Dispensing with the chemist
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THE pharmacy business isn’t what it used to be. Long gone are the days when chemists mixed potions in accordance with doctors’ scrawled instructions or secret formulae.

Today’s pharmacy is a bristling hi-tech venture, which is why the retail business model, with the dispensary at the rear so customers must navigate laden aisles of gifts, cosmetics, and nappies to hand over a paper script, is looking shaky.

With web links to suppliers, the Health Insurance Commission and private funders in place and electronic prescribing direct from the doctor’s desktop just around the corner, scuffles over pharmacy location rules seem silly.

On the internet, it doesn’t matter where the pharmacist is, just so long as the customer receives the order by overnight delivery or from a kiosk in a nearby supermarket. The other major scrap, over rising Pharmaceutical Benefit Scheme costs, presents an opportunity.

Subsidising several thousand small retailers across the nation just so people can obtain medications at the local shops may not be the most efficient delivery model in the long term.

In Britain, the government is planning to rip huge savings from drug costs by setting up large-scale regional dispensaries and local dispatch or collection arrangements.

In Australia, the recent National Competition Policy review found “whatever the benefits”, present restrictions on pharmacy ownership and operation impose large costs on consumers, taxpayers and the wider community.

“Continuing escalation of PBS costs will necessitate a focus on ways of improving cost-effectiveness in the pharmacy sector,” it says.

The Australian Medical Association was blunter: “Distribution of medications under the PBS is expensive. In 2003-04, distribution costs were 33.9 per cent of the budget cost to the Government. Given the budgetary pressures, an efficient and cost-effective distribution system is a necessity, not an optional luxury.”

Pharmacists are far from Luddites. They were early and enthusiastic adopters of technology, developing quite a range of systems to meet specific needs.

Right now, the federal Government is spending $14.5 million to ensure all pharmacies have broadband internet access plus $1000 a pharmacy under a security incentive, and up to $2000 towards installing a barcode reader (in a bid to reduce drug selection errors at the point of sale).

Pharmacists routinely engage in e-commerce with wholesalers and the HIC, a proficient IT practitioner that is introducing PBS Online, its next-generation platform for pharmacy payments.

Electronic prescribing, technically possible but hampered by regulatory requirements that signed paper scripts are returned to the HIC for reconciliation, cannot be far behind.

Sam Di-Giacomo, chief executive of pharmacy products supplier Advance Healthcare Group, is upbeat about the prospects for e-prescribing, and Advance has just launched a joint venture with the ePharmacy/My Chemist Group to take advantage of their combined internet retail, mail order and supply businesses. “We’d like to see the script leave the doctor’s desktop and go straight to an electronic provider like us,” he says.

“We’ve trialled it, and it can be done. At the moment there’s an administrative impediment, in that the HIC requires the physical script, but the fact that the HIC is doing PBS Online suggests they’re getting ready for electronic scripts.

“There are 220 million scripts written a year, and they have to be kept for seven years. That's a lot of paper.”
The ePharmacy partners are aiming for an $8 million turnover, based on aggressive marketing and discounting in the private, non-PBS script space. "Now, the PBS is a $6 billion market and growing, while private scripts -- that's your Viagras, your Zybans -- are about $1.8 billion and growing fast," Di-Giacomo says.

"This is why we've put all this together, because this is a space you can discount through the wholesaler. With this model, we've demonstrated that we can do 20 to 30 per cent discounts on the supply of drugs for private scripts."

Based in Western Australia, Advance developed its Pharmeasy mail order web pharmacy business, allowing customers to post in the script, on the US model. There, one in four people have their pharmaceuticals home-delivered.

"We think there's room in Australia for that model. It's obviously cheaper, more convenient, it's efficient and it caters for the time-poor and the homebound," Di-Giacomo says.

"We looked at the landscape and came up with a legal way to do it, because we're not pharmacists, we're an ASX-listed corporation."

Scaling up to provide a nationwide service proved more difficult, so Advance merged its Pharmeasy business, now rebranded as ePharmacy, with Australia's largest web-based pharmacy, ePharmacy in Queensland with about 60,000 members, and its main shareholder, the Victorian My Chemist chain. In NSW, Pharmacy Direct is another well-established webmail order business, selling a wide range of over-the-counter products as well as dispensing medications.

It uses Australia Post registered mail courier services to deliver orders, and discounts heavily through catalogue promotions.

Not to be outdone, the Pharmacy Guild entered a "strategic alliance" last year, teaming its half-owned software developer PCA NU Systems with the then ASX-listed Health Communication Network, providing a potential link between HCN's Medical Director software on GPs' desktops with PCA's Fast Reliable Easy Dispensing systems in shops.

With HCN claiming Medical Director is used by 16,000 doctors to manage health records of 15 million Australians and generating more than 90 million prescriptions a year, and PCA claiming FRED is used by 2200 pharmacies to dispense more than 50 million scripts a year, the union was described as "a new era of electronic collaboration."

Private medico group Primary Health Care bought HCN earlier this year and delisted. HCN is at present redeveloping and upgrading its flagship product.

Meanwhile, there's movement on the hospital pharmacy IT front, with the South Australian, West Australian, Queensland and NSW governments "starting to make noises" about upgrading existing, largely inventory, systems.

IBA Health is carefully positioning itself in this space, with the purchase of a New Zealand boutique IT company, E Pi, which has developed a next-generation hospital pharmacy system incorporating medication management.

"Most hospital pharmacy systems focus on dispensing, producing a label and managing stock," IBA Health marketing director Greg King says.

"The next-generation ones are doing all that but are also starting to look at things like drug-to-drug interactions, patient allergies and so on. There's the basis for a medical record so pharmacists can look at the total patient and dispense a drug in the knowledge of all the other things the person is taking."

E Pi/IBA Pharmacy has sold its product into nine district health boards in New Zealand, including Auckland, where the suite will be the foundation for a regionwide medication management strategy worth more than $1 million.
Auckland Regional Pharmacy project manager John Cox says the automated process will give doctors and pharmacists access to a single, real-time electronic prescribing and drug administration system.

"This has cost benefits, but the implications for improved patient care are far more significant," he says.

IBA dominates the New Zealand hospital prescribing marketplace. It also dominates the Singapore market with a pharmacy product built into the electronic health record component of its full clinical information system.

"We are now in the final phase of a program to bring that product into the Australian market and that requires two things none of the other hospital pharmacy products do well at the moment, and that is the Australian Drug Formulary and the MIMS database, and a PBS claiming capability," he says.

"We're localising our core product that has been in New Zealand and we plan to roll out the first part, the MIMS drug database and the PBS part, next month.

"We already have a capability for hospitals to build their own formularies, but we want to set it up so a hospital can import from other organisations."

Interest in PBS claiming was prompted by a recent West Australian review of public hospital pharmacy departments, which identified potential savings of more than $19 million as a result of pharmacists initiating changes to drug use that would result in shorter stays, fewer readmissions and reduced demand for lab testing or other medical procedures.

The reviewers realised also that hospitals could claim against the PBS for patient medications.

The development of pharmacy decision support tools is another idea taking hold.

In Victoria, more than 150 pharmacists in 53 pharmacies are involved in the PROMISe project being run out of the University of Tasmania's pharmacy school.

Senior research fellow and project manager Peter Tenni says the pharmacists are recording instances of clinical intervention in which the pharmacist has acted to prevent an error or harmful outcome.

"Ninety-nine times out of a 100, you hand in your script and they say, fine, you've had this before, no problem," he says.

"We're interested in the one in 100 times where that's not fine. The pharmacists in our trial are recording situations where they've had to make a change to the patient's therapy. Maybe the patient is taking something prescribed by another doctor or has provided other information that might need to be brought to the prescribing doctor's attention."

Although the project software allows pharmacists to directly enter de-identified details about interventions sent to the university's research server for analysis, Tenni says it's a long way from being a full pharmacy decision support system.

"In future, if this information was collected routinely, we could feed alerts back to pharmacies," he says.

"When a pharmacist is about to dispense a certain medication, for example, we could ping back a message saying there's a common problem we've seen with this drug in the past month, so perhaps you should mention it to your customer, or check if the customer has any of these signs.

"We don't have that capability yet, but the big HealthConnect project will help inform GPs and pharmacists about interventions, and it will be easier because you're able to check more things without having to contact the prescriber."

Any improvements in the supply chain will help retail income growth, industry analysts say.
One option is automated dispensing units, such as ATMs that dispense medication instead of money when an authorisation is entered.

There are a number of makers of these robotic devices in the US and elsewhere and they are generally used at remote clinics or medical centres with limited access to drugs.

Northern Territory pharmacy consultant Rollo Manning says automated dispensers would be a godsend for medical staff working in Aboriginal communities, and would be popular in city settings such as busy pharmacies in suburban shopping malls.

"Not everybody wants or needs to be subjected to a lecture every time they go to the chemist," he says.

"So far, the introduction of automated dispensing systems has been resisted here, yet in other parts of the world they are being used in a dramatic way to reduce costs and improve care."

Manning encountered the concept a few years ago, when he was looking for a machine that could be installed at a remote clinic 600km from Darwin to support visiting doctors.

"At present, it can take two weeks for a script to be sent into a hospital and the medication sent back out to the clinic," he says.

"What if the doctor scans a script through a machine to a central pharmacy, where it's logged into a database, checked, and the dispensing instructions are sent back to a machine in the clinic and a packet drops out, a label prints off, the label's put on the box and the person walks out with it. The situation at present is totally hopeless."

Back at retail level, the local chains are gearing up for change.

Brand names and prices are being finessed, and innovative franchising arrangements are in play as they seek to hold off threats not just from new business models and supermarkets, but from huge global players such as Wal-Mart and Boots.

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