

MAY 2023



OFFICIAL JOURNAL OF
The Pharmacy Guild

APP2023 Speaker
Snapshot

APP2023 Visual
Highlights

AI In Community
Pharmacy

POST
APP2023
Edition



GOLD CROSS



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Australian families have been using GOLD CROSS medicines for over 70 years* to help treat a wide range of everyday health concerns.

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PRESIDENT'S MESSAGE

It's rare for an organisation to be able to get bi-partisan support from both sides of the parliamentary aisle, yet last year we managed to do just that.

Our 'Affordable Medicines Campaign' not only won the backing of both Labor and the Coalition in the lead up to the federal election, but it also led to a reverse auction.

The then Coalition Government committed to a \$10.00 reduction, to bring the maximum PBS co-payment down from \$42.50 to \$32.50.

However, Labor went further and committed to bring the maximum co-payment down to \$30.00 which led to a memorable newspaper front page headline "I'll raise you \$2.50".

The legislation to change it was then backed not just by the two major parties, but all MPs and Senators of all political persuasions.

This May marks 12 months since the last federal election and while the political landscape has changed, our 'Affordable Medicines Now' campaign hasn't.

We have reignited the campaign so we can bring the maximum co-payment down to our original target of \$19.

Politics is the art of compromise and last year we accepted (albeit temporarily) the victory of a \$12.50 reduction than holding out for the preferred reduction to \$19 and potentially walking away with nothing.

There are more compelling reasons however, for us to light the wick on our 'Affordable Medicine Now' campaign 2.0.

Yes, the new figure of \$30.00 has been in effect since January, but since then interest rates have climbed a further 0.5% and there have been 10 interest rate hikes in the past 12 months.

Inflation reached 7.4% in the twelve months to January when our new maximum co-payment came into effect.

In other words, the gains we fought so hard for last year and won, have now be eroded.

It's why we are going into battle for our patients again.

Earlier this month (April) we launched our campaign with the media and did so swiftly with the federal budget fast looming.

We have also written to every single federal MP explaining why the new lower co-payment is needed and why it's affordable and won't add to inflation.

It's also sensible from a preventative illness point of view because as we know, when people skip taking their medicines because they can't afford it, they put their own health at greater risk of chronic disease and illness.

You can expect to hear a lot more about the campaign in the coming months.

APP: A RAGING SUCCESS

On a brighter note, for those of you who attended APP in late March, it probably won't come as a surprise to you that the attendance smashed the record for the biggest turnout.

This year 7,471 of you passed through the turnstiles of the event, making it the most successful APP in its 33-year history.

I am sure you will agree with me it was an outstanding event with a fantastic line up of speakers, workshops, and a great time as well to unwind and catch up with each other, which for many of you was probably the first time since the pandemic.

I'd like to personally thank and congratulate Conference Convenor and former Guild National President, Kos Sclavos AM and his team for organising such a memorable conference.

Just one question Kos, how are you going to top this year's event in 2024?

Trent Twomey
National President



STATE OF THE AUSTRALIAN ECONOMY

Economic Update – April 2023

T

The biggest current challenges to the Australian economy continue to be stubborn post COVID-19 inflation and labour market skills shortages.



Inflation in Australia currently sits at 7.8 per cent annually to the December 2022 quarter, and two factors have been pinpointed as the drivers of this inflation.

First, the COVID-19 pandemic's negative impact on the productive capacity of the Australian and global economies, which resulted in supply chain disruptions, lost production, and layoffs. COVID-19 also resulted in a transmission of cost pressures through the economy, both domestically and internationally.

Second, during this time economic policy was set to be expansionary as authorities both internationally and locally were attempting to revive the economy. This translated into higher demand and prices and the Reserve Bank of Australia (RBA) is expected to continue raising official interest rates in 2023 until inflation is under control.

Skills shortages reflect a tight labour market that has continued post the COVID-19 period, job vacancies are high as demand for employees outpaces supply (including from a higher participation rate). The unemployment rate is at historically low rates (sitting at 3.5 per cent for February 2023) and the demand stimulus which was necessary to deal with COVID-19 added to the tightness of the labour market as it resulted in a pickup in employment. The labour market is expected to remain strong through 2023.

The most recent data on production in the Australian economy shows a slowing economy. Gross domestic product (GDP) increased by only 0.5 per cent in the December 2022 quarter, and 2.7 per cent for the year, underpinned by net exports. Total final consumption expenditure grew by 0.3 per cent in the December 2022 quarter, driven by a 2.4 per cent increase in consumption of food.

Retail Trade

The dollar value in turnover for pharmaceutical, cosmetic and toiletry goods, which is an Australian Bureau of Statistics (ABS) definition that includes community pharmacy (including prescriptions, OTC, and front of shop items) has been relatively strong. Table 1 shows, by retail trade category, year-on-year growth in turnover to February 2023 (latest data available at the time of writing) for all of Australia.

The table shows pharmaceutical, cosmetic and toiletry goods turnover experienced annual growth of 5.4 per cent to February 2023, which was behind the growth for overall retail trade of 6.4 per cent. Year-on-year retail trade growth has been dominated by spending on restaurants, takeaway food, and supermarket & grocery categories.

Table 1: Retail trade - turnover (\$) year on year growth

Feb 2023

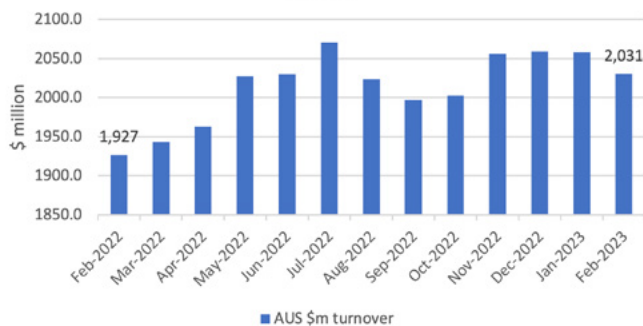
Restaurants	20.5%
Takeaway food	11.8%
Supermarket & grocery	8.4%
Department stores	7.7%
Clothing	6.5%
Total	6.4%
Liquor	6.0%
Footwear	5.5%
Pharmaceutical, cosmetic & toiletry goods	5.4%
Specialised food	4.5%
Other	2.9%
Other recreational	1.6%
Hardware	-0.4%
Furniture & houseware	-0.7%
Electrical goods	-5.2%
Books & newspapers	-10.6%

Source: ABS, Retail Trade, Australia.



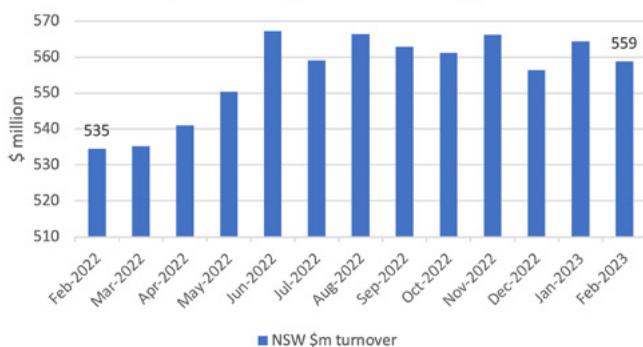
Chart 1 shows the monthly level of the dollar value of turnover for pharmaceutical, cosmetic and toiletry goods nationally. In February 2023, the dollar value reached \$2,031 million. This is up from \$1,927 million in February 2021, a 5.4 per cent increase, as reflected in Table 1.

Chart 1: Australia pharmaceutical, cosmetic and toiletry goods turnover



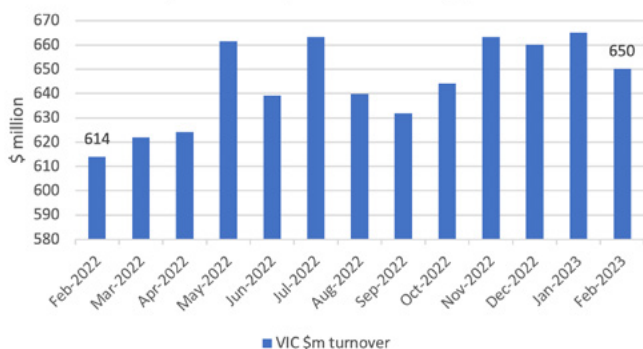
Turning to each jurisdiction, New South Wales recorded 4.5 per cent year-on-year growth in the dollar value of retail trade for pharmaceutical, cosmetic and toiletry goods to February 2023, which was below the national growth figure of 5.4 per cent. Chart 2 shows a value of \$559 million in retail trade in February 2023 for New South Wales.

Chart 2: NSW pharmaceutical, cosmetic and toiletry goods turnover



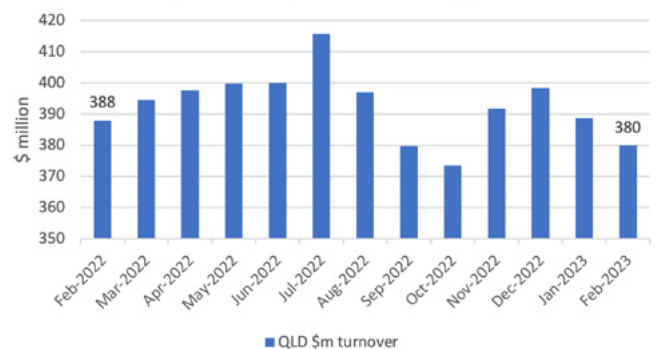
Victoria's dollar value of turnover for pharmaceutical, cosmetic and toiletry goods is given in Chart 3. It shows that the February 2023 result (\$650 million) was a 5.9 per cent year-on-year improvement against February 2022 (\$614 million). Victoria continues to have the largest dollar value of pharmaceutical, cosmetic and toiletry goods turnover across all jurisdictions.

Chart 3: VIC pharmaceutical, cosmetic and toiletry goods turnover



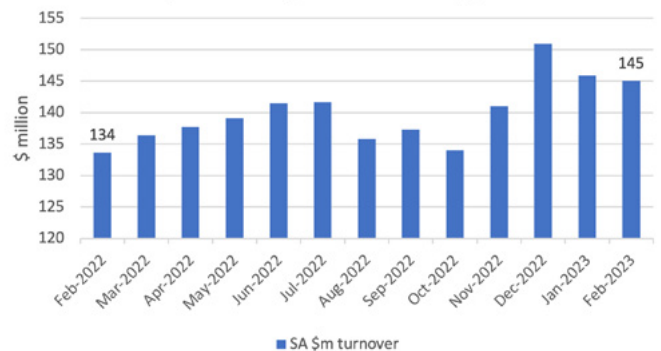
Queensland's pharmaceutical, cosmetic and toiletry goods turnover declined by 2.1 per cent year-on-year to February 2023, compared to 5.4 per cent growth nationally. On a monthly basis, turnover reached just under \$380 million in February 2023 (Chart 4).

Chart 4: QLD pharmaceutical, cosmetic and toiletry goods turnover



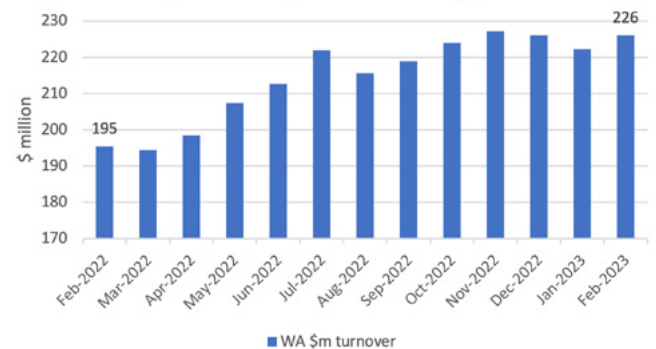
South Australia's pharmaceutical, cosmetic and toiletry goods turnover recorded 8.5 per cent year-on-year growth to be \$145 million in February 2023 (Chart 5).

Chart 5: SA pharmaceutical, cosmetic and toiletry goods turnover

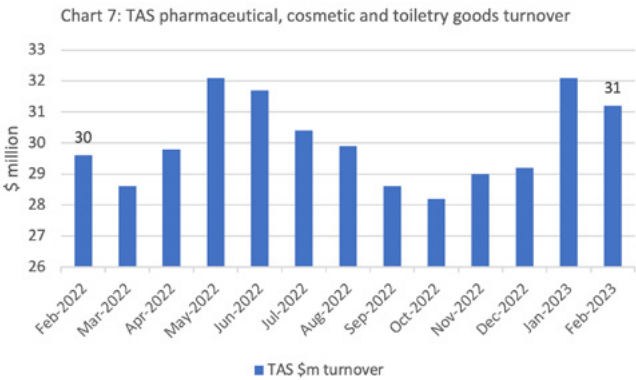


Western Australia has had very strong growth in pharmaceutical, cosmetic and toiletry goods turnover. As at February 2023, the monthly dollar value was \$226 million (Chart 6), a 15.7 per cent year-on-year growth rate.

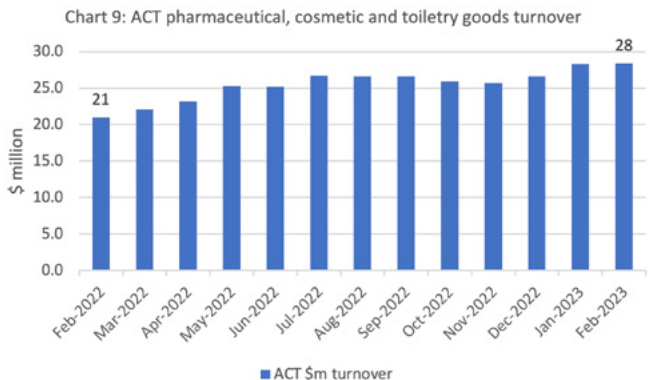
Chart 6: WA pharmaceutical, cosmetic and toiletry goods turnover



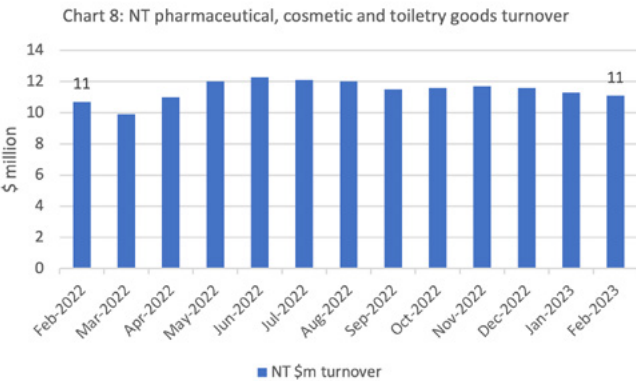
Tasmania year-on-year growth rate in pharmaceutical, cosmetic and toiletry goods turnover to February 2023 matched the national result of 5.4 per cent. In February 2023 retail trade was \$31 million (Chart 7).



Finally, also off a low base, the Australian Capital Territory recorded the strongest growth on a year-on-year basis to February 2023, with growth of 35.2 per cent and a dollar value of retail trade in February 2023 of \$28 million (Chart 9).



Off a small base, the Northern Territory recorded 3.7 per cent year-on-year growth in pharmaceutical, cosmetic and toiletry goods turnover to February 2023 to reach \$11 million (Chart 8).



SPEAKER SNAPSHOT

As always, APP was a specular event: the biggest community pharmacy conference in the world! After a difficult couple of years, everyone was eager to network and socialise; this was the perfect opportunity.

Full scope of practice has landed in Australia, thanks to the persistence and hard work of the Guild team. Mark Butler, Minister for Health, talked about the timely opportunity for all healthcare professionals to practice at the top of their scope. Now is the time for community pharmacy to make that happen. The energy and passion of community pharmacy demonstrates the commitment within the profession. The clinical sessions included real-life exemplars of community pharmacists already making a difference.

I spoke about the global experiences of full scope of practice, in particular what we've learned in the UK. Professional autonomy, including prescribing rights, is the key to getting there. Pharmacists need the tools to do their job independently, without relying on other professionals. The pilots starting around Australia, including New South Wales and North Queensland, are great for patients and their access to the right care.

It was an honour to spend some time with five National Presidents of the Guild, past and present, and talk about how community pharmacy has developed in Australia.

Mark Burdon
Secretary General, World Pharmacy Council

I cannot express how touched and moved I am by all the feedback, messages and kindness shown towards my session, journey, life and family. What this industry does to support people like me is remarkable.

I really believe that success is getting out of bed knowing in your heart that you can make a difference in someone else's life. Yes, it's an incredible opportunity but also a huge responsibility each day to do what you all do in this industry.

I admire your commitment to impact, grateful for the opportunity and only hope that in some small way I was able to positively impact those in the room to have the courage each day to never give up and strive to make the world just a little better place than what we found it. Feeling overwhelmed and blessed.

Michael Crossland
Speaker, Executive Coach, Humanitarian, International Best Selling Author
WWW.MICHAELCROSSLAND.COM



The learning atmosphere within the APP experience gets better each year. When CPD points are gained within an enjoyable and comfortable atmosphere, the information is retained far better.

The range of educational options offers choice beyond any other conference. Added to that is the opportunity to browse an enormous range of both well-known and new-to-market exhibitors at a leisurely pace. The highlight for me is to see the face-to-face vibrancy within our profession. Familiar faces we haven't seen for a while, mixed with new contacts, encourages a renewed focus on what we do and who we are.

Big thanks to Emma and her team for consistency and quality every year.

Gerald Quigley

Master Herbalist, Speaker for Aspen Pharmacare on Reflux versus Silent Reflux



As a speaker, I am always excited about the opportunity to share new information with APP delegates and this year was no exception.

My presentation on 'What you need to know about expiry dates and reliable stability studies for non-sterile compounded medicines' generated lots of discussion at the PCCA stand during the conference and it was exciting to hear compounding pharmacists thinking about the best way forward to embrace changes in compounding to deliver the most up-to-date services for their patients.

Most pharmacists agreed that it was timely to commence a structured review of their formulas

paying particular attention to the current expiry dates which they were assigning to their most commonly prepared items. Most importantly, they realised the opportunity they have to take advantage of the more than 100 extended validated BUD formulations available to PCCA members, including bracketed studies, as well as the numerous anhydrous bases which can be used to extend the expiry date of their formulations, as well as to save time in preparation and deliver outstanding products to their patients.

Marina Holt

Education & Training Manager, PCCA

The Future of Pharmacy, "Put your Shoulder behind Full Scope of Practise and realise there's not a Digital Consumer, just your patients wanting to engage with you differently."

There's no digital consumer, just your patient wanting to engage with you in different ways.

There is this fallacy out there that there is this digital consumer, and to engage with them, we need to speak in 000's and 111's and beep bops. Today, post-pandemic, that is just wrong. I'm sure you have shopped online and in a store this week alone. Why do we think our patients are any different?

There is just one consumer, our patients, but yes, they are demanding to engage with us digitally, and if we don't do it, someone else will.

The ADHA sells efficiencies in e-scripts, but the pharmacy workflow is stuffed. We must demand a better way that reduces minutes to deliver prescriptions and, most importantly, an outstanding consumer experience with continued safety.

I've spent most of last year thinking and developing our offer in this space. The way I've set my stores to address the Future of Pharmacy is to build a piece of technology that will streamline workflow both physically within the store and digitally. It's a unique fulfilment platform that will revolutionise what we do and scoop up how consumers can engage with us.

Online, Telehealth, emails, telephone calls, pre-set orders link in with much of the self-select technology. I have had to do this to free up and, more importantly, reinvigorate our pharmacists and workforce to engage with their patients, not paralysed by systems that don't talk to each other. The runway to get this right is very, very short.

We must make working in community pharmacies more enjoyable while delighting our patients before they move elsewhere.

Catherine Bronger

Pharmacy Owner, Chemistworks, Senior Vice President of The Pharmacy Guild of Australia (NSW), Chair of the NSW Scope of Practice Subcommittee

APP HIGHLIGHTS











APP-SOLUTELY FABULOUS!

APP 2023 may now be over, but we're still spinning after such a successful event. Now we've had a bit of time to take stock and catch our breath, we have to thank Kos and Emma and the rest of the team that brought it to life, the staff that manned the stand, but most of all, the army of customers and supporters who stopped by to continue their long-standing support of Australia's favourite Jelly Bean.

Not only did we see a record number of attendees walk through the doors of APP, but records were broken on our stand as well, with over 570 kilograms of jelly beans and bears handed out to our fans, nearly 9 tonnes of confectionery ordered from the stand, with hundreds of Glucojel bears, bags and bean dispensers handed out to eager recipients. If you're already the biggest pharmacy jellybean brand in Australia, sometimes it doesn't matter how fast you grow.

Since 1941, Glucojel has been at the centre of millions of stories being created by all manner of Australians every day. From Nanna's secret stash to the sick day perk-up, and from the sporting field energy burst to the management of a diabetic episode, we're proud to have been part of so many sweet memories.

And it's not just customers who share their sweet memories, we had pharmacists from all across Australia sharing their stories (and in one case, their exclusive handmade Glucojel earrings!), from those

reminiscing about the early Gilseal days, to those that wish they were still allowed to stock them today, the voice of pharmacy was very loud on our stand.

And the voice of pharmacy isn't just something we'll always believe in and listen to, it's also something we'll always contribute to. Because our success is pharmacy's success – with every dollar we make going straight back to the profession, through the Pharmacy Guild of Australia (PGA).

All money raised by Gold Cross assists the PGA in their advocacy work for community pharmacy. Some of their work includes: Community Pharmacy Agreement negotiations and the recent affordable medicines campaign that resulted in the reduction of the general patient co-payment for prescriptions amongst others. So rather than just contributing to the bottom line of a big corporate, every Glucojel sale contributes to the mission of the PGA: To enable community pharmacy to serve the needs and preferences of patients and health consumers across Australia using pharmacy's unique role in medication management and safety.

By stocking Glucojel, you are not only providing your customers with Australia's favourite jelly beans but you are also providing a solid future for your profession. Thank you for your continued support, and we look forward to achieving more with you, long into the future.

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STILL AUSTRALIA'S FAVOURITE JELLY BEAN.



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Only available at Australia's favourite pharmacies.

Dietary Intervention for

IRRITABLE BOWEL DISEASE

Irritable Bowel Disease (IBD) is an umbrella term used to characterise disorders that cause chronic inflammation at various sites along the gastrointestinal tract, it includes both Crohn's disease and ulcerative colitis.¹



Both conditions share similar symptoms, including urgent diarrhoea, rectal bleeding, abdominal pain and excessive gas.¹ The severity of these symptoms can fluctuate significantly, with patients experiencing unpredictable flares and remissions. During flares physical symptoms can be severe and debilitating, with additional psychological disorders, such as anxiety and depression, frequently reported.²

Despite their similarities, there are distinct differences which allow the two conditions to be differentiated.

Ulcerative colitis: involves continuous inflammation and ulcers along the lining of the large intestine (colon) and rectum.¹

Crohn's disease: involves non-continuous sections of inflammation anywhere in the digestive tract, from the mouth to the anus. It can often penetrate through the intestinal lining and involve the deeper layers of the digestive tract.¹

Given the profound effect IBD can have on quality of life there is great interest by patients and healthcare professionals alike to identify potentially useful interventions for the management of the condition.

Pathophysiology

While the aetiology of IBD remains largely unknown, research has suggested that it likely involves a complex interaction between external environmental triggers, microbial environmental and genetic predispositions.^{1,3} This interaction contributes to an inappropriate immune reaction and an exaggerated inflammatory response in the gastrointestinal tract.

It is not yet understood which factor plays the greatest role in the development and progression of IBD, but there is growing interest in the influence of the microbial environment.⁴

Patients with IBD have been found to have an imbalanced composition of microbiota, known as dysbiosis.⁵ When compared with healthy individuals, patients with IBD have a lower microbial diversity, with a greater abundance of opportunistic bacteria (such as Bacteroidetes and Proteobacteria) and a smaller presence of beneficial bacteria (such as Firmicutes).^{4,5}

This imbalance translates to an increase in inflammatory cytokines such as tumour necrosis factor (TNF) and interleukins-6 and a decrease in beneficial metabolites such as butyrate.⁵ These changes allow for disturbances to the mucosal barrier, which contributes to intestinal inflammation and IBD development.⁵

Given the extensive research indicating that both microbial diversity and inflammation can be modulated through diet, the potential of a therapeutic diet for IBD is plausible. Yet without expert guidance patients can put themselves at high risk of unnecessary dietary restriction. As such, healthcare professionals should be familiar with the evidence behind popular therapeutic diets in order to provide sound education and eliminate misconceptions.



Gluten Free Diet

Gluten is the general name for the complex proteins glutenin and gliadin present in most carbohydrate foods, such as wheat, rye and barley.

For individuals with Coeliac disease, the consumption of gluten is associated with symptoms of bloating, diarrhoea, abdominal pain and fatigue. In these patients, gluten peptides trigger an abnormal immune response that causes intestinal inflammation and damage.⁶

Given the similarities between IBD and coeliac disease, there was early interest in whether gluten was contributing to the gastrointestinal inflammation identified in IBD and whether a gluten-free diet (GFD) could be an appropriate therapeutic diet.⁶

Despite patients with IBD self-reporting improvements in clinical symptoms following dietary gluten elimination⁷, to date there has been no association between the intake of gluten and IBD progression.⁶ By contrast, research has shown that the unnecessary removal of gluten may have a negative impact on microbial diversity which may have a negative impact on gastrointestinal health.⁸ Palma et al found that when healthy subjects trialled a GFD, the microbial implications imitated those evident in the active phase of IBD; a reduction in beneficial bacterial and an increase in opportunistic bacteria populations.⁸ In addition, research into the nutritional quality of gluten-free products consistently shows lower protein content with high fat and salt content compared to their equivalent gluten-containing products.⁹

It is likely that self-reported improvements are a result of changes in diet quality. For example, the benefits arise from eliminating refined carbohydrate grains rather than the removal of gluten itself. This hypothesis is supported by the well-established association between a diet high in refined carbohydrates and both an increased presence of inflammatory markers and lower microbial diversity.¹⁰

Therefore, there is insufficient evidence to recommend a GFD to individuals with IBD unless coeliac disease or a gluten intolerance has been diagnosed.¹¹

Mediterranean Diet & IBD

The gold standard for an anti-inflammatory diet is the Mediterranean diet (MD); heavy on vegetables, whole grains, olive oil; moderate on fish and red wine and light on red meat and processed foods.

MD has been shown to prevent the onset of dysbiosis by promoting microbial diversity and enriching beneficial bacteria, which support the mucosal barrier function and reduce intestinal inflammation.¹⁰ In patients with IBD, MD adherence has been associated with decreased inflammatory markers such as tumour necrosis factor (TNF) and interleukins-6.¹²

Despite there being limited research, the MD has been shown to reduce symptoms and improve quality of life in patients with IBD.^{12,13} When compared with other therapeutic diets, MD stands out as the preferred dietary intervention, based on clinical outcomes, ease of following and the other health benefits associated with MD.¹³

While more research is required, the MD can be recommended as a supportive dietary intervention to reduce disease markers and potentially relieve symptoms for patients with IBD.¹¹ This advice is appropriate for IBD patients during remission and low symptom states, however during flares these patients may need to alter their diet texture and composition.



RECOMMENDATIONS

Although there is limited data from well-designed clinical trials to inform the routine use of any particular diet for treatment of IBD, it has been well-documented that patients with IBD are at higher risk of nutrient deficiencies and are more likely to avoid specific foods because of misconceived beliefs that specific foods will cause gastrointestinal symptoms.¹¹ As such patients should be gently discouraged from trialling any restrictive diets and dietary education should emphasise the importance of following a nutritionally adequate dietary pattern, such as MD, to promote and support long-term health.



PATY 2023

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OF THE YEAR



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LIVING
REAL
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National Families Week

15-21 MAY

www.nfw.org.au

Each year, between 15 May and 21 May (and coinciding with the United Nations [International Day of Families](#) on 15 May) thousands of people across the country participate in Australia's biggest celebration of families.

The theme for 2023 is **living real, DREAMING BIG**; a theme that promotes the capacities and **resilience** of families in creating strong, safe and connected communities.

'Being connected to friends, family and community is essential for our wellbeing.

Strong family connections provide care and affection, a safe environment to take on adventures and risks, and enables all members to grow and develop. They keep us connected to culture and provide the foundations to take on the world.

A healthy supportive family is a great place to chase your dreams, have fun, celebrate achievements and is a source of strength during harder times.

Families are diverse, vibrant and unique - create some space during national families week to enjoy your family and the colour they add to your world.

Our communities thrive when families are healthy and strong.

National Families Week is a time to celebrate with family, make contact with extended family and friends, and share in the enjoyment of family activities within the wider community. It is a time to celebrate the meaning of family and to make the most of family life.'

Jamie Crosby, CEO, Families Australia

We invite you to hold a National Families Week workplace or community celebration; it can be a morning tea, a conference or seminar on matters of interest to you or your organisation, a partnership or publication of research, or a special social or community event. There are a range of National Families Week related activity ideas, templates and information that you can use throughout the year. These can be download from the National Families Week [Get Involved](#) webpage.

Visit the National Families Week [website](#) for links to resources and research to support Australian families.

Follow us on social media, share and promote National Families Week on your intranet and social media platforms, and issue a media release on the importance of families, family friendly workplaces and community. Follow us on [Facebook](#) and [Instagram](#) and tag your posts [#nationalfamiliesweek](#).

Register your event at <https://nfw.org.au/get-involved/register-your-event/>.

National Families Week is an initiative of Families Australia supported
by the Australian Government Department of Social Services



LIVING REAL DREAMING BIG



National Families Week

15-21 MAY

www.nfw.org.au



TOP 10 TIPS



LIVING REAL DREAMING BIG



National Families Week

1

Have fun with your family and create time to play.

2

Take time out from technology and enjoy family time together.

3

Appreciate your family, friends and community – everyone matters!

4

Regularly check in with each other “how was your day?”

5

Do an exercise or relaxation class as a family group, or play a team sport.

6

Celebrate your family’s achievements, large and small.

7

Have confidence in your abilities and celebrate the positive aspects of family life.

8

Ask others for support to navigate the challenges.

9

Help and support others whenever you can.

10

Build connections and learn from others.



The Pharmacy
Guild of Australia

APP
2024
14-17 MARCH
GOLD COAST

14-17 MARCH 2024

EARLY BIRD REGISTRATION OPENS IN SEPTEMBER

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LAVENDER THROUGH THE AGES

More than just a beautiful scent

Lavender has been used for thousands of years for its medicinal and aromatic properties, by the ancient Egyptians who used it in the embalming process and by the Romans who named it Lavare ('to wash') and used it in their baths to help relax and soothe their muscles.





During the Middle Ages, lavender was used to ward off the plague, and it was also used as a natural insect repellent, as a perfume and a flavouring agent in food and drink.

In the 16th and 17th centuries, lavender became popular in Europe for its medicinal properties, it was used to treat a variety of ailments, including headaches, insomnia, and anxiety. Modern research has confirmed many of its traditional uses.

The 16th century herbalist William Turner suggested wearing a quilted cap containing lavender for head colds and to “comfort the braine.”

Victorian women prone to fainting sniffed lavender-scented hankies to revive themselves and placed lavender swooning pillows on the settee, hoping that if they fainted, they would naturally land on the swooning pillows.

Lavender Oil was first distilled in the 19th century and became widely available for use in medicine and perfumery. It was also used during World War I as an antiseptic and to treat wounds.

Directions for Use

Lavender oil is still a popular essential oil that is often used for its calming and relaxing properties. It can be used in several ways to promote mental health and well-being.

- **Inhalation:** One of the most common ways to use lavender oil for mental health is through inhalation. You can add a few drops of lavender oil to a diffuser or vaporizer and inhale the scent. Alternatively, you can add a drop or two of lavender oil to a tissue or handkerchief and inhale the scent directly.
- **Massage:** Lavender oil can be used for massage to help promote relaxation and reduce stress. Mix a few drops of lavender oil with a carrier oil, such as coconut or jojoba oil, and massage the mixture onto your temples, neck, shoulders, or any other areas that feel tense.
- **Bath:** Adding a few drops of lavender oil to your bathwater can help you relax and unwind after a long day. The warm water and soothing scent can help relieve stress and anxiety.
- **Pillow spray:** You can make a simple pillow spray by mixing a few drops of lavender oil with water in a spray bottle. Spritz your pillow and bedding before bedtime to help you fall asleep faster and stay asleep longer.

It's important to note that while lavender oil is generally considered safe, some people may experience an allergic reaction or skin irritation. It is important to use it properly and to always do a patch test before using any new essential oil, consult with a healthcare provider if you have any underlying health conditions or concerns.

While lavender oil is generally considered safe for external use, it can be toxic if ingested.

Lavender Growing, Harvesting & Distillation

Lavender is a plant that is native to the Mediterranean region and is now widely grown around the world for its aromatic and medicinal properties. Lavender oil is extracted from the flowers of the lavender plant through a steam distillation process.

Typically grown in warm, dry climates with well-drained soil, such as in the Mediterranean, North Africa, and the Middle East, lavender can also be grown in other regions that have similar growing conditions, such as parts of the United States, Australia and New Zealand. It's also a relatively drought-tolerant plant that does not require frequent watering.

Lavender plants are typically harvested when the flowers are in full bloom, which is usually in the summer months, with the flowers then carefully harvested by hand and transported to a distillery for processing and essential oil extraction.

The steam distillation process involves placing the lavender flowers in a still and steaming them until the essential oil is released. The steam is then condensed, and the oil separated from the water before being bottled.

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ALL PHARMACY OF THE YEAR FINALISTS

With Automated Dispensaries Rely on One Thing

The BD Rowa™ Team would like to congratulate all Pharmacy of the Year finalists for their impressive and inspiring achievements which include Excellence in Business Management, Community Engagement, and Professional Innovation.



When we realised that ALL the finalists who have an automated dispensary have a BD Rowa™ Robot, we got very excited. We reached out to them to find out what part the Robots play in helping them achieve what they set out to do. We asked them whether having a robot has changed their daily routines and if they had to narrow it down, what are the three things they love most about their Robots. Here's what they had to say.



Lucinda Marks, Co-proprietor at Capital Chemist Calwell:

"Capital Chemist Calwell has been looking after the health of its patients in Tuggeranong for over twenty-five years. Going on two of those twenty-five years, we have been lucky enough to have our BD Rowa™ Automated Dispensing Robot.

The Robot has allowed us to significantly increase the speed in which we provide dispensed items to our patients. We then gain more time with our patients to provide better health outcomes. The community love experiencing the express service, especially when we forward dispense, which can turn a script around in roughly one minute!

The children of the community love seeing the medications move around and out of the Robot, especially when we had chocolates being dispensed during our re-opening.

The BD Rowa™ Robot has granted us a significant amount of time that would be otherwise spent looking for where medication is kept. A staff member doesn't have to spend hours putting the medication away and can now provide other services/perform other tasks.

We have gathered some quotes from our staff, why they love their Robot:

- Saves time and makes me quicker; Makes dot dispensing a breeze; Because you don't have to look for anything, it just spits it out.
- Frees up time to spend with patients; Increased patient interaction.
- Not having to put boxes away.
- Enables forward dispensing.
- Being able to know straight away if stock is available to you."



Jacqueline Meyer, Proprietor at LiveLife Pharmacy Cooroy:

"LiveLife Pharmacy Cooroy is a highly specialised community pharmacy servicing not only our local community, but also our local Rehabilitation Hospital as well as a local Palliative Care Hospice. The Pharmacy has just celebrated its 90th birthday in the community and I have been the proud owner for the past eight years. We underwent a significant refit in 2021, during the height of Covid, during which time saw the removal of our traditional elevated dispensary into a 100% forward Pharmacy model with no dispensary and the addition of our BD Rowa™ Vmax Automated Dispensing Robot.

Our BD Rowa™ Robot has definitely allowed our pharmacists to be more accessible to our community. With our forward pharmacy model, we have our pharmacists involved with every step of the customer interaction, from scripts in, dispensing and scripts out and counselling. Having our pharmacists fully engaged and available to connect with our customers on a deeper level has not only contributed to our business growth and success but also led to the need to employ more pharmacists and interns.

One of the favourite parts of the Robot is the three metre BD Rowa™ ProLog™ that allows for stock to be unloaded on the belt and then automatically loaded. This step alone has significantly reduced the time taken to put away dispense stock. Also, the stock rotation, cleaning and accurate stocktake functions have been game changers for our daily routines and stock management. It allows our pharmacists to be focussed on more clinical tasks and service.

Regarding the three reasons we love our Robot:

- First, we have never experienced incorrect stock on hand.
- Second, it allows for the Pharmacist team to be utilising their clinical skills for the benefit of the customer and forming relationships with the community rather than being hidden in the back of the dispensary away from the general public.
- Third, you never have to put away dispensary stock!!"



**Sam Afsar, Co-proprietor at Pharmacy
777 Shoalwater, Western Australia:**

"Pharmacy 777 Shoalwater is a unique team where we have Pharmacists that have specialised in various areas (sleep, integrative health, medication management, diabetes, wound care to name a few) to assist the health needs of our community.

Collectively the whole team works together to provide personalised care to every patient at every interaction. Our Pharmacy has experienced significant business growth in the last five years on the back of our team's persistent hard work. To cope with the growth, we installed the BD Rowa™ Robot about nine months ago and have already seen some incredible results.

Our pharmacist team attends to every patient as they walk in through the door. To do so, we need an efficient and smooth dispensing system in the background. The BD Rowa™ Robot has significantly cut down dispense time and has taken away a lot of headaches with inventory management.

Investing in our Robot has purchased us time, which is essential in our business model that focuses on an innovative patient centred, service-based business model.

Regarding the change of our daily routine and inventory management, the BD Rowa™ Robot has allowed our dispensary to operate more efficiently which allows the team to focus on patient interactions a lot more. The time saving in the dispense process also allows less waiting time for the patients.

The three reasons we love our Robot are:

- Increased efficiency (in inventory management and handling busy periods).
- Accuracy.
- Reduced waiting time.



**Frank Pappalardo, Co-proprietor at Wholelife
Pharmacy & Healthfoods Pease Street, Queensland:**

"Wholelife Pease St Pharmacy and its model has achieved exceptional growth and success throughout its time of approximately fifteen years. Pharmacist availability to all that walk through the door was the concept that birthed the automation within the pharmacy, which further evolved to improving efficiencies and being able to produce the highest quality and most efficient outcome for both our patients and staff members.

Wherever there may be opportunity to upskill, automate and innovate any area within the pharmacy, we undertake extensive research and ultimately employ the best offer for our store. That's why we have had our BD Rowa™ Automated Dispensing Robot, for almost ten years.

Ever since its installation at Wholelife Pease St Pharmacy, the BD Rowa™ Robot has improved our efficiencies on a store level which has in turn allowed us to continue to improve our offering time and time again. Its installation upstairs complemented our vision where we were able to fully service our customers and remain facing them without the distraction of retrieving stock but further produced a tidier finish within our shop fit. It allowed us to utilise a larger space whilst being accessible by our back of house, which allowed the high-level professional services offering to remain downstairs.

We have been nominated for and won prizes for our ability to provide professional and clinical services within the community where the innovation of the dispensary and its stock assisted us in this achievement.

The sheer size of our BD Rowa™ Robot allowed us to increase our stock holdings and maintain high stock levels to see us benefiting from the ease of this automation seamlessly. We purchased the BD Rowa™ Robot with a hopper which allowed simple and efficient medication re-stocking within the Robot where our dispensary technicians were able to remain on the floor whilst still being able to fully access and service the robot from this distance.

The ability to place chutes in strategic locations pertaining to different locations such as nursing home, stock control and dispensary allowed this automation and innovation to be benefited throughout the store within multiple different sections.

The BD Rowa™ Robot became one of our biggest achievements at the time given how novel it was to be in your local pharmacy. We even appeared in a news segment because of this – the first pharmacy in Far North QLD to have this innovation, customers were coming from far and wide just to witness the Robot in action whilst it picked stock at its incredible speed and because of this, we installed a screen downstairs for everyone to watch it work while they waited!

The BD Rowa™ Robot improved our daily routine immensely where stock control of a growing dispensary became easy. We were able to do large orders and track everything electronically. The Robot improved our dispensing accuracy through use of a barcode system, but also speed of dispensing, with faster and multi-box picking, along with the strategic placement of fast mover medications near the exit chutes. The stock was able to be put away in any order and essentially emptied into a chute with dispensing still serving as the BD Rowa™ Robots primary function.

Entering and receiving invoices, checking of available stock and ability to do a rolling expiry check of all stock became a breeze. Stocktakes took a fraction of the time to complete with the highest accuracy given the reporting function of the robot and so we were able to do these more frequently than before. All this time saving reduces costs whilst also improving the individual roles of pharmacists and dispensary staff exponentially. We became one of the frontiers in automation almost ten years ago, where the purpose and place of digitalising and automating pharmacy has become a top priority.

Our three reasons for why we love our Robot:

- First and foremost, it allows us to spend more time, forward facing and engaging with our customers.
- Second, the efficiencies that have been improved as a result such as stock control, increased holdings, impeccable counts/ stocktakes, minimal expiries, dead stock, and even its own optimisation of space, picking of popular and multilevel items, and its self-cleaning function. These automation gains are immeasurable not just in terms of cost saving but team building, morale and improved work environment just by streamlining roles and responsibilities among staff and pharmacists.
- Third, it has allowed us to employ staff who are excited to join a team who have innovated their pharmacy where they are able to undertake important jobs within their roles outside the more administrative roles."



FIND OUT MORE

Find out more: To learn more about BD Rowa™ Solutions, you can visit the website: bd.com/rowa

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This interview is based upon information provided by:

- *Lucinda Marks, Co-proprietor at Capital Chemist Calwell*
- *Jacqueline Meyer, Proprietor at LiveLife Pharmacy Cooroy,*
- *Sam Afsar, Co-proprietor at Pharmacy 777 Shoalwater*
- *Frank Pappalardo, Co-proprietor at Wholelife Pharmacy & Healthfoods Pease Street*



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THE WORKFORCE CAPABILITY PROJECT



One of the key issues in planning for the future is to ensure the pharmacy workforce meets the growing demands of the healthcare sector and the needs of the communities that pharmacies serve.

Words | Scott Harris





**The Pharmacy
Guild of Australia**

The Workforce Capability Project

Addressing workforce shortages as we move forward has emerged as a national priority across all business sectors, and community pharmacy is no exception.

The Guild constantly conducts surveys and reviews data to ascertain exactly what the workforce situation is and where its needs in the future will be. Its most recent modelling, established from various surveys and data sources, shows there is a currently a shortage of approx 2,400 full time equivalent (FTE) pharmacists across Australia.

What is even more worrying is that the identified shortage is growing and shows no signs of easing in the near future.

It is also clear that there is a continuing disparity in how our workforce is distributed with a higher proportion of pharmacists per head of population in cities and metropolitan areas than in regional and rural towns, and remote communities – a maldistribution that has been going on for too long.

These are challenges we need to plan for and address.

But to do so we need accurate and up-to-date information and data. It is difficult to obtain accurate pharmacist vacancy data through traditional recruitment means and this is why the Guild launched a survey at the recent APP2023 conference to collect as much data on pharmacist vacancies as possible.

The Guild's 2023 Workforce Survey is how we want to get this data, as it comes direct from you – pharmacists who know exactly what is happening in the workforce.

The survey is part of the Guild's Workforce Capability Project which relies on the insights and knowledge of members and pharmacy staff to understand pharmacy workforce needs and issues.

The reason the Guild has taken it on itself to gather workforce data independently is that data from external sources has proved unreliable or not available. And if we want to be ready for the future, we need to build any response on reliable data and information.

Putting this into context, the Guild has found that using data from sources such as recruitment agencies and the like doesn't capture positions that are filled via referrals, word of mouth, transfers and so on. Also a trend is for pharmacies to have a single advertisement in a paper, online or through a recruitment agency when in fact they may have several positions needed to be filled.

Gathering accurate and relevant data through the 2023 Workforce Survey will assist advocacy and strategic decision-making relating to primary healthcare within pharmacy now and into the future.

Never has this future planning been more important with huge changes coming to the pharmacy sector through the increasing recognition that pharmacists need to be able to work to their full scope of practice.

Already a number of states and territories have implemented pilot schemes to enable pharmacists to begin providing a wider range of health services to ease pressure on doctors and emergency departments.

The health system is under enormous pressure at the moment and many areas



**“GATHERING
ACCURATE AND
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THROUGH THE
2023 WORKFORCE
SURVEY WILL
ASSIST ADVOCACY
AND STRATEGIC
DECISION-MAKING”**

of it are at breaking point. Wait times for GPs and emergency department admissions are unacceptably high, and utilising the skills and expertise of pharmacists is a way of addressing that.

So much so that the Federal Minister for Health Mark Butler has publicly supported pharmacists working to full scope.

On top of that the profession faces the challenges of providing services to a growing aged care cohort, as well as providing services and medicines in aged care facilities. There will also undoubtedly be increased vaccination demands as more and more vaccines available under the National Immunisation Program become available through pharmacies.

But to be fully effective in this new environment of healthcare, we need to have the workforce in place, where and when it is needed, and filling out the 2023 Workforce Survey is a very concrete way you can help lay the foundations for the future.

Full scope of practice, our ageing population and pharmacist services in residential care will increase demands on the workforce and make the pharmacist labour market even tighter. But if we plan now we can be ready for it and provide a skilled and motivated workforce community pharmacy sector able to practise to its full potential – and to the full benefit of patients and the community.

Help us achieve that by filling in the survey.



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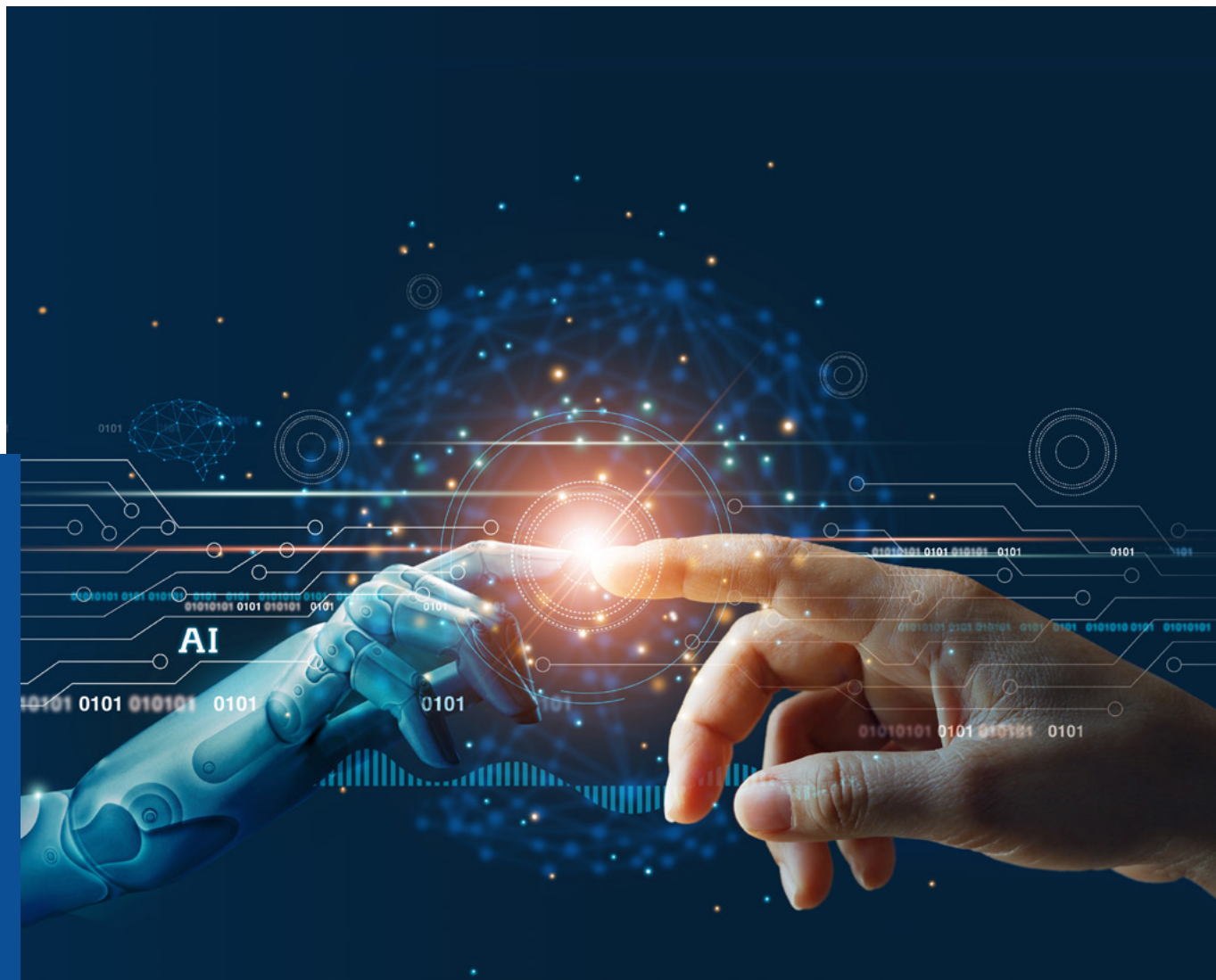
FROM FEAR TO OPPORTUNITY

Debunking Myths and Harnessing the Power of AI in Community Pharmacy

A

As the world advances rapidly into the digital age, Australian community pharmacies face an ever-evolving landscape that demands innovation and adaptability.

Words | Zamil Solanki



Artificial Intelligence (AI) has been heralded as a transformative force in various industries, and the pharmacy sector is no exception.

Specifically, its role in healthcare, and its potential to enhance pharmacists' ability to provide patient care and manage pharmacy operations is being increasingly recognised and embraced by pharmacy owners and their teams – many of whom are unaware that AI is working in the background to begin with.

This article aims to provide a comprehensive understanding of AI and its potential implications for Australian pharmacies. We will explore the myths surrounding AI, its role in community pharmacy, the benefits it brings to pharmacists with an expanding scope of practice, and the practical steps pharmacies can take to embrace this technology. By addressing the fears and misconceptions, we hope to facilitate a productive conversation that will ultimately benefit both patients and practitioners.

What is AI?

Artificial intelligence, at its core, is the development of computer systems that can perform tasks typically requiring human intelligence. These tasks may include problem-solving, learning, perception, and language understanding. AI systems come in various forms, from simple rule-based systems to more complex machine learning models that can adapt and evolve over time.

There are two broad categories of AI: narrow AI, which is designed for a specific task or set of tasks, and general AI, which is meant to possess human-like cognitive abilities across a wide range of tasks. While general AI remains a distant goal, narrow AI applications are already making significant inroads into various industries, including healthcare and pharmacy.

In pharmacy, AI can be used for a variety of applications, including data analysis, patient monitoring, diagnosis, and treatment planning. Today, AI algorithms already help pharmacists with many tasks including medication management, patient compliance, drug interactions, patient engagement and dosage calculations.

However, as AI becomes increasingly sophisticated, thanks to advances in machine learning and the availability of vast amounts of data, ongoing growth in this technology will spur excitement, but like any change, also increase trepidation in equal measure.



“THE WORLD HASN'T HAD THAT MANY TECHNOLOGIES THAT ARE BOTH PROMISING AND DANGEROUS — YOU KNOW, WE HAD NUCLEAR ENERGY AND NUCLEAR WEAPONS”

– Bill Gates

It's therefore our role as health entrepreneurs to become more aware of the technology we use, its impact in how we deliver healthcare, and how our patients engage with us through platforms that use AI. Moreso however, we must be able to navigate through the myths and understand the true realities of this platform, and its capabilities, both for good, and for bad.

The Myths of AI?

Misconceptions surrounding AI have bred fear and skepticism, particularly when it comes to the potential impact on jobs and the way we work. Here, we debunk some of the most common myths and provide a more balanced perspective on AI's role in community pharmacy.

MYTH 1: AI WILL REPLACE HUMAN PHARMACISTS

While AI has the potential to automate certain tasks, it is unlikely to replace human pharmacists entirely. AI lacks a critical element of the pharmacist-human experience – emotional intelligence (EQ). EQ and complex reasoning skills are critical to ensure empathetic patient interactions occur. Instead though, AI will augment the pharmacist capabilities, free up time, and allow them to focus on meaningful interactions with their patients through value-added services and personalised and holistic advice.

MYTH 2: AI IS INFALLIBLE

AI systems are not immune to errors, particularly when they rely on poor-quality or biased data. Collaboration between humans and AI will therefore be crucial to ensure the best outcomes for patients. More importantly though, the introduction of AI does not negate the responsibilities of the pharmacist. Pharmacists must be vigilant in evaluating AI-generated insights and maintaining a healthy skepticism to ensure accurate information is communicated at all times.



“OUR INTELLIGENCE IS WHAT MAKES US HUMAN, AND AI IS AN EXTENSION OF THAT QUALITY.”

– Yann LeCun

MYTH 3: AI WILL CREATE UNEMPLOYMENT IN THE PHARMACY INDUSTRY

With a growing workload, and ongoing labour shortages, effective and efficient time utilisation is key. Instead of replacing jobs within the industry, AI will allow pharmacy owners and their teams to redeploy talent to much more meaningful and ultimately profit-earning activities. AI implementation will create new jobs and opportunities for pharmacists to expand their scope of practice. AI will allow pharmacists to focus more on patient care and less on administrative tasks, such as inventory management and dispensing.

MYTH 4: AI IS ONLY FOR LARGE CORPORATIONS

The benefits of AI are not limited to big corporations. Community pharmacies can also harness AI to streamline operations, improve patient outcomes, and support an expanding scope of practice. The key though is to truly understand the problems you need solving, and to find the right AI applications that align with your goals and objectives to overcome them.

AI in Community Pharmacy

The role of AI in community pharmacy is expanding, and it is becoming an increasingly essential tool for pharmacy owners and their teams, even if they don't know that they're likely using AI already in their business.

An example of how AI is being used in community pharmacies today is in medication management systems. These systems use machine learning algorithms to predict when patients will run out of medication and send refill reminders.

They can also help pharmacists identify potential drug interactions, side effects, and allergies, and provide dosing recommendations based on the patient's medical history. This technology can also provide better access to medical information, enabling pharmacists to make informed decisions about patient care.

Beyond just these examples, and as our scope of practice expands, AI is well-positioned to play a growing role in community pharmacy, enabling pharmacists to improve patient care, increase efficiency and productivity, and enhance the accuracy of medication dispensing.



“ARTIFICIAL INTELLIGENCE ISN'T AN INTRUDER IN OUR LIVES, BUT A MULTI-TALENTED ASSISTANT THAT CAN IMPROVE OUR LIFESTYLE IF USED IN THE RIGHT WAY.”

– Aamina Suleman

Specifically though, pharmacists will need to overcome the roadblocks, challenges and obstacles currently faced around a lack of time, a lack of talent, and a lack of change management ability to embrace the evolutionary changes to the way we practice pharmacy.

AI plays just one role in this evolution, and offers numerous benefits including:

IMPROVED PATIENT OUTCOMES

By automating repetitive tasks and providing data-driven insights, AI can free up time for pharmacists to engage more closely with patients, resulting in better health outcomes.

PERSONALISED CARE

AI can help pharmacists develop tailored treatment plans based on individual patient needs, taking into account factors such as genetics, lifestyle, and medical history.

DATA-DRIVEN DECISION-MAKING

AI can provide pharmacists with real-time data and analytics, enabling them to make informed decisions about patient care and pharmacy operations.

ENHANCED COLLABORATION

AI can facilitate communication and collaboration between pharmacists and other healthcare professionals, leading to a more integrated and effective healthcare system.

All in all though, pharmacists must adapt and innovate to remain relevant in the age of AI. Those who harness the power of this technology will be better positioned to serve their patients and communities.

Leveraging AI Today

As community pharmacies continue to grapple with time and resource constraints, it's essential that they start exploring and using AI solutions to help remove obstacles and achieve their expanding scopes of practice. While it can be daunting to embark on new technologies, there are several steps that pharmacy owners and their teams can take right now to start exploring and using AI to help overcome these obstacles.



“BY FAR, THE GREATEST DANGER OF ARTIFICIAL INTELLIGENCE IS THAT PEOPLE CONCLUDE TOO EARLY THAT THEY UNDERSTAND IT.”

– Eliezer Yudkowsky

Firstly, pharmacy owners and their teams need to identify the core problems, roadblocks, challenges, and obstacles within their businesses that are causing the lack of time and resources. They should then prioritize these obstacles and focus on solving them one at a time.

Secondly, they should start researching AI solutions that could help overcome these obstacles. There are several AI-based products and services available for community pharmacies, including inventory management, patient engagement, and chronic care management systems. Pharmacy owners and their teams should evaluate these solutions to determine which ones align with their business goals and budget.

Thirdly, once they have identified potential AI solutions, they should reach out to the vendors and schedule a demonstration or consultation. This will help pharmacy owners and their teams to better understand the benefits and limitations of each solution and decide whether it's a good fit for their business.

Fourthly, pharmacy owners and their teams should prioritise training and education on leveraging their clinical skill set, by developing and harnessing an entrepreneurial skill set. AI solutions are just one piece of the puzzle. It takes a holistic approach to ensure the roadblocks, challenges and obstacles are overcome. By investing in training and education for their teams, pharmacy owners can ensure that they are best placed to understand, adapt to and implement the changes required to thrive in this increasingly complex and competitive landscape.

Finally, pharmacy owners and their teams should foster a culture of innovation and improvement, and look towards ways to regularly monitor, evaluate and refine the effectiveness of their systems, processes and workflows. They should gather feedback from their teams and patients, analyse their data, and make adjustments as necessary.

By following these five steps, community pharmacies are better equipped to overcome the challenges associated with time, talent and tactics, resulting in an increased ability to seize emerging opportunities, provide better patient care, and operate more efficiently.

In conclusion, AI is rapidly transforming healthcare, and community pharmacy is no exception. By automating routine tasks and providing personalised support for chronic disease management, AI can enable pharmacists to focus on patient care, expand their clinical role, and increase revenue streams for their businesses. However, despite the benefits of AI, there is also a fear of how AI will impact pharmacy jobs, patient privacy, and overall healthcare costs. It is important for community pharmacy stakeholders to understand the potential of AI and how it can be integrated into practice to enhance patient care and support the expanding scope of practice for Australian pharmacists. As community pharmacy continues to evolve, AI will play an increasingly important role in shaping the future of the industry. As we move forward, we must continue to explore new technologies and innovative solutions that will enable us to provide better care to our patients, improve health outcomes, and enhance the overall patient experience. You must find holistic solutions, and training programs that empower your pharmacy and the teams within it to embrace these technologies and to cultivate the entrepreneurial skill set required to grow, run, lead and even own a thriving pharmacy.



TIRED OF SAYING “I DON’T HAVE TIME”?

**Sick of saying “I don’t have enough talent”?
Frustrated from saying “I don’t know how”?**

We hear you loud and clear.

But knowing these problems is one thing,
doing something about it is another.

So our question is, what are you doing about it?

How are you leveraging your time to take advantage
of all the opportunities heading your way?

How are you attracting and recruiting talent
to help you achieve your goals?

Do you have time to train, mentor and grow
the talent already within your business?

And then, do you know how to implement the
necessary changes in your business to truly thrive?

Because the honest answer is no.

And that’s not because you’re not good enough,
but simply because you were never taught
how to overcome the roadblocks, challenges
and obstacles within your business.

But that’s where we come in.

So rather than stew on the problems within your
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confidential chat, head to
zamilsolanki.com/book-consultation
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ABOUT THE AUTHOR

Zamil Solanki works with healthpreneurs – from individuals to large multi-national organisations – to help them overcome unique challenges and achieve their goals through curated training programs, and tailored holistic solutions. Unlike other coaches and consultants, we pair global research and techniques with our own experiences, having grown our own pharmacy by \$4 million and exiting it for 3x the industry average multiple. To do this, we focus holistically using 5 key pillars – mindset, planning, leadership, marketing and sales and specialize in workflow, innovation, automation and systems.



Zamil Solanki
Pharmacist, Business Strategist & Entrepreneurial Coach



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GOLLMANN

NATIONAL AUSTRALIAN PHARMACY STUDENTS' ASSOCIATION

Connecting Tomorrow's Pharmacists

A APP 2023 was an amazing event to experience, and as a student, it provides invaluable exposure to the industry, with insights into what the future looks like post university. Over 400 students attended APP this year from around Australia which is an amazing representation compared to the last couple years.





The event involved education, networking opportunities and the always impressive trade show. It is an exciting look into the industry of pharmacy, what the future of community pharmacy looks like, and shows the opportunities that are open to us.

Having our NAPSA Congress really sparked the interest and value of attending different conferences Australia wide.

We had 2 all-inclusive student scholarships which gave Sebastian and Kira all access to enjoy APP and attend any educational and social events.

PGA sponsored our hugely successful NAPSA Alumni event which took place on the Friday evening of APP. We had over 90 tickets sold making it our biggest alumni event in recent years! It's such an amazing opportunity for new NAPSA members to build relationships and meet with previous NAPSA alumni.

The trade show gave students an insight into what is new in the industry and what changes are coming into pharmacy. Students also had a hands-on experience with newly launched products and were able to take that knowledge back and apply it in their studies or at work.

During university, we learn all the vital skills to be a pharmacist, but we are limited with exposure to the industry of pharmacy outside compulsory placements. It is important to remember that the industry needs to engage with these students from an early stage in their careers for them to be excited about prospects post university.

By attending APP as a student, we were able to speak directly to individuals already engaged and excited about pharmacy, as well as being able to experience the more business side of pharmacy by visiting wholesalers, pharmaceutical companies, banner pharmacies and up and coming technological advances. The tradeshow is always a highlight to students, as it is one place we can talk directly and be exposed to this side, as well as always leaving with the fun freebies.

Many other opportunities were on display throughout the weekend, and one of the most engaging to students was intern opportunities and education being provided by various organisations around life post university. The ability to talk directly to these people cannot be underestimated as we have seen many students disengage post the era of online learning, becoming disconnected at a time where the industry is already facing workforce issues and student retention issues.

The education sessions provide a chance to keep up with relevant changes and exciting new advances that will one day impact us in our careers, while also showing those in the world of pharmacy are considering those who will one day be the face of it.

APP was an event that made us feel excited around the future of community pharmacy, and this cannot be underestimated. The industry needs to further its reach and engagement by continuing to make events such as this accessible to students. We are grateful for the opportunity to be able to attend, and we are hoping to see more and more students attend every year with the aim of engaging and involving them in industry discussions further.

NAPSA would like to congratulate the Pharmacy Guild of Australia for another fantastic conference and thank them for their continued support of NAPSA's attendance at APP.



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Working Towards Better Children's Pain and Fever Management In Pharmacy

- Explain the risks associated with inappropriate management of acute pain and fever in children.
- Describe the role of the pharmacist in the management of acute pain and fever in children.
- Discuss the current evidence for management of paediatric pain and fever.
- Identify opportunities to counsel parents and carers on appropriate use of both non-pharmacological strategies and non-prescription medicines for children's pain and fever.

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Fostering Innovation in Pharmacy

- Describe innovation in the workplace.
- Identify components of the workplace environment.
- Promote innovation in the workplace.

Working Towards

BETTER CHILDREN'S PAIN AND FEVER MANAGEMENT

In Pharmacy

T This article discusses the importance of appropriate pain and fever management in children, including the consequences associated with both under- and overtreatment. It examines the crucial role of pharmacists in managing acute presentations of paediatric pain and fever, while reviewing the current evidence for management strategies and their relevance in the pharmacy setting.

Words | Karalyn Huxhagen





Learning Objectives

After completing this activity pharmacists should be able to:

- Explain the risks associated with inappropriate management of acute pain and fever in children.
- Describe the role of the pharmacist in the management of acute pain and fever in children.
- Discuss the current evidence for management of paediatric pain and fever.
- Identify opportunities to counsel parents and carers on appropriate use of both non-pharmacological strategies and non-prescription medicines for children's pain and fever.

Competency standards addressed:

2.2, 2.3, 3.1, 3.2, 3.5



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ACCREDITED CPD

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Burden of Pain & Fever in Children

Pain and fever are common occasions in children.¹⁻³

Acute pain is often a result of injury, illness, teething, or necessary medical procedures.^{1,2} Moreover, as many as 40% of children and adolescents complain of pain that occurs at least once weekly, and chronic pain affects at least 15–20% of children.²

Fever in children most often results from an infection.³ The prevalence of serious infections in children under the age of 5 is low, as seen in a two-year prospective cohort study (15,781 instances of febrile illness) where the combined prevalence of the infections of interest (urinary tract infection, pneumonia, or bacteraemia) was 7.2% (95% CI 6.7–7.5%).⁴ Despite this, fever can be a worrisome occasion for parents and it is responsible for 15–25% of consultations in primary care and emergency departments.³

Given the frequency of pain and fever in children, it is important to ensure parents and caregivers have an adequate understanding on how to manage these occasions, including when to use non-pharmacological and pharmacological interventions, and when to seek medical attention.





Why Adequate Management of Paediatric Pain and Fever is Important

Both undertreatment and overtreatment of pain and fever can be problematic.

UNDERTREATMENT OF PAIN AND FEVER

Inadequate pain management can greatly impact a child's quality of life by interfering with their mood, sleep, appetite, school attendance, academic performance, and participation in sports and extracurricular activities.² Undertreated pain can also have lasting consequences and impact future experiences of pain. For example, a study examined whether children's experiences of pain intensity and anxiety during venepuncture were related to their memories of the procedure. The participants (n=48 children aged 5–10 years) self-reported their pain intensity and anxiety both immediately and two weeks after the procedure, and it was found that those who initially reported higher levels of pain tended to over-estimate their anxiety at follow-up – that is, they recalled the experience being scarier two weeks later than they did immediately following the actual pain experience. In contrast, children who reported lower levels of pain tended to accurately recall or under-estimate their anxiety at follow-up.⁵ Similarly, a study of children diagnosed with leukaemia who underwent lumbar punctures as part of their treatment (n=55) found that higher levels of distress during the event predicted greater exaggerations in negative memories at follow-up.⁶ Moreover, these exaggerated negative memories were then associated with greater pain and behavioural distress at subsequent pain events, compared to children with accurate recall.⁶ These findings indicate an association between the memory of and direct experience of pain, highlighting the importance of effective pain management. Memories of painful experiences can also affect pain coping behaviours in adulthood (e.g., phobic reactions to medical procedures and avoidance of medical care), while early repeated exposure to pain can lead to altered pain sensitivity and psychological issues.^{2,7,8}

In contrast, fever in itself is not harmful, but rather the underlying condition that led to the rise in temperature may be.³ If parents or carers are unclear about when fever requires medical attention (i.e., 'red flags') versus when it can be managed at home, there is a risk that a serious medical emergency may be missed.

OVERTREATMENT OF PAIN AND FEVER

On the other hand, overtreatment of both pain and fever due to inappropriate medication use can be problematic.^{9–12} Parents and caregivers may hold misconceptions about what to expect during common pain events such as teething or about the long-term effects fever can have on their child's health.^{3,13} This can result in inappropriate use of medicines and overuse of health resources such as emergency departments.^{14,15}

Management of children's pain and fever by parents and carers in Australia is less than ideal as seen in a study profiling medication dosing behaviour of carers of children aged ≤5 years (n=97) using fever and cough/cold management scenarios. Only 35% of medication dose measurements in the study were accurate, with actual measured doses ranging from 73–120% of the intended dose. Additionally, 20% of observations had an inappropriate dosing interval and 45% chose to medicate fever when the temperature was below 38°C.¹⁵

These results are concerning given overdose of children's pain and fever medications can have serious consequences in children.^{9–12} Paracetamol overdose in young children is common and has been associated with acute liver failure and death.^{9,10} Ibuprofen exposures are not as common as paracetamol, though ingestion of >400 mg/kg in children has been associated with serious adverse effects.^{11,12,16} In the case of a suspected overdose, patients must be promptly referred to a tertiary care setting (i.e., hospital) to receive appropriate care. If unsure whether the dose(s) given to patient warrant a referral, the Poisons Information Centre should be contacted on 13 11 26 without delay.

Considering all this together, it's important to help parents understand how to identify and manage their child's pain and fever using evidence-based strategies – not only to ensure medication is used appropriately, but also that adequate pain and fever relief is achieved, and any unnecessary suffering is avoided.

The Crucial Role of the Pharmacist

Pharmacists have an important role in supporting responsible self-care, and the provision of non-prescription medicines is a key component of this. As one of the most accessible health providers in the community, pharmacists are well placed to provide much-needed education to parents and carers on when and how to use medications in children within the context of an overall management plan. This is important to help build parents' confidence and competence in providing effective pain and fever relief for their children, and to reduce the risk of inappropriate medication use. Pharmacists also play a critical role in triaging children's pain and fever cases, ensuring those who need medical attention are referred.

In executing these roles, pharmacists should be led by the latest evidence and clinical guidelines. Current Australian guidelines for children's pain and fever management were developed in the context of a hospital setting, or are for chronic pain management, or are directed towards prescribers or other health professionals. While some of the recommendations may not be appropriate or relevant for community pharmacy, pharmacists can certainly draw on the principles of care from these. Below, we will highlight some key principles of paediatric pain and fever management that are relevant in a pharmacy setting.

Assessing Pain in Children

Assessment of pain is important in all healthcare settings to dictate the management approach.¹⁷ Since pain is a personal experience, many different terms can be used to describe different sensations.² However, children may struggle to effectively communicate their pain.^{1,2} Additionally, children of the same age can vary widely in their perception and tolerance of pain.² There are a number of validated pain scales for children such as the Faces Pain Scale and the FLACC (Face, Legs, Activity, Cry and Consolability) scale, but these are not always relevant for the community pharmacy setting.¹

Thus, the focus for the pharmacist should be on appropriate and comprehensive history taking (Table 1). A child's ability to self-report their pain depends on their age or developmental stage.^{1,18} For infants, it is up to the parent or caregiver to notice the signs.¹ However, even in older children, it's important to combine a child's self-report with observations from the parent or carer to have a more complete and reliable picture.^{1,18} Developing rapport with parents or carers is important during assessment, as this improves children's trust and willingness to communicate.¹⁸

Depending on the presenting condition, a physical examination may also be warranted.¹⁸ The ultimate objective is to establish the history, characteristics and biopsychosocial context of the pain in order to formulate a management plan that meets the child's needs.¹⁸ Pain assessment can be integrated into the current tools used in community pharmacy protocols, such as during the 'Ask' and 'Assess' components of the Ask, Assess, Advise protocol; the 'Check' and 'Assess' components of the CARER (Check, Assess, Respond, Explain, Record) protocol; and the 'What' component of the What, Stop, Go protocol.

Table 1: Pain history assessment¹⁸

Aspect of pain experience	Information sought*
Onset and timing of pain	<ul style="list-style-type: none"> Was the onset of pain sudden or gradual? Was there an identifiable cause? (e.g., trauma, illness or a stressor) Is the pain intermittent or continuous?
Location of pain(s) and radiation	<ul style="list-style-type: none"> Identify all painful sites Is the pain localised or widespread? Is the pain referred or radiating?
Description of pain(s)	<ul style="list-style-type: none"> Characteristics of pain to determine its type
Severity of pain	<ul style="list-style-type: none"> Is it mild, moderate or severe?
Aggravating factors	<ul style="list-style-type: none"> Factors that contribute to the pain experience
Relieving factors	<ul style="list-style-type: none"> Factors that improve pain
Associated symptoms	<ul style="list-style-type: none"> Symptoms that may be associated with a particular cause of pain, including underlying pathology Identification of red flags
Impact of pain	<ul style="list-style-type: none"> Identify psychosocial and physical aspects of patient's life that have been impacted by the pain experience, and to what extent

**For infants, it is up to the parent or caregiver to notice the signs, which may include their cry being different, not wanting to eat, or being withdrawn.¹*

Lifestyle Considerations

Non-pharmacological or lifestyle considerations are a critical component of pain and fever management, which can be tailored based on the child's age and clinical context.¹⁹

Techniques for managing acute pain include creating a comfortable environment (e.g., warm room, parental presence), distracting the child (e.g., play, storytelling) and physical interventions (e.g., comforting the child or RICE [Rest, Ice, Compression, Elevation] for injuries).¹⁹

In the case of fever, parents should be advised that children who seem well and happy do not need to be treated.²⁰ However, if the fever is making the child miserable, rest and hydration are the recommended non-pharmacological strategies. Hydration is recommended in the form of small, frequent drinks:²⁰

- Breastfed infants <6 months of age – additional feeds should be offered.
- Formula-fed infants <6 months of age – the usual amount of formula should be offered.
- Infants >6 month of age – breastfeeding or bottle-feeding should be continued, and the child may also be offered water or rehydration solutions.

Parents may also try dressing them in appropriate clothing so that they are not too hot or cold.²⁰

Helping parents and carers understand which non-pharmacological interventions are appropriate for their child's development stage and clinical context can allow them to initiate tailored management strategies.^{19,21} It should be emphasised to parents to use non-pharmacological strategies alongside medications, rather than relying on medications alone to relieve their child's pain or fever.¹⁹

Recommended Pharmacotherapy Options

If non-pharmacological methods are unlikely to alleviate the child’s discomfort, adding pharmacotherapy may be helpful.²⁰⁻²² The recommended first-line pharmacotherapy options for pain and fever are over-the-counter (OTC) paracetamol or ibuprofen.²⁰⁻²² While the exact mechanism of action of paracetamol is unclear, it is thought to achieve an analgesic effect via inhibition of central prostaglandin synthesis and modulation of inhibitory descending serotonergic pathways.²³ On the other hand, ibuprofen exerts analgesic and anti-inflammatory effects through inhibition of cyclooxygenase and prostaglandin synthetase.²⁴ Since paracetamol’s anti-inflammatory effects are negligible, ibuprofen may be considered a more suitable option for pain with an inflammatory component.²²⁻²⁴

IBUPROFEN VS PARACETAMOL EFFICACY

The efficacy of OTC paracetamol and ibuprofen for alleviating pain and fever are comparable. Paracetamol (15 mg/kg/dose every 4 hours) and ibuprofen (10 mg/kg/dose every 8 hours) demonstrated comparable pain relief over 48 hours in a prospective, randomised controlled study in children aged 5–14 years presenting at the emergency department with an acute limb fracture (n=94).²⁵ Similarly, single-dose paracetamol (15 mg/kg/dose) and ibuprofen (10 mg/kg/dose) demonstrated comparable antipyretic efficacy over 8 hours in a double-blind, double-dummy, randomised study in children aged 3 months to 12 years with fever of non-serious origin (n=301).²⁶

IBUPROFEN VS PARACETAMOL TOLERABILITY

With regard to tolerability, paracetamol may often be thought of as being safer than ibuprofen due to perceptions about the gastrointestinal safety of non-steroidal anti-inflammatory drugs (NSAIDs).²⁷ However, literature shows the gastrointestinal safety of ibuprofen is similar to paracetamol in managing paediatric pain and fever in children older than 3 months of age, when used in the OTC setting in patients without contraindications or precautions.^{27,28} In one of the largest trials evaluating ibuprofen (5 or 10 mg/kg) and paracetamol (12 mg/kg) in febrile children aged 6 months to 12 years (n=84,192), the risk of gastrointestinal bleeding was low (7.2 per 100,000) with no statistically significant difference in gastrointestinal bleeding between the two groups (p=0.31).²⁷⁻²⁹ The four cases of bleeding (which were managed conservatively) in this study are occasionally cited as a potential cause for concern, despite the lack of significant difference relative to paracetamol.²⁷⁻²⁹ Furthermore, a systematic review and meta-analysis comparing paracetamol with ibuprofen for short-term treatment of fever or pain in children younger than 2 years found that ibuprofen had the same low risk of adverse events as paracetamol (7 studies with 27,932 participants; ibuprofen vs paracetamol: odds ratio, 1.08; 95% CI 0.87–1.33; P=0.50, I²=0%; moderate-quality evidence).³⁰ Given that OTC paracetamol and ibuprofen have comparable efficacy and tolerability for alleviating pain and fever in children, the choice of which pharmacotherapy to recommend to parents may come down to inflammatory involvement in the presentation, and whether the patient has any contraindications or precautions.

Combining or Alternating Paracetamol and Ibuprofen

Multimodal analgesia is a strategy that’s commonly used when monotherapy is inadequate.²² It aims to improve pain relief due to additive or synergistic effects of drugs with different mechanisms of action.²² The evidence for strategies like alternating or co-administering paracetamol and ibuprofen in paediatric pain and fever is inconclusive, and current advice in both local and international guidelines is limited and mixed (Table 2).^{23,31-35}

Table 2: Guidelines recommendations for combining or alternating paracetamol and ibuprofen

Governing body / Guidelines	Recommendations
Therapeutic Guidelines ³¹	<ul style="list-style-type: none">• Mild, acute nociceptive pain: paracetamol and ibuprofen may be combined if paracetamol alone is unlikely to provide adequate analgesia for children >3 months old• Moderate, acute nociceptive pain due to an acute illness (e.g., uncomplicated appendicitis), or following surgery or trauma: combination paracetamol and ibuprofen recommended as first-line therapy for children >1 year old
Royal Children’s Hospital ³²	<ul style="list-style-type: none">• To ensure the child’s pain is well controlled, alternating between ibuprofen and paracetamol, or combining them may be appropriate• Advise parents to keep a diary of when each dose of ibuprofen and paracetamol is given to avoid overuse
Australian Medicines Handbook ²³	<ul style="list-style-type: none">• Mild-to-moderate pain: if regular paracetamol alone is inadequate for treating pain, adding an NSAID may provide additional analgesia and allow use of lower or intermittent doses of NSAID• Fever: combining paracetamol and ibuprofen (or using an alternating regimen) to treat fever is not recommended
The Children’s Hospital at Westmead ³³	<ul style="list-style-type: none">• For severe pain, paracetamol is synergistic with NSAIDs and reduces opioid requirements
NICE Guidelines ³⁴	<ul style="list-style-type: none">• When using paracetamol or ibuprofen in children with fever, do not give both agents simultaneously. Only consider alternating these agents if the distress persists or recurs before the next dose is due

While there is no clear conclusion on the recommendations for alternating or combining doses of different medications, these methods do come with a risk of accidental overdose of either medicine.³² Thus, it's important to advise parents and carers to maintain a clear, written dosing schedule when administering analgesic medications to children, and to advise all carers of the child when dosing of medicines has occurred.

Counselling on Appropriate Medication Use

As previously highlighted, parents and carers have many gaps in their understanding of appropriate medication use in children, particularly with regards to correct dosing.¹⁵ It is therefore important for pharmacists to take the time to explain this, even when it seems rote.

Taking the time to go through the dosing instructions and warnings on the pack label with the parent or carer is vital so that they are clear on how to use the medication and what the contraindications and precautions are (Table 3). Ensure parents understand that the medication dose should be based on the child's weight, or the ideal weight for children who are overweight or obese.²² Parents should also be encouraged to use a syringe for the most accurate dose measurement.¹⁵ If a child spits up a dose, advise parents not to give another dose until the next interval is due, to avoid risk of overdose. Should a child continue spitting up the dose, parents may need to consider giving an alternative medication that is more palatable to the child, or an alternative format such as suppositories.

Table 3: Ibuprofen and paracetamol specifications

	Ibuprofen ^{24,36}	Paracetamol ^{23,37}
Age it can be used from	3 months (oral liquid suspension)	1 month (oral liquid suspension)
Dosing interval	Every 6–8 hours as necessary, with no more than three doses in 24 hours.	Every 4–6 hours as necessary, with no more than four doses in 24 hours.
Adverse effects	Gastrointestinal issues, kidney injury, asthma and cardiovascular effects. Dehydration can increase the likelihood of adverse events.	Supratherapeutic doses can result in hepatotoxicity. Many paediatric medications contain paracetamol and accidental overdose may occur.

Parents should also be advised on how to assess the effectiveness of the medicine before providing an additional dose, and given guidance on what to do if the child is not improving (e.g., switch to alternate pain relief, or seek medical attention).²² Ensure parents understand that neither ibuprofen nor paracetamol should be used for more than a few days at a time.³² In noting that, it's also important to counsel parents and carers regarding red flags and advise them not to wait for the medicine to work if they see them deteriorating – it's critical that they seek medical attention should their child's illness start to significantly worsen.

Finally, it is important to address any misconceptions parents may have about the medicines, such as the need to take medicines with food, particularly with regards to ibuprofen. The need for NSAIDs to be taken with food has not been properly examined in human subjects and the evidence for food modifying the gastrointestinal effects of NSAIDs is lacking.^{27,38} On the contrary, a systematic review of 38 publications (n=874) found that food typically delayed absorption of ibuprofen and the time to maximum concentration was reduced by 22% when taken with food compared to the fasted state.³⁹ Accordingly, the Australian Medicines Handbook was updated in 2015 to state that ibuprofen can be administered without food; although if an upset stomach occurs, it can be taken with a meal.²⁴ It is important to explain this to parents as some may hesitate to start pharmacotherapy unless their child has eaten, which can cause unnecessary discomfort if the child has a reduced appetite and is refusing to eat.



When to Refer

While minor elevated fever can be treated in community pharmacy, children aged <3 months with a fever above 38°C or aged 3–6 months with a fever above 39°C should be referred for medical attention.^{40,41} It's important to note that the severity of illness can't be predicted by degree of fever, speed of onset, response to antipyretics or presence of febrile seizures, and the appearance of the child is often the most useful indicator.⁴⁰ The features of an unwell child that may indicate high risk of serious bacterial infection are listed in Table 4.

Table 4: Fever 'red flags' for referral⁴⁰

Colour	<ul style="list-style-type: none"> • Pallor • Mottled • Blue/cyanosed
Activity	<ul style="list-style-type: none"> • Lethargy or decreased activity • Not responding normally to social cues • Does not wake or only with prolonged stimulation, or if roused, does not stay awake • Weak, high-pitched or continuous cry
Neurological	<ul style="list-style-type: none"> • Bulging fontanelle • Excessive irritability • Neck stiffness • Focal neurological signs • Focal, complex or prolonged seizures
Respiratory	<ul style="list-style-type: none"> • Grunting • Tachypnoea • Increased work of breathing • Hypoxia
Circulation & Hydration	<ul style="list-style-type: none"> • Poor feeding • Dry mucous membranes • Persistent tachycardia • Central capillary refill time ≥3 seconds • Reduced skin turgor • Reduced urine output
Other	<ul style="list-style-type: none"> • Non-blanching rash • Fever for ≥5 days • Swelling of a limb or joint • Non-weight bearing/not using an extremity

Regarding pain, mild-to-moderate acute paediatric presentations are generally fine to be managed in community pharmacy. Table 5 lists some examples of these presentations as well as those that should be referred. Moderate-to-severe pain presentations should also be referred for medical attention.

Table 5: When to refer pain presentations

Treat in community pharmacy	<ul style="list-style-type: none"> • Pain from minor injury (e.g., grazes, cuts, bruises, sprains) • Teething pain • Colic • Minor headache • Immunisation • Post minor surgery • Dental pain
Refer to medical practitioner	<ul style="list-style-type: none"> • Earache • Stomach pain • Migraine • Pharyngitis • Viral infections of the mouth • Post major surgery • Pain from an unknown source • Pain associated with other symptoms (e.g., dizziness, loss of consciousness) • Pain that has been present for a sustained period • Pain that may be associated with abuse/bullying



KEY LEARNING POINTS

- Undertreated pain in children can impact quality of life and may impact future experiences of pain.^{2,5,6}
- However, overtreatment of children's pain and fever with medicines is an issue amongst Australian caregivers and can have serious consequences in children.^{9,10,15}
- Paediatric pain and fever management requires a multimodal approach of non-pharmacological strategies alongside balanced use of analgesics.^{17,20,21}
- Pharmacists have a key role in supporting acute presentations with education and counselling on OTC medicines, as well as triaging cases requiring further medical attention.
- Current evidence supports the appropriate use of OTC ibuprofen or paracetamol for children's pain and fever;^{25-27,30} further clarity is needed on alternating or co-administering doses.



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FOSTERING INNOVATION IN PHARMACY

In a highly competitive community pharmacy industry, the success of a business can be dependent on staying ahead of the competition by offering innovative products, product combinations and services. Pharmacies should be careful not to waste opportunities by using outdated ways of doing business. Maximising opportunities relies on having staff who are motivated to contribute to innovative processes within the pharmacy.





Learning Objectives

On completing this activity pharmacists should be able to:

- Describe innovation in the workplace
- Identify components of the workplace environment
- Promote innovation in the workplace

Competency standards addressed:

4.2, 4.3, 4.6, 4.7



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As a manager, it is essential to provide opportunities for all staff to participate in and achieve innovative outcomes as part of their work roles. To enable this to happen, it is critical that you promote, support and implement work and management practices that emphasise the value of innovation throughout every facet of the pharmacy, and create an environment that facilitates the application of innovation skills for your team members. It is well known in business that the workplace environment has a significant impact on staff morale, attitudes and motivation. The way people feel about their job is critical to their ability to innovate.

What is Innovation?

The term innovation derives from the Latin *innovatus*, "to renew or change. The Harvard Business School, defines innovation as a product, service, business model, or strategy that's both novel and useful.¹ Innovation may lead to new or improved products, new services, new systems, processes and/or work procedures. Innovative ideas can be simple or complex and should be viable.¹

This definition encompasses innovation as the development of new products and new technologies. Although pharmacies supply products and use new technologies, it is important that its offering to customers is service focussed. Therefore, there is a need to be aware of service innovation too.

Innovation Versus Creativity

Creativity and innovation are not one and the same. Creativity refers to the ability to combine ideas in a unique way or to make unusual associations between ideas. An organisation that stimulates creativity develops unique ways to work or find novel solutions to problems. But creativity by itself is not enough. The outcomes of the creative process need to be turned into useful products, services or work methods, which is defined as **innovation**. Thus the innovative organisation is characterized by its ability to channel creativity into useful outcomes. When managers talk about changing an organisation to make it more creative, they usually mean they want to stimulate and nurture innovation.²

CREATIVITY



INNOVATION

CREATIVITY

FOSTERS

INNOVATION

Innovation at Work

In addition to new or improved products, innovation may lead to new or improved services, systems or work procedures. In the retail environment, this may be as simple as displaying products in a new way that attracts more customers into the store. Think for a moment about the community pharmacy in general, in many cases the current 'trends' have emerged from small, innovative changes with the aim of improving customer traffic, improving workflow, or further developing the image of the pharmacy as a health care provider within the community. From there these innovative changes have continued to grow and multiply.

The capacity to be innovative has been identified as a major contributing factor in the survival of organisations. Retail organisations benefit from encouraging their staff to be more innovative. Innovations don't need to be radical new products or ground-breaking designs. They may be small improvements in the workplace, new ways of approaching work, changes to systems, or new designs or processes.

Innovations can include:

- renewed focus on customer service
- new display concepts
- new reporting systems
- changes to packaging of your products
- adjustments to ways of sharing information
- redesigned floor space of your store
- altered filing system.

The Work Environment and Innovation

Your workplace environment is a critical component of the success or failure of innovation. A person who is unhappy at work, completely unmotivated, stifled by bureaucratic requirements and not supported by management is not going to contribute a new idea or look for an opportunity to make improvements.

On the other hand, a person who feels appreciated and supported in their work, who is allowed some flexibility, is content in their physical environment, and has access to help when needed is much more likely to be motivated to contribute new ideas to the workplace.

What is meant by the term 'workplace environment'? It is more than the physical space in which you work. It also includes your work practices, procedures and conditions, as well as how you organise teams and allocate work. The diagram below identifies the various components of the workplace environment.



Work practices refer to the way in which you and the team carry out your work activities. For example, you may have a work practice of holding a regular Friday morning meeting. Work practices are not strict rules, so in this example, the meeting may be postponed.

Workplace procedures are a set of steps or actions that the team follows to complete a particular task. For example, there may be a set of procedures established for handling customer complaints based on a sound rationale, and it should be followed in all cases.

Working conditions refer to employment policies and contracts. They might include policies on flexible working hours, family-friendly leave entitlements, study leave and personal leave. These are the conditions that may be included in an employment contract. Working conditions have the potential to create a positive or negative workplace environment.

Working arrangements also impact on innovation. Working arrangements refer to the design of teams and allocation of work. They may include, for example, allocation to a team, job rotation within the team, flexible work arrangements, working with people outside the organisation, and access to management advice and guidance.

Physical environment may include, for example:

- the layout of the store and work areas
- the design and décor of the workplace
- staff amenities including relaxation areas and eating areas
- access to external areas
- location of different departments within the store.

Learning environment includes the education opportunities that are provided for staff to learn about and apply innovative work practices. These include organised short staff training events within and external to the business, just-in-time learning, mentoring from fellow staff and other opportunities such as traineeships, product training and in-store refresher training.

All these aspects of the work environment have an impact on the ability of employees to apply innovation skills. The workplace environment can motivate, support, encourage and promote innovation or it may stifle it completely. Organisations should facilitate interaction between people with diverse skills and competencies to assist learning.

Organisational learning capabilities influence the innovating performance of small and medium enterprises (SMEs).³



Promote Innovation in the Workplace

A critical aspect in creating an innovative workplace is to ensure there is organisational support and commitment for innovation by making it an integral part of the organisation's approach to business. Unless the organisation demonstrates its commitment to innovation by supporting and promoting the value of innovation, it is unlikely to be able to create and maintain an innovative work environment. Managers may encourage this commitment by taking a whole organisation approach to innovation.

Successful Small to Medium Enterprise (SME) business owners have identified key factors behind their success in building innovative SME's:

- **Provide failure-tolerant leadership.** Risk is part of innovation and organisations with cultures that promote challenge and risk taking will generally be more innovative. Recognise that there will be some innovative ideas that don't work straight away, and some that completely fail.
- **Establish the right business culture.** It's people that innovate – a pharmacy business needs to send clear signals to its people that they are valued, rewarded and critical to the pharmacy's success and growth. An innovative idea is just as likely to come from a junior staff member as it is from a business owner, a cleaning contractor or a pharmacist.
- **Promote teamwork and collaboration.** A pharmacy owner cannot innovate alone so thought needs to be given to building systems, collaboration, alliances and a culture to sustain innovation.
- **Look outside the square.** Recognise that the answer may not be within the pharmacy. It may be in another pharmacy, another retail environment, or a completely different work environment. Take the time to explore examples from other pharmacies, both locally and nationally. Examples of innovation within the pharmacy environment are often displayed or discussed at industry events and conferences, so take the time to attend and network.

- **Access financial and business support.** This is critical particularly in today's economic environment. When building new aspects of the business, assistance to assess risk and risk mitigation strategies are invaluable.

This may include:

- making specific reference to innovation in the Business Plan and in Key Performance Indicators
- developing and implementing whole of organisation systems and procedures to support innovation
- promoting the value of innovation to staff
- maintaining a commitment to innovation in spite of potential business risks
- acknowledging and acting upon staff suggestions for innovation and improvement.

It is important for you to promote innovation to your staff, for example by:

- making your section of the work environment as conducive to innovation as possible
- encouraging the education and utilisation of new technologies
- explaining to your staff your reasons for valuing innovation
- acknowledging and acting upon innovative ideas and celebrating or rewarding innovations appropriately
- acknowledging potential risks and maintaining your commitment to innovation in spite of them
- celebrating small wins
- creating an environment where there is a willingness to try new things
- creating an ideas board where new ideas are displayed
- incorporating a 'five minute rule' where all new ideas are given a full five minutes of positive comments before any negative or more critical feedback is given
- providing sufficient time, training and support once innovative ideas have been adopted

These considerations contribute to establishing the right business culture for innovation to flourish.

Not all innovations succeed, for a variety of reasons. During the development phase of an idea, it may become apparent that it is not appropriate for the organisation. It is important, however, to promote and celebrate innovations that don't work, as well as those that do. This reinforces the organisation's commitment to and valuing of innovation, and so enhances the work environment.

Each attempt at innovation provides a good learning opportunity to analyse what works, what doesn't and why. The initial idea and its progress should be celebrated, so the people involved feel their efforts are appreciated and maintain their motivation to attempt more innovations. Celebrating innovations should be a positive and sincere message that innovation is highly valued by you and the organisation. As highlighted by Alex Lee, president of the kitchenware and household tool company OXO, it is our failures and mistakes that can lead to the best learning opportunities.⁴

Depending on your organisation and its culture, the way you celebrate innovation will differ. Some organisations like to celebrate loudly and publicly, others may prefer a more subdued acknowledgement.

Your celebration may involve a range of activities such as:

- congratulating the project team who worked on the idea
- writing a story in the company newsletter about the idea
- using the idea as a springboard for more ideas
- ensuring that appropriate managers in the organisation are made aware of the idea
- referring to the development of ideas during performance reviews

Exemplify Innovative Work Practices

One of the most effective ways to promote the value of innovation to your team is to model innovative work practices in your own work. If you want innovation to become a positive component of your workplace environment, your team needs to see you, their team leader, providing a model of innovative work practice in your role within the team.

You need to demonstrate the use of innovation skills in your role, share these experiences with your team, and promote and reinforce the value of innovation to the business. For example, if you wished to model innovation processes and skills to develop a concept for promoting a new service, you could:

- interpret the brief in relation to your customer base and the new service
- involve your staff in creative thinking activities to generate ideas for the approach
- identify a range of appropriate people to be included in a collaborative process to develop the idea
- take time for structured reflection on the approach
- represent the idea and make a presentation to relevant stakeholders, seeking their feedback
- evaluate the approach against the requirements of the brief.

You could also model facilitating the use of particular skills, such as creative thinking skills, to develop ideas. For example, if a team meeting seems to be stagnating, start a brainstorming session to get it going again. The team will probably rely on you for a time to instigate such creative thinking exercises until they feel confident to do it themselves.

If you wish to model sharing your experiences of being innovative as part of your job, tell the team about an occasion when you used the process to develop an idea and the idea worked, as well as an occasion when an idea did not work and what you did about this. Show them that you are taking the risk of coming up with new ideas and sharing them with others.

Summary

- Managers can play an important role in fostering workplace innovation among all pharmacy staff.
- Innovation can be encouraged in the workplace in many different ways including having a tolerance to failure and acknowledging and acting upon innovative ideas.
- Innovating should be actively celebrated.
- A focus on innovation should be at the forefront of all pharmacies looking to add value to their business.



Working Towards Better Children's Pain and Fever Management in Pharmacy

01 What is a potential consequence of undertreated children's pain?

- a) Acute liver failure
- b) Impaired quality of life
- c) Overdose and toxicity
- d) Increased pain tolerance

02 What is a potential consequence of overtreatment of children's pain and fever with medication?

- a) Increased blood pressure
- b) Impaired quality of life
- c) Overdose and toxicity
- d) Increased pain tolerance

03 What is a key role of the pharmacist in treatment of acute pain and fever in children?

- a) Educating children about pain and fever
- b) Determining the dosage regimen for prescription medicines
- c) Perform medical investigations and differential diagnosis
- d) Educating parents and triaging patients

04 According to current evidence, how do OTC ibuprofen and paracetamol compare in relation to efficacy for children's pain and fever?

- a) Ibuprofen and paracetamol have comparable efficacy for children's pain and fever
- b) Ibuprofen is more effective than paracetamol for children's pain and fever
- c) Ibuprofen is less effective than paracetamol for children's pain and fever
- d) Ibuprofen and paracetamol should not be used for children's pain and fever

05 Which of the below counselling points about ibuprofen and paracetamol is correct?

- a) Ibuprofen dose should be based on age and paracetamol on weight
- b) Ibuprofen can be taken from 1 month of age and paracetamol from 3 months
- c) Paracetamol can be taken on an empty stomach but not ibuprofen
- d) Both ibuprofen and paracetamol can be taken without food



LEARNING OBJECTIVES

After completing this CPD activity, pharmacists should be able to:

- Explain the risks associated with inappropriate management of acute pain and fever in children.
- Describe the role of the pharmacist in the management of acute pain and fever in children.
- Discuss the current evidence for management of paediatric pain and fever.
- Identify opportunities to counsel parents and carers on appropriate use of both non-pharmacological strategies and non-prescription medicines for children's pain and fever.



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Fostering Innovation in Pharmacy

01 Innovation can be defined as a product, service, business model, or strategy that's both novel and useful.

- a) True
- b) False

02 Which of the following is LEAST correct:

- a) Creativity and innovation are one the same
- b) Creativity promotes innovation
- c) Creativity refers to the ability to combine ideas in a unique ways
- d) Innovative ideas must be useful

03 The workplace environment includes:

- a) Policies and procedures
- b) The conditions of work
- c) Physical work space in which people work
- d) Learning environment
- e) All of the above

04 How can innovation be promoted within a workplace?

- a) Providing a no-tolerance to failure and a win-at-all-costs culture
- b) Identify potential business risks and avoid ideas that lead to unknown risks
- c) Take disciplinary action against staff who develop unsuccessful innovative ideas
- d) Acknowledging and acting upon innovative ideas and celebrating accordingly

05 A community pharmacy wishes to promote a new professional service. How can the manager incorporate workplace innovation to help promote the new service?

- a) Involve all staff in creative thinking activities to generate ideas for the approach
- b) Think outside the box – looking at other pharmacies or health practices offering the service
- c) Model innovative work practices, by sharing experiences of being innovative
- d) All of the above



LEARNING OBJECTIVES

After completing this CPD activity, pharmacists should be able to:

- Describe innovation in the workplace
- Identify components of the workplace environment
- Promote innovation in the workplace



SUBMIT YOUR ANSWERS TO EARN CPD CREDITS

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