institute of Health and Welfare).

Clearly, if this issue is not addressed systematically, it will only serve to widen the socioeconomic inequalities in health associated with obesity in Australia.

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Competing interests: Paul O'Brien is a bariatric surgeon who receives research funding from Inamed Health Corporation, manufacturers of the Bioenterics Lap Band. Inamed Health Corporation had no involvement in writing or submitting this letter.

1 Talbot ML, Jorgensen JO, Loi KW. Difficulties in provision of bariatric surgical services to the morbidly obese. *Med J Aust* 2005; 182: 344-347.

2 Medical Services Advisory Committee. Laparoscopic adjustable gastric banding for morbid obesity. Canberra: Australian Department of Health and Ageing, 2003. (MSAC Reference 14.) ❑

Burnout and psychiatric morbidity in new medical graduates

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To the Editor: The recent article by Willcock and colleagues on the high psychological morbidity and level of burnout that interns experience during their first year in hospital highlights an important topic.[1]

Willcock et al point out that there is an increase in psychiatric morbidity over the intern period in first-year medical graduates. This corroborates the findings of a larger study we conducted among interns during their first year, in which we showed that psychiatric morbidity rises, particularly during the middle of this first year as a doctor, but then decreases by the end of the year.[2]

The point made by Willcock et al[1] is that psychiatric morbidity is not limited to first year graduates — senior doctors are also susceptible to psychological morbidity and burnout.[3]

Their article highlights the continuing need for workplace reform and support for the medical profession. In addition to reducing working hours, other interventions need to be considered to prepare medical students for their profession, and to reduce the factors which contribute to morbidity (eg, workload, multiple tasking, incessant paging). It should be feasible to test the efficacy of such interventions with the same instruments (such as the General Health Questionnaire) in future generations of interns, and to compare these results with the above studies. Showing that such interventions are effective will provide a strong platform from which to implement wider change in the workplace.

1 Willcock SM, Daly MG, Tennant CC, Allard BJ. Burnout and psychiatric morbidity in new medical graduates. *Med J Aust* 2004; 181: 357-360.

2 Bruce C, Thomas PS, Yates DH. Health and stress in Australian interns. *Intern Med J* 2003; 33: 392-395.

3 Bruce CT, Sanger MM, Thomas PS, et al. Factors affecting female or male consultant stress in an Australian teaching hospital [letter]. *Med J Aust* 2003; 179: 174-175. ❑

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In reply: Bruce and colleagues are correct to call for ongoing workplace reform and support for the medical profession in general. Our study, which followed medical students to the end of their intern year, did not show a significant fall in psychiatric morbidity towards the end of the intern year as theirs did. Our review of the recent literature suggests that any "improvement" in psychological morbidity after the mid-year peak during internship is likely to be transient, with the early postgraduate period representing a period of transition from normative population values of burnout and morbidity to levels which remain high throughout a medical career, when compared with the general population.

The traditional interpretation of the internship as a "baptism by fire", which tests and ultimately strengthens the new medical graduate, does not hold up to scrutiny. A realistic assessment of this period suggests that it is one where stress and distress often reach unhealthy levels, and where dysfunctional coping strategies may be developed which persist throughout a medical career.

The development of mature personal coping strategies along with systemic changes to promote engagement with work have been identified as the most likely means of limiting burnout and its sequelae among medical practitioners.[1]

1 Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Ann Rev Psychol* 2001; 52: 397-422. ❑

Integration of overseas-trained doctors into the Australian medical workforce

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To the Editor: McGrath's article on integrating overseas-trained doctors (OTDs) into the Australian medical workforce noted that the areas of difficulty in this area have been well defined.[1] McGrath challenged us to "get on with it". We interpret this challenge to mean that there has been enough regurgitating and redefining of the problem, and it is time for some action.

In South Australia, the difficulties of integrating overseas doctors into the workforce mirror those experienced by other states. The Department of Health Overseas Trained Doctor 2004 database listed 93 OTDs as eligible to work in SA. Seventy were employed. All of these doctors had only completed the Australian Medical Council (AMC) Multiple Choice Question (MCQ) examination. Since its inception in April 2003, the Postgraduate Medical Council of South Australia (PMCSA) AMC doctors subcommittee has worked to put in place a number of educational initiatives to support and assist OTDs to complete the Australian Medical Council Exams, and to advocate for their ongoing needs for better orientation to the workplace and protected education time at work.

The programs initiated by the PMCSA are both Government-funded and self-funded. They are: culture and medical communication for doctors, MCQ tutorial program, ready for work program, hospital tutorials,

objective structured clinical examination practice exam, clinical bridging program, and study groups.

Examination results in 2004 for candidates undertaking the PMCSA programs bettered the national average. Of the 16 enrolled participants in the MCQ tutorial program, which ran from January to April 2004, nine sat the May AMC MCQ exam and seven deferred. Eight of the nine passed, giving a pass rate of 89% (AMC pass rate 56%; Australian Medical Council, personal communication).

In the AMC clinical examinations, our candidates achieved an overall pass rate of 67%; 30 sat the exam, 20 passed and 10 were given a re-sit or a fail result. (AMC pass rate 59%; Examinations Officer Clinical, Australian Medical Council, personal communication). Twenty chose to defer after using the various programs and tutorials on offer to gauge their level of preparedness. These doctors are planning to undertake the exam in 2005.

These programs constitute the South Australian Action Plan for OTD inclusion in the workforce.[2] All of these programs are available and appropriate for any OTD (permanent resident or temporary resident). To the best of our knowledge, no temporary resident wishing to work in "areas of need" has enrolled in our programs yet.

1 McGrath BP. Integration of overseas-trained doctors into the Australian medical workforce. *Med J Aust* 2004; 181: 640-642.
2 Hart LS, Vernon-Roberts J. South Australian action plan for OTD inclusion in the Australian medical workforce. Adelaide: Postgraduate Medical Council South Australia, 2005. ❑

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IN REPLY: Hart and Vernon-Roberts outline the South Australian Action Plan by the Postgraduate Medical Council of South Australia Australian Medical Council (AMC) doctors subcommittee to support and assist overseas trained doctors (OTDs). Their worthy efforts are directed predominantly towards the many OTDs preparing for their AMC examinations, with associated bridging and "ready-for-work" programs to facilitate entry into the hospital medical workforce.

However, the question that needs to be addressed, and which was the main thrust of my article,[1] is why we don't have a national coordinated approach to all elements of the pathway to integrating OTDs into the Australian health care system. This cannot be a largely political approach, as is the Australian Government's Strengthening Medicare initiative, which is particularly weak in the areas of assessment for safe practice and support in training.

A recent article has highlighted the need for a national approach to coordinated governance for postgraduate medical education in Australia and the unsatisfactory complexity of medical education and training systems in this country.[2] This excellent article includes only very brief reference to OTDs, using the term "international medical graduates",[2] which is becoming the more acceptable term and the one recognised by other countries. It does not address the many gaps and problems in the pathways for this group.

The number of international medical graduates seeking employment and/or being actively recruited into the medical workforce in Australia each year is far greater than the number graduating from our own medical schools. Thus, there is a degree of urgency about the debate on postgraduate medical education in Australia. We need a national authoritative body, like the new United Kingdom Postgraduate Medical Education and Training Board.

1 McGrath BP. Integration of overseas-trained doctors into the Australian medical workforce. *Med J Aust* 2004; 181: 640-642.
2 Dowton B, Stokes M-L, Rawstron E, et al. Postgraduate medical education: rethinking and integrating a complex landscape. *Med J Aust* 2005; 182: 177-180. ❑

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