

Why use the services of a compounding pharmacy?

A GP'S PERSPECTIVE

By Dr Bryan Goh (GP; Adelaide, South Australia)

Commercially available prescription pharmaceuticals and over-the-counter healthcare products don't always adequately address the specific needs of individual patients; or they may not always do so in a way that's sufficiently convenient or acceptable to individual patients or their carers.^{1,2} Asking a qualified 'compounding' pharmacist to prepare a custom-made treatment or healthcare product – one specifically formulated to meet the identified need(s) and preferences of the person for whom it is being made – is often one of the most practical solutions in these situations.^{1,2}

Some examples of when this option has worked for me

In my experience as a GP, I've found that working with a compounding pharmacy is especially helpful when specific treatments are not commercially available in the desired formulation (e.g. when I would prefer to be able to prescribe a liquid formulation – a syrup or suspension – instead of a tablet or capsule; or when the optimal dose strength for my patient is not available). This most often happens when I'm treating paediatric patients.

For instance, I very recently recommended a compounding solution to help treat a young patient who was unable to swallow tablets. This particular patient was a 10-year-old child with Attention Deficit Hyperactivity Disorder, who had been having tremendous difficulty getting to sleep at night – and had been doing so for several years, despite exhaustive attempts to find an effective non-pharmacological solution to the problem. His paediatrician and myself had agreed that it might be time to prescribe a trial of bedtime melatonin therapy, but the only commercially available formulation of this hormone is a prolonged-release tablet that contains 2 mg of active ingredient and is indicated for use by adults. It was therefore decided – in collaboration with the patient's mother – that I should write a script for a melatonin-containing syrup. I directed the mother to present this script to a compounding pharmacist, who was able to prepare a customised syrup, formulated to deliver a small amount of melatonin with each dose; and the mother has since

confirmed that use of this syrup appears to have helped her son – that he has been sleeping better, finding it easier to concentrate at school and generally appears much happier and more settled.

Another recent example of how compounding has helped in the management of one of my paediatric patients involved a baby who had been prescribed omeprazole for gastroesophageal reflux disease (GORD). Omeprazole – a drug that reduces acidity in the stomach and can therefore help relieve the symptoms of GORD – is only commercially available in the form of tablets or capsules, for adults, and is also known to have a particularly bitter taste. However, once again, a compounding pharmacy was able to help overcome each of these problems, by preparing an appropriately customised, sweet-tasting omeprazole suspension.

Of course, compounding is also a potentially handy solution when managing adult patients. To illustrate this point, I recall a 70-year-old patient of mine who is quite overweight, rarely leaves her house and always tries to avoid the sun, due to a history of skin cancers. A routine health check in March 2016 revealed that this patient had a severe Vitamin D deficiency, so – in addition to recommending some appropriate dietary and lifestyle changes, and encouraging her to boost her daily calcium intake – I immediately prescribed a Vitamin D supplement (cholecalciferol, 4,000 IU/day).

Continued next page...

"I've been able to help a great many people over the years... simply by suggesting that we engage the assistance of a compounding pharmacist."

Dr Bryan Goh (GP), Adelaide, SA



Consider the potential benefits of a custom-made product

...continued from previous page

Blood tests conducted four months later revealed that this patient still had a moderate-to-severe Vitamin D deficiency. After confirming that she had been taking her daily Vitamin D supplement as directed and ruling out the presence of any underlying gastrointestinal disorder, I decided that this patient was going to need a much higher dose. Together, we agreed that it was time to ask a compounding pharmacist to prepare a high-dose formulation that's not commercially available in Australia - one that would allow her to take a high-dose capsule of Vitamin D (50 000 IU), once per week. Use of this high-dose supplement soon restored the patient's Vitamin D levels to a more normal level, which could then be maintained on a lower dose.

The patients I've mentioned in this article represent just three relatively simple, everyday examples of how being able to access the expertise of a compounding pharmacist has been an enormous help to me and - more importantly - my patients. However, there are numerous potential scenarios in which it can be useful to seek the advice or expertise of a compounding pharmacist (Table 1); and there's virtually no limit to the types of product that a compounding pharmacist can be asked to prepare (Table 2)¹⁻³ I've been able to help a great many people over the years, when they've not been completely satisfied with commercially available healthcare options that have been prescribed or recommended for them, simply by suggesting that we engage the assistance of a compounding pharmacist.

Choosing a compounding pharmacy

In Australia, the preparation of compounded medicines and other health-related products is regulated by the Pharmacy Board of Australia and pharmacies that offer compounding services are expected to ensure that everything they do complies with relevant standards.^{1,2,4} However, for added reassurance, I always recommend that people present scripts for customised treatments or preparations to a pharmacy that is experienced in the practice of compounding; one that has an appropriately qualified, well-trained compounding pharmacist on hand, and which also has the requisite facilities and quality control safeguards in place to be able to prepare compounded products to a high standard.

TABLE 1

Some of the useful things that compounding pharmacies can do ^{*1-3}

- Reformulate treatments in a way that makes them easier for a particular patient to use (e.g. by creating liquid formulations of tablets or capsules; or by improving the flavour of a medicine)
- Adjust the strength or concentration of active treatments in a commercially available formulation
- Remove particular ingredients from a commercially available formulation (e.g. to avoid potential allergic responses or drug interactions; or to accommodate a specific dietary restriction or religious belief)
- Create customised formulations of medications or treatments that are difficult to find or not commercially available (e.g. if a treatment needs to be taken or administered in an unusual way; or if you want to combine more than one active ingredient in a single tablet, capsule, lotion or cream)

TABLE 2

Examples of what compounding pharmacies may be able to prepare ^{*1-3}

- Tablets, capsules or dissolvable lozenges
- Liquid formulations (e.g. solutions, suspensions, emulsions, mixtures, elixirs, tinctures)
- Topical preparations (e.g. creams, ointments, lotions, gels, moisturisers, sprays, eye drops)
- Sublingual (under-the-tongue) preparations, such as sprays or drops
- Patch medications
- Powders
- Mouthwashes
- Suppositories or pessaries
- Treatments for intravenous infusion or injection

*Not a full list

“Compounding pharmacies can modify a commercially available product, or even prepare a customised product from raw ingredients, ensuring that it meets your specific needs and preferences.”

Dr Bryan Goh (GP), Adelaide, SA