New South Wales

Special Commission of Inquiry into Healthcare Funding

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Name: NSW Poisons Information Centre, Children's Hospital Westmead

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NSW poisons Information Centre
the children's hospital at Westmead

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Mr Richard Beasley SC
Commissioner
Special Commission of Inquiry into Healthcare Funding

Re: Special Commission of Inquiry into Healthcare Funding

We are the managers of the NSW Poisons Information Centre (PIC), which is based at Children's Hospital at Westmead. The NSW PIC is a supra-LHD service responsible for providing poisons information and clinical toxicology advice across NSW. We provide advice to both the public and healthcare workers.

NSW PIC has expertise in clinical care, research, epidemiology, education and public health; many of our staff are world experts. Our multidisciplinary staff are composed of medical doctors (including specialists in clinical toxicology, clinical pharmacology, emergency medicine, addiction medicine, nephrology), pharmacists, scientists and researchers. Our staff have joint appointments in tertiary hospitals, universities, other government and non-government organisations.

Reflecting our reputation as content experts, we frequently advise the government, media and other organisations on matters relating to poisoning and overdose. The Medical Director of NSW PIC is Associate Professor Darren Roberts and he is available to answer any questions related to this submission.

Executive summary

NSW PIC reflects the key principles reflected in this enquiry, by providing safe, high-quality, timely, equitable, and accessible patient-centred care and health services to the people of NSW. We deliver clinical care across the hospital-community continuum.

We are experiencing critical issues created by inefficient use of funding at the NSW Poisons Information Centre. This relates to complexities with the funding of PICs, including duplication and inefficiencies due to cross-border processes and the existing funding model in a changing health system. There are significant gaps in funding which impacts on service delivery. Since Poisons Information Centres and Clinical Toxicology services have been demonstrated to save the health system substantial amounts of money, underfunding of the Poisons Information Centre will have an overall increase in costs to the NSW government, and potentially lesser outcomes for NSW residents. The funding gaps impact on assessment, referrals and management decisions which affects patient care, in both the community and hospital environments, and to clinical and policy staff. There are multiple opportunities to streamline services and processes to address these shortcomings. Some of these relate to addressing national structures, others relate to limitations of block funding. Addressing these key components will drive best-practice and performance using data and research, and improve efficiency and ensure financial sustainability.

Background: poisons information centres and the health system

Poisons information centres provide <u>essential clinical services</u> to the community

There are four state-based poisons information centres (PICs) operating in Australia: NSW, Victoria, Western Australia and Queensland. PICs provide services 24 hours per day, seven days a week, including all holidays. Dialling 13 11 26 will connect the caller to the nearest PIC that is open.

PICs provide telephone advice on a wide range of poisons, including medicines, supplements, chemicals (household, cleaning and industrial), plants, stings and bites.

PIC advise both the public (~75% of calls) and healthcare workers (~25% of calls). As an emergency service we are frequently contacted by paramedics and doctors and nurses in emergency departments for support on the assessment and management of acutely poisoned patients.

PICs provide advice in the context of the exposure, meaning that the advice is specific to the actual person and what they have been exposed to, in contrast to information found in a textbook. Advice is broadly categorised as reassurance, watch-and-wait, or specific treatments.

PICs are staffed by Specialists in Poisons Information (SPIs), who are mostly pharmacists and some science (pharmacology) graduates. All have received on-the-job training in toxicology and toxinology which takes a minimum of 3 months. SPIs respond to most phone calls, and collaborate with highly experienced clinical toxicologists who are medical specialists.

Doctors phoning the service with unusual, complicated and/or severe poisonings are referred to clinical toxicologists.

Poisons information centres facilitate connectivity between the community, healthcare workers, public health organisations

PICs are a central point of communication, optimising patient-centred care. It is not uncommon that a PIC is called about the same patient on multiple occasions, as they move from the community to ambulance to hospital, and also recalls from hospital staff during the admission. During this pathway, the PIC provides expert advice, hands over at transitions of care (eg calling the hospital in advance), reduces wasteful testing or treatments and facilitates early discharge when appropriate.

When staffing levels permit, NSW PIC actively follow up selected poisoning cases referred to our service, e.g. the following day, to ensure that management remains optimal and to facilitate discharge. Staff at Queensland PIC can directly review medical records and enter their advice, and this documentation is associated with improved adherence and reduced sub-optimal management [1]; unfortunately, NSW PIC is not currently staffed to perform this task.

PICs are key services for detecting emerging toxicological risks to the community, including new clusters. This is known as toxicovigilance and toxicosurveillance. This leadership role of NSW PIC in detecting and/or responding to toxic threats has been well demonstrated in recent years, including issues associated with non-food grade poppyseeds being sold in supermarkets, baby spinach contaminated with an hallucinogenic weed, children and adolescents accessing e-cigarettes, contamination or miselling of recreational drugs, carbon monoxide in colder months, rodenticide poisonings in Western NSW, and many more.

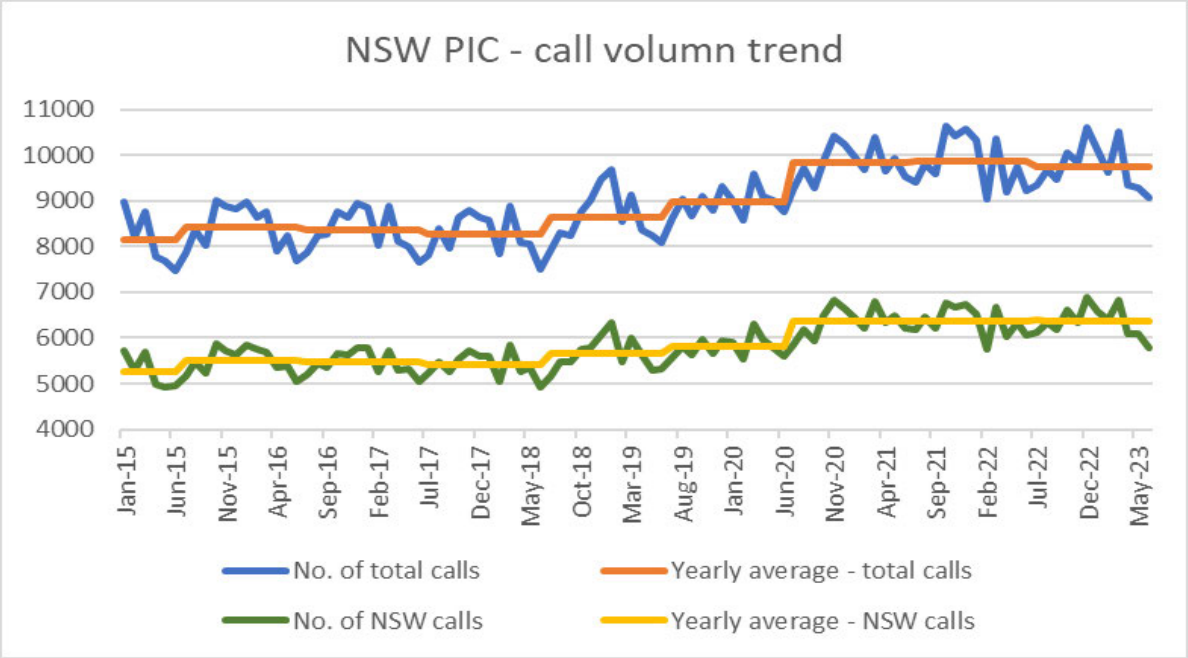
PIC data and expertise informed risk assessments and responses by government (e.g. TGA) and non-government agencies to these toxic threats. However, these toxic clusters have identified gaps needing to be addressed. We are aware that our current processes are not sufficiently agile for rapid detection, but instead rely on clinical intuition and potentially serendipity. For example, in the 2022 the toxic poppyseed cluster, cases were present in NSW for at least two weeks prior to the cluster being detected by Queensland PIC. This delay was due to inadequate resourcing at NSW PIC, because this sentinel function requires a database that has adequate functionality, and staff to interpret data and appropriately action, including engaging with partners. We work very closely with various branches of NSW Ministry of Health to report and respond to toxic threats.

Unfortunately, current limitations in PIC resources (in particular IT, discussed later) are compromising toxicovigilance and follow up services, which confers risks to the NSW population. Many toxicovigilance activities have/will improve patient outcomes, streamline care, reduce expenditure, and/or maintain NSW and Australia as a world leader in integrated and collaborative clinical care.

The NSW PIC is an increasingly busy clinical service, managing a disproportionate workload of calls to PICs nationally

NSW PIC has experienced increasing call volume (clinical workload) over the past 8 years with a pronounced and sustained increase from 2020 onwards (Figure 1).

Figure 1. Call Volume Trend – Calls taken by NSW PIC



NSW PIC currently answers nearly 120,000 calls/year, or 320 calls/day. It is anticipated to be the clinical service with one of the highest number of patient interactions in NSW Health. The average number of total calls per month increased almost 20% from 8,154 in FY15 to 9,748 in FY23. In 2022, the average call duration was 3 minutes and 54 seconds, reflecting our efficiency at managing calls.

The workload of NSW PIC accounts for approximately 50% of all calls to Australian PICs, which is mostly due to NSW PIC having the longest opening hours. Unfortunately, NSW PIC has become the unofficial default PIC for answering calls when other PICs are not open. Furthermore, NSW PIC is frequently requested to cover shifts for other PICs who are unable to do so, at unanticipated times.

Overall, this places a disproportionate burden of work on NSW, in particular because the workload is weighted to times when other PICs are closed, approximately 21:00-24:00 and 05:30-08:00. This contributes to staff burnout and challenges with recruitment.

In addition to providing the clinical service, the NSW PIC is active in quality, policy, public health and education activities across NSW and Australia. We collaborate with partners to perform high quality research, and we facilitate the translation of research into policy and practice with our partners and other stakeholders.

Poison information centres represent excellent value for money, offering cost savings to the healthcare budget

NSW PIC works to continuously improve the quality, safety, consistency, and reliability of patient care as well as foster professional development for the NSW population and our staff.

In providing poisoning advice to the community, a key outcome following an expert risk assessment is preventing unnecessary attendance for medical review. A study conducted by Australian PICs called

SNAPSHOT2 estimated that every $1 dollar invested in PIC saves $3 to the system.[2] This was largely due to preventing unnecessary presentations hospitals or GPs. This cost saving does not include indirect costs, such as parents spending time doing more productive activities.

Cost savings are also anticipated from PICs advising healthcare workers treating patients with known or suspected poisoning. Data from Australia and elsewhere has demonstrated that specialist clinical toxicologist input can achieve cost savings of millions of dollars by reducing the length of stay and avoiding unnecessary investigations.[3-7]

Hence, the majority of cases of suspected or confirmed poisoning should be consulted with a PIC because this is efficient and saves money. However, current resource limitations are a barrier to actively promoting this with the healthcare system.

Impact of an underfunded PIC

Increased costs of clinical care to NSW Health

The cost-effectiveness of PICs for patients and the healthcare system has been outlined, and this largely relates to preventing unnecessary medical assessments, tests, and facilitating discharge.

Optimising PIC staff can reduce costs by ensuring appropriate clinical care. For example, in response to increased calls received to PIC (Figure 1 above), staffing and rostering were reviewed so that there were sufficient staff to answer calls promptly. This serves to minimise wait times for healthcare workers calling for advice, and minimise drop outs due to excessive waiting. This was successful, with the number of drop outs decreasing from 11% in 2014 to 3% in 2022. In this same time period, we did not observe an increase in unnecessary calls. Therefore, based on the results of our previous research [2], drop out cases are likely to attend hospital for assessment following a poison exposure, and this is much more expensive and frequently unnecessary.

Current limitations in NSW PIC staffing (discussed below) prevents NSW PIC from operating a 24/7 service for NSW residents. As such, calls originating from NSW are referred to an interstate PIC 3 nights/week, and the cost of this service is billed to NSW. This is a more expensive way to provide this service to NSW.

Impact on quality of care for NSW residents

The requirement for NSW calls to be managed by an interstate PIC 3 nights/week may also reduce the quality of care provided to NSW patients. This is because it relies on clinicians external to NSW Health who are unfamiliar with our systems and geography to provide advice.

PICs do not have access to each other's databases, we do not have access to specific details about NSW patients and their exposures when calls from NSW are directed to PICs in other states. This currently occurs 3 nights/week. The lack of IT connectibility between the PICs has implications on handover, continuity of care, documentation and statistics.

Impact on public health responsibilities of PIC

NSW PIC makes regular submissions to various government groups relating to the risks of medicines and substances in Australia. We understand the poisons and exposures in Australia and can identify when use and misuse is associated with harms. Toxicovigilance activities are discussed above, and examples of recent actions prompted by toxicovigilance activities includes rescheduling of paracetamol, bromoxynil, choline salicylate, and product recalls such as toxic spinach and poppy seeds.

This ultimately protects the community, and more can be done, but it requires data (and IT) and expertise.

We have been working other PICs to develop a new IT solution to monitor data and identify trends to facilitate the identification and response to toxic concerns. This was supported by a small research grant and is showing excellent promise. Unfortunately, the overall project is underfunded with no guarantee for ongoing maintenance so it may not persist. Funding to support this essential and basic service requirement is needed.

Funding of PICs

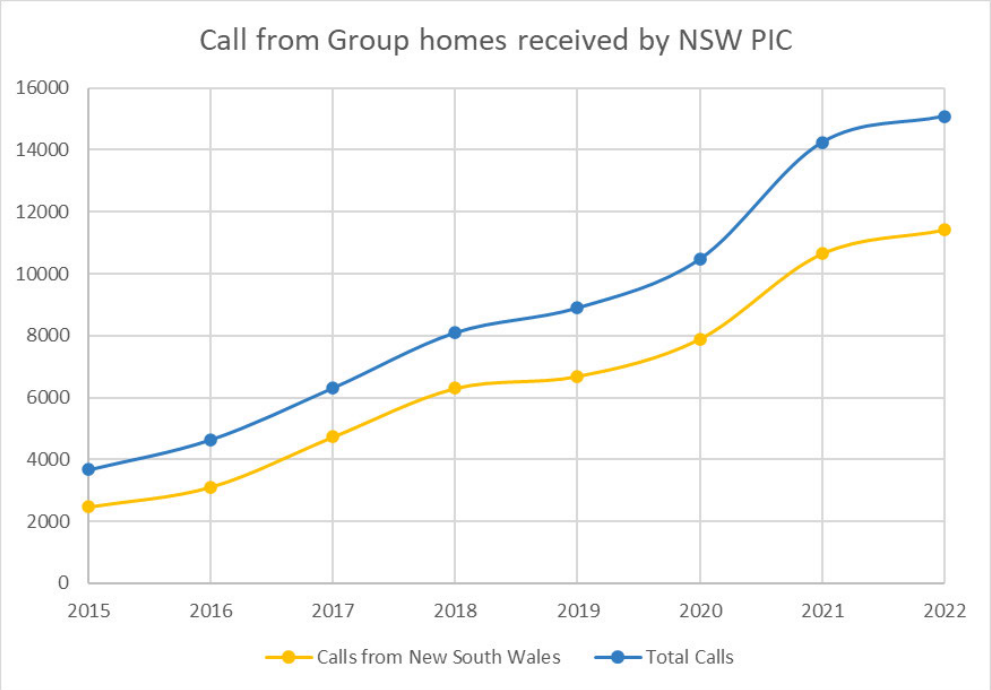
PICs are funded by state health departments, and those states without a PIC outsource this service to interstate PICs. For example, NSW PIC is contracted to service both Tasmania and ACT.

NSW PIC receives block funding, because PIC services are not readily suited to activity-based funding given that 75% of the services are to people in the community. Furthermore, NSW PIC provides telephone advice to healthcare workers across NSW, and the lack of connectibility of LHD-based computer systems across NSW is another barrier to activity-based funding.

Block funding can offer impediments to adequate funding because it does not readily adjust to changes in workload, requires constant renegotiation, and the budget needs of smaller services within an LHD (such as PIC) can be overshadowed by larger services. Block funding to NSW PIC has not been increased by Ministry of Health recently or recurrently.

We have seen an increase in calls from national based organisations, eg calls from NDIS-funded group homes, without an appropriate funding source for NSW PIC, see Figure 2. The shortfall in funding and existing short staffing has prompted PICs to refer NDIS workers to the community pharmacies who provide the supply services, but such pharmacists are not always trained or comfortable to advise on such issues and may refer back to PIC, or simply refer the patient to hospital. Improved funding will reduce this confusion in processes, which is currently wasteful and possibly compromises outcomes by encouraging less effective and efficient care.

Figure 2. Calls from Group homes received by NSW PIC



Although NSW PIC cross bills other jurisdictions for calls handled by NSW SPIs, it is unclear whether the current rate is appropriate for today's service.

The inadequate funding of PICs means that we are prevented from starting initiatives that would save more money overall and improve care (eg virtual training, adequate database)

Financial inefficiencies, and opportunities for cost savings

Because Australia has four PICs, each operating within the confines of state-based budgets, there is duplication of spending and resources. This incurs financial and system inefficiencies that impact on clinical care and possibly safety. Examples include:

Inadequate staffing decreases service performance, increasing costs across the health system, compromises staff satisfaction and retention, and fragments care

An issue described in the letters of the Inquiry is the reliance of health services on casual staff, and this similarly applies to NSW PIC. However, NSW PIC is particularly vulnerable. Due to our small staffing pool and lack of a readily accessible pre-trained workforce, even a slight decrease in staffing on short notice due to the usual predictable and unpredictable reasons impacts on rostering.

SPIs in NSW are paid amongst the lowest of the penalty rates nation-wide for afterhours shifts, and this limitation in the award also complicates staff willingness to work during unfriendly family hours, and retention.

Inadequate staffing of the PIC roster leads to longer wait times for callers, which (1) increases call drop outs (see data above) which leads callers to attend an emergency department for advice, (2) hospital staff's time is wasted when on-hold waiting, (3) increased SPI workload with accompanying overtime, job dissatisfaction and poor retention, (4) NSW calls being referred to interstate PICs.

SPIs are highly trained, requiring a minimum of 3 months on-the-job training to be able to work unsupervised. This is in addition to the minimum training required to obtain an undergraduate degree from university and postgraduate training. Therefore, it is not possible to fill roster gaps using locum pharmacist staff because they do not have the training or expertise in poisons information and clinical toxicology. So, we rely heavily on casual staff, or the rostering of permanent staff to overtime shifts. This includes redeployment of senior SPIs and managers to call-taking.

This increase in overtime and associated penalty rates represents a more expensive cost for delivering the PIC service, adds to the training costs and adversely impacts on work-life balance, achieving non-clinical tasks, job satisfaction. There are also the costs from the flow-on effects to the community and health services mentioned above, as well as contributing to the overall burnout and low morale of the staff.

Redeploying senior staff to call-taking activities is expensive, but also imposes barriers to non-clinical tasks being completed, impeding our key toxicovigilance, education/training, public health and other activities of the PIC. This is a vicious cycle, and the overall outcome is a more expensive and less efficient and effective service. The only outcome of this is decreased service delivery and care to NSW.

Current staffing limits prevent NSW PIC from operating a 24/7 service for NSW residents. So, for three nights/week when calls originating from NSW are answered by another PIC, NSW is billed for this. This represents a more expensive way to deliver the service, relies on care provision by clinicians external to NSW Health who are unfamiliar with our systems and geography, impedes clinical handover and continuity (we do not have access to details about NSW patients in interstate databases), and impedes toxicovigilance activities.
These issues can be managed by appropriately staffing the PIC so that the roster can be filled safely. The cost is low cost to the operating budget of NSW Health, but will have a major impact on clinical care provided and overall cost savings to NSW.

Ownership of 13 11 26 by HCN Medical Director, rather than by the PICs

The Poisons Information Centre number, 13 11 26, is owned and managed by a company known as HCN Medical Director. HCN Medical Director utilises the Optus network, though the company has recently been purchased by Telstra. Currently, each State/Territory is billed for the call costs originating from their jurisdiction, pay a *percentage* of the 13 11 26 government number charge ($506.75, ex GST) plus the Optus Inbound Service Management portal ($524.25, ex GST) used to manage the call routing based on the number of calls originating from that state that month, and **pay 30% administration fee (ex GST)** to 'manage' the number. There is inconsistency in invoicing, resulting in individual PICs versus State Health Departments paying the bill.

In-principle consent has been sought from the PICs to transfer legal ownership of 13 11 26 to the SCHN (Sydney Children's Hospitals Network, where NSW PIC sites) and pass through contractual obligations to ensure shared ownership of the number by Australian PICs. This confers several advantages:

(1) Cost savings, through abolishing the 30% administration fee for ad hoc programming of infrequent diversions. In NSW this amounts to an estimated annual cost saving of $10,000, but nationally the cost savings would more significant
(2) Cost savings, through capitalising on the competitive Telstra call charges locked in by NSW Health
(3) Ability for PICs to locally control call routing as required, for example, routine diversions, emergency routing in case of Telco outages (as seen with the recent Optus outage, in which PIC was impacted), or to address surges in call volume for public health crises
(4) An opportunity for PICs or the National Poisons Register to charge manufacturers of medications and products to list the 13 11 26 number on the consumer medicines information (CMI) leaflet and Material Safety Data Sheet (MSDS)

Multiple instances of cloud-based telephony solutions and clinical information databases

The NSW PIC has been using Telstra Genesys Cloud to manage calls received by the service. This solution confers several advantages to on-site hospital infrastructure including redundancy for local IT failure (can operate remotely), advanced queuing capacity, and call recording from a clinical governance perspective. Despite the system being designed to accommodate usage by all 4 PICs, only Victoria PIC (VPIC)has chosen to use the solution. The Telstra Genesys Cloud costs NSW PIC $57,000 over 3 years, of which VPIC is charged for user licenses but not an equal proportion of the underlying cost. Queensland PIC (QPIC)has implemented a similar but inferior product (that does not record clinical toxicologist consultant transfers), and Western Australia PIC (WAPIC) are exploring a different and inferior Cloud based solutions.

If the four PICs were using the same instance of Telstra Genesys Cloud, advantages would include:
(1) Significant annual cost savings, through sharing of infrastructure costs
(2) Enhanced clinical communication between staff from different PICs, including handover
(3) More robust clinical governance, including call recording nation-wide
(4) Ability to visualise origin of all calls received by the service

Opportunities for revenue

Group homes, rate of charge, support, funding

The number of calls received by NSW PIC from disability service providers has increased 311% from 3,669 (2,462 NSW) in 2015 to 15,087 (11,419 NSW) in 2022, Figure 2 above. While other PICs receive an average of 6 calls per day, NSW PIC averages 41 calls per day from carers at disability group homes. With no current funding source for these calls, and with the findings of the Disability Royal Commission recently published, it would be useful to secure federal funding to support NSW PIC continuing to provide clinical advice on medication errors to improve safety and health outcomes of those living with disabilities. Federal funding would enable cost savings at the level of the State health budget and would support enhanced service costs associated with this call volume.

Staff wellbeing

PICs are busy due to the high call volume, in particular NSW

As already discussed, PICs are understaffed which impacts on service delivery and staff satisfaction. NSW services afterhours shifts to a much higher extent than other PICs, impacting on workload, staffing happiness and retention. Adequate staffing is essential to ensure optimise staffing and performance and to respond to surges in calls, eg toxic outbreaks such as spinach and poppy seeds.

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