

Response to The Australian Centre for Disease Control (CDC): Consultation on how the Australian CDC plans to use data

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Introduction

Formerly known as the Society of Hospital Pharmacists of Australia (SHPA), Advanced Pharmacy Australia (AdPha) is the progressive voice of Australian pharmacists and technicians, built on 80 years of hospital innovation that puts people and patients first. AdPha supports all practitioners across hospitals, transitions of care, aged care and general practice to realise their full potential. We are the peak body committed to forging stronger connections in health care by extending advanced pharmacy expertise from hospitals to everywhere medicines are used.

AdPha is pleased to provide a submission to the Department of Health and Aged Care regarding how the Australian Centre for Disease Control (CDC) plans to use data. Establishing a centre for disease control in Australia is imperative to ensure Australia is well prepared for emergencies, but also centralise the provision of public health information and collate necessary data and information to provide evidence-informed advice.

AdPha convenes various Specialty Practice Leadership Committees including Pharmacy Informatics and Technology, Infectious Diseases, Leadership and Management, Medication Safety and Research, who have informed AdPha's response to this consultation.

If you have any queries or would like to discuss our submission further, please contact Jerry Yik, Head of Policy and Advocacy at jyik@adpha.au.

Response to consultation questions

Question 1: How important do you think it is that the proposed CDC has access to data to inform their decisions?

It is crucial for the proposed CDC to have access to current, de-identified data to inform their decision-making processes. Without access to accurate and timely data, the CDC would be unable to effectively monitor public health, predict trends, and take preventive actions during public health emergencies. Reliable data, especially real-time information, will allow the CDC to develop strategies that can mitigate the effects of outbreaks or emerging health crises, ensuring swift and targeted interventions. It was evident during COVID-19 that Australia did not have access to accurate, timely data owing to the lack of interoperable data linkages and systems. When establishing the proposed CDC, it is important from the beginning data is well linked and accessible to provide uniform, data-informed information and advice.

Question 2: How comfortable do you feel about the proposed CDC using health data for their work?

AdPha members feel comfortable with the proposed CDC using health data for their work, provided that this data is de-identified and handled transparently. The effective use of health data will enhance the CDC's capacity to monitor, respond, and prepare for health emergencies.

However, building trust in the CDC's ability to manage healthcare data responsibly, securely and robustly is essential to ensuring public support for their initiatives. AdPha believes further clarity and discussion is required with regards to data governance obtained by the Australian CDC. This includes what safeguards and measures will be implemented to protect public health data, who will govern the storage of data and how the population will be informed about how their data is used. These are important questions AdPha believe the proposed CDC should clarify to increase community engagement in the establishment of the proposed CDC.

Question 3: Do you have concerns about the way the proposed CDC may use data?

While the concept of the CDC using data is generally supported, there are concerns due to the lack of clarity regarding how the data will be used. Further information and detail regarding the types of initiatives and implementation that the proposed CDC will consider upon accessing health data requires more transparency.

AdPha believes there are various types of data that will be obtained, but the proposed CDC must disclose how will current data systems integrate with the proposed CDC and will the use of antimicrobial data be better captured without relying on data from the Pharmaceutical Benefit Scheme (PBS). As mentioned above, during the COVID-19

pandemic, a lack of mature linked data systems in Australia delayed initial responses and the lack of transparency regarding antimicrobial usage hindered prompt action.

Therefore, it is important for the CDC to clarify how it will collect and use data, ensuring a mature and linked data system is established from the outset to inform public health actions effectively.

- **Integration with other surveillance programs and data sources**

A key question is how the proposed Australian CDC will integrate with existing surveillance programs like AURA (Antimicrobial Use and Resistance in Australia) and NAPS (National Antimicrobial Prescribing Survey), as well as align with the National Antimicrobial Resistance Strategy. The CDC must ensure seamless integration with these organisations, leveraging existing data and expertise to provide a comprehensive understanding of public health risks. This integration should also extend to data sharing between these organisations, promoting transparency and collaboration. AdPha raises concerns about how the CDC will manage the complex task of coordinating and integrating diverse data sources, to then effectively use the data. This requires ensuring that decisions are informed by real-time, accurate data and communicated in a timely manner.

The governance of data is another critical consideration, with respect to how the data will be managed and factors deciding on how the data will be used and for what purposes. It is important that the data custodian is clearly defined to build trust and engagement, and that the roles of commercial enterprises involved in data collection are transparent.

Ensuring interoperability from the outset will allow the CDC to track medicine use effectively across different health sectors and jurisdictions. For example, the de-identified data from prescribing and dispensing of antimicrobials from various prescribing and dispensing software, could be developed to be interoperable with national surveillance programs and data sources to support the CDCs work. It should be noted that while the data from Services Australia and the PBS is another source of data, this would not capture antimicrobial prescribing and dispensing that is outside of the PBS.

- **Consideration for monitoring medicine usage and procurement**

The proposed CDC will also need to address how it will use the data to track medicine usage, particularly for antimicrobials. Currently, PBS data is utilised to monitor trends in antimicrobial prescribing, however, this is not accurate data that can inform policy or practice change. Simply relying on dispensing data may not provide a full picture of medicine use, so additional layers of monitoring, such as prescribing data and usage trends, should be integrated. There is also the question of whether the CDC will play a role in medicine procurement for certain infectious diseases. Lessons from COVID-19 have shown that the government's lack of visibility into hospital procurement due to a federated model created challenges in ensuring adequate supply. Clear governance structures need to be established to manage procurement effectively during health

crises, ensuring the CDC can respond rapidly to changing public health needs.

When it comes to monitoring antimicrobial use, relying solely on PBS data is neither accurate nor sufficient. PBS data captures medications that are subsidised under the scheme, but it excludes privately prescribed antimicrobials, which can account for a significant portion of antimicrobial use, especially when dealing with resistant pathogens. For instance, highly resistant antimicrobials such as ciprofloxacin are commonly prescribed for off-label conditions, similarly, chloramphenicol, is used for conditions other than eye infections, and excessive use of famciclovir are not captured comprehensively in PBS data. This creates blind spots in the monitoring of antimicrobial resistance and trends in antimicrobial prescribing.

The proposed Australian CDC should first clarify what data will be obtained and how, to then provide greater guidance to the use of the data. To address this gap by developing systems that integrate private prescription data, ensuring that all antimicrobial use is tracked, regardless of its funding source is essential. The CDC will need to leverage real-time prescription monitoring technologies and collaborate with healthcare providers, community pharmacies, and hospitals to capture a holistic view of antimicrobial usage patterns. Additionally, hospital-based antimicrobials, particularly in services like Hospital in the Home (HITH), where extended-duration antibiotics via infusers are often used, are also not included in PBS data. This means essential drugs used for prolonged treatments, such as piperacillin/tazobactam or ceftriaxone, are not being monitored for overuse or resistance development. It is critical that the CDC builds a framework that integrates data from HITH services, hospital pharmacies, and other non-PBS sources to capture the true scale of antimicrobial use across Australia.

The antimicrobial landscape has shifted dramatically over the years, where the use of medicines such as carbapenems, namely meropenem, is increasingly seen prescribed in hospital settings as the emergence of resistant pathogens across Australia increases. Meropenem was rarely seen charted on inpatient medication drug charts five to years ago, however, this has now changed, and it is more commonly prescribed to treat extended spectrum beta lactamase producing organisms (ESBL). Meropenem is not PBS listed, therefore, AdPha queries how the proposed CDC will monitor medicine usage and detect trends in antimicrobial prescribing to take prompt action to prevent the prolific emergence of antimicrobial resistant pathogens.

Adding on to this, medicines such as ceftaroline, ceftazidime-avibactam, ceftolozane-tazobactam which are reserved for treating highly resistant pathogens are showing an increase in use in some states and territories in Australia according to findings from the National Antimicrobial Utilisation Surveillance Program. These medicines are highly specialised and expensive, are some may need to be sourced from overseas during local shortages. These procurement patterns need to be closely monitored, as increasing reliance on foreign markets can indicate supply chain vulnerabilities or overuse of specific antimicrobials, potentially driving resistance. The CDC should play a key role in tracking

the sourcing and usage trends of such antimicrobials, working with hospitals, importers, and pharmaceutical suppliers to ensure that usage is appropriate and aligned with antimicrobial stewardship programs. Therefore, to comment on how the proposed CDC plans to use the data, it is essential the proposed CDC provides clarity of the data sets they aim to obtain and how they will do this.

Question 4: What would you want to know about how the proposed CDC will be using your data?

As mentioned above, AdPha strongly believes it is important to be aware exactly which datasets the proposed CDC plans to use, such as Critical Antimicrobial Resistances (CARAlert) or resistance biograms, as well as the sources of these data. Having detailed knowledge of the type of data being used and the specific sources will provide clarity and help professionals understand the scope of the CDC's monitoring activities. This transparency will ensure that stakeholders can assess the effectiveness of the CDC's work in areas like antimicrobial resistance and disease monitoring and potentially provide their expert input into data their respective organisations may have access to.

Question 5: How would you like the proposed CDC to communicate how they use your data?

Regular updates should be communicated to state and territory health departments and relevant public health directorates. The CDC should also provide data usage reports to those involved in Antimicrobial Stewardship programs, and there should be a focus on keeping public health officials informed about the CDC's ongoing work. This communication will foster transparency and trust, ensuring that all stakeholders are kept up to date.

More importantly, data obtained from the public must be appropriately utilised to drive policy and practice change. This needs to be available for the public, such that they too are aware of the use of their health data and the benefits it provides as part of a public health initiative.

Question 6: Is there anything else you would like to say about the planned data practices of the proposed CDC?

It is vital for the CDC to implement a clear and transparent system for managing and sharing data. The use of health data should be open, equitable, and secure, ensuring that it is used for the benefit of all Australians without compromising privacy. Proper oversight and a commitment to interoperability across all systems are key to ensuring the successful management of health data.

To effectively limit the emergence of resistant pathogens, the CDC must consider integrating real-time data collection and prescription monitoring from multiple sources

(e.g., PBS, private prescriptions, and hospital procurement) and linking it with clinical data can help the CDC track resistance trends and adjust policies to mitigate risks across Australia. This holistic approach will be essential to building a resilient and proactive public health system by the proposed CDC.