

Asynchronous prescribing with boundaries: Why it serves a Public Health need

The Structural Problem

Every day in Australia, approximately 1.7 million women will take a contraceptive pill¹, 3.75 million Australians will take a cholesterol lowering statin², a similar number will take at least one anti-hypertensive, and over 3 million Australians will take an SSRI. For the vast majority of this cohort attaining this medication will be simple and straightforward. They will either have a routine prescription in hand from their regular GP with several repeats or, in the event their prescription has expired, their GP will be available either in person or by phone to facilitate the renewal of their prescription. Those two routes are indeed the access gold standard. They ensure continuity by adopting a 'one patient, same prescriber' model.

But for a meaningful minority of this cohort, the Australian primary health care system will let them down. The Gold Standard access routes referenced above assume absolute availability of prescriber and the relative proximity of the patient concerned. In an ideal world the practice where the prescriber works would be perfectly informed of the prescriber's instructions and be 'on call' for a patient requiring a re-script. But we know that practices Australia wide have limited trading hours and enough practitioner churn to complicate the 'same prescriber' ideal. The approved medical deputising services such as 13-Sick and DoctorDoctor, exist on account of this very phenomenon. Doctors and practices are simply not available for their patients at all times, at all places.

The above access issues are even more pronounced in regional Australia where GP rates can be as low as 150 GPs per 100,000. A recent wave of regional practice closures are both symptomatic and causative of this issue³. The public health danger of not having readily available primary health care is obvious. Lack of timely professional help during an acute health crisis can of course be outcome determinative. Less intuitive but no less dangerous, however, are the scores of Australians who, in these situations, may be left without their routine medications. We know, for instance, that abrupt withdrawal from an anti-hypertensive, can produce a syndrome of sympathetic overactivity that includes nervousness, tachycardia, headache, agitation and nausea 36-72 h after cessation of the drug⁴. Suicidality risk dramatically increases from abrupt withdrawal of an SSRI and abrupt withdrawal of a statin increases risk of stroke. Running out of a routine prescription may be non-acute but it is time critical. A GP on holidays or a patient visiting their relative interstate should not be cause for a medical emergency.

This issue is expected to worsen in the short to medium term. According to Deloitte Economics 2022 GP workforce report;

¹ Based on IBIS World female population estimates and 'Factors Influencing young women's contraceptive choices' Claringbold, Sanci, Temple-Smith, AJGP 2019

² NPS Medicinewise, Top 10 Drugs, 2020-21

³ ABC News, Pomona Family Medical forced to close as national GP shortage bites regional Queensland towns, 18 Dec 2022. The Guardian, Rural Victorian town left without bulk-billing doctor after clinic closes doors" Aug 2022

⁴ Int J Clinical Practice, "Withdrawal Syndrome Following Cessation of Anti-Hypertensive Drug Therapy", 2005 May 59 (5), 562-70

1. With an ageing and growing population, demand for GP services is projected to increase by 38% by 2032 (and by 46% in our cities)
2. Despite this significant increase, supply of GPs will decrease by 15% in cities and by 4% overall
3. This will result in a shortfall of 11,392 GPs by 2032, or almost 1 in 3 of the GP workforce.

Fixing this issue with more GPs is a solution with a very long lead time. Resourceful and smart solutions leveraging clinical experience, technology and operational controls will be necessary to ensure large segments of the Australian public have access when they need it most.

The COVID 19 exacerbation

The accessibility issues outlined above were substantially exacerbated with the onset of the COVID-19 pandemic. Not only did the pandemic see thousands of GPs limit their physical practice but, as a matter of precautionary COVID policy, it discouraged patients from actively seeking face to face GP consultations. Compounding the supply problem was Australia's impermeable border policy capping the inflow of urgently needed IMGs. This confluence of factors created a perfect storm of accessibility failure.

Some immediate but not entirely sufficient regulatory changes were made including, for a limited time, allowing medicare rebates for ALL GP telehealth consultations. The rebates were subsequently qualified in June to cover only tele-consults where a physical consult had taken place at least 12 months prior. From 13 March 2020 to 31 July 2022, a whopping 118.2 million telehealth services were provided by over 95,000 practitioners. To contextualise this number properly, in the year 2019/2020, 180 million consults in total were provided.

The Possible Solutions

Any discussion around potential solutions should be prefaced with the simple submission that face-to-face clinical care remains the most comprehensive and legitimate model of **assessing** and **managing** a patient. This will likely be the case for the remainder of our lifetimes.

The current issue overburdening our healthcare system is that not all the circa 200 million consultations annually (over 8 visits per patient per year!) are created equal. A 65-year-old obese patient with intermittent chest pain is a very different consultation qualitatively and quantitatively to a 26-year-old working woman with no medical history seeking a repeat of her oral contraceptive pill. The latter is not without value. It presents an opportunity for a GP to practice preventative medicine, lifestyle intervention and education. But we would be misappropriating critically scarce resources if we didn't triage the two presentations correctly. The second presentation, while *ideally* dealt with in a face to face setting, can and should have a facility for expedited service when resource scarcity demands it to be so. That resource scarcity can either derive from a lack of doctor time (eg. Doctor is away, practice is

closed, doctor is too busy etc) or a lack of patient time (patient is away, or sick or in a position where they cannot access their routine prescriber). Through finding a mechanism for expedited service for patient number 2, scenario number one can command the resources it deserves and the second patient is not left without her contraceptive pill and placed at risk of an unintended pregnancy.

How to expedite service safely

Much of safe prescribing, especially when dealing with repeat prescriptions, involves the thorough exclusion of contraindications and the establishment of appropriate indications. The latter becomes less important of course when dealing with a patient seeking continuation of existing therapy.

Any GP or doctor in training will emphasise the importance of clinical pathways in arriving at approving a medication. These pathways provide a clear, almost arithmetic, journey to a prescribing decision. This process, therefore, lends itself to technology as a streamlining tool in decision making. These clinical algorithms are now being adopted across most Western Healthcare systems to assist with triage, prescribing and even more complex management.

Limiting the use of the above technology to routine prescribing and combining it with clinical, human oversight is the most conservative use case for Asynchronous care. Again, nothing will substitute a face to face clinical assessment but, in the interest of offering a solution where the Gold Standard is neither available nor feasible, a carefully curated asynchronous model with appropriate limitations in place is the next best thing.

Perhaps due to a lack of awareness of the above technology, we have seen the nation take bolder, more radical steps, towards streamlining prescription management. In March 2020, at the beginning of Australia's experience with the pandemic we saw pharmacies in the ACT given permission to dispense medication without a medical script at all. NSW and QLD at present are both engaged in pilots where the doctor is excluded from the prescribing process completely. We agree with the AMA's position on this. This is clinically reckless and irresponsible, particularly when a model of care exists that both requires medical oversight and offers the efficiency the above pilots are asserting. Any expedited solution in the face of resource scarcity should be **clinically managed by doctors, and contain appropriate safeguards and limitations.**

Safeguards and Limitations

The ideal purpose of an asynchronous prescribing model is to **efficiently and safely prescribe routine medication while minimising the opportunity for adverse events.** It also should see itself as a **stop-gap measure** that reunites the patient with his/her regular prescriber as soon as practicable. So what are some of the safeguards that can be put in place. Below is a list of safeguards our asynchronous system has in place to minimise potential harm.

Safeguards

1. IHI Identity verification
 - a. Purpose: Minimise identity fraud and false applications
2. An 18 year old age minimum
 - a. Purpose: To ensure the patient understands how to navigate the platform and has a complete understanding of the written clinical pathways
3. Comprehensive consent forms requiring patient signature
4. A doctor monitoring the patient's submissions at ALL times and available to that patient if necessary
5. Appropriate access to live medical advice if patient seeks further details
6. Regular doctor reviews of the clinical pathways for each medication
7. Digital notes sent to patient's own doctor immediately at patient's instruction
 - a. Purpose: Ensure continuity of care by keeping patient's regular prescriber informed

Limitations

1. Categories of medication frequently abused or drugs of addiction completely excluded from model. Examples include:
 - a. Opioids
 - b. Benzodiazepines
 - c. Gabapentinoids
 - d. Schedule 8 medication
2. Patient's ability to re-use the platform limited to certain number
 - a. A responsible asynchronous platform should not provide a 'blank cheque' for patients. Patients are excluded from re-applying after 2 uses if they have not consulted their GP in the interim.
3. No repeats provided in the asynchronous prescription
 - a. The purpose of asynchronous care as outlined above is to serve as a **stop-gap** measure, not a substitute for their routine care. To further this objective, NO repeats are provided.

Sitting above these safeguards and limitations should be a comprehensive **Clinical Governance Framework** with a **Clinical Governance Committee** of suitably qualified medical professionals providing oversight, guidance and modification where necessary.

Conclusion

Australia is in the midst of a primary healthcare crisis. Chronic GP shortages across the country are an embarrassing stain on an otherwise leading Western healthcare system. Now, more than ever, is a time to cautiously embrace technology to help alleviate some of the crippling healthcare burden experienced across the nation. This technology should not exist in a vacuum but should be designed, managed and curated by GPs trained in Australia with the clinical knowledge to both harness its power and recognise its limitations. Since inception, Instantscripts, one of the leaders in Asynchronous care, has helped over 600,000

Australians in times of urgency and GP scarcity. These Australians have GPs and will continue to see them. The GPs at Instantscripts will ensure that is the case. At the same time, the 80 + GPs working with Instantscripts will ensure that no Australian ends up in an Emergency room simply because she needed her contraceptive pill re-filled. If that happens, the patient, the hospital, the system, will all be the losers.