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Brief report

Implementation of a successful infection prevention and control governance structure and capacity building strategies during COVID-19 pandemic – A brief report

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An analysis of the Clinical Excellence Commissions response to COVID-19 prevention and protection measures identified the need to build on the existing governance process to achieve a more structured and methodical approach. The infection prevention and control measures and strategies implemented within health and nonhealth care, proved to be effective and sustainable with the ability to build additional clinician capacity even during an ongoing pandemic.

The Clinical Excellence Commission (CEC) is a board-governed statutory health corporation established in 2004 as one of 5 pillars of the New South Wales (NSW), Australia health system. The CEC has a performance agreement with the NSW Ministry of Health and is responsible and accountable for the delivery of NSW Government and NSW Health priorities. The role of the CEC is to lead, support, and promote improved safety and quality in clinical care across the NSW health system (*Appendix 1 – NSW Health Organisational Structure*).[1] The CEC's Healthcare Associated Infection (HAI) and infection Prevention and Control (IPAC) program consists of a multidisciplinary team engaged in providing health professionals with leadership, expertise, support, and resources for the implementation of IPAC. This also includes responsibility and the lead role for the NSW Health Pandemic IPAC management for publicly funded health services. In response to the pandemic HAI/ IPAC expertise was further extended to Residential Aged Care facilities (RACF), other government, nongovernment agencies, quarantine, industry, and the wider community. The HAI/IPAC team therefore plays a unique and essential function within NSW.

The COVID-19 pandemic necessitated an unprecedented, significant, and sustained work effort from the HAI/IPAC team as part of the statewide NSW Health response to keep health workers (HWs), patients and visitors safe with the most up-to-date evidence and resources. The NSW Ministry of Health engaged the HAI/IPAC team in an expanded program of IPAC reviews including hotel quarantine, district special health accommodation, community facilities and private health facilities. In addition, the HAI/IPAC team lead and coordinated the NSW Respiratory Protection Program, procurement support and expert reviews for NSW Health and the NSW Health care Worker Expert Panel reviewing HW exposure to COVID-19 incidents. This occurred whilst maintaining existing mandatory HAI programs of work (for example, Hand Hygiene, HAI surveillance, multidrug resistant organism management).

GOVERNANCE AND STRUCTURE OF IPAC RESPONSE DURING COVID-19 PANDEMIC

NSW is home to one third of the Australian population and NSW Health is the largest health care system in Australia which operates more than 220 public hospitals with on average 20, 720 beds as of June 2020), in addition to providing community health and other public health services, through a network of local health districts, specialty networks, and nongovernment affiliated health organizations, known collectively as NSW Health (*Appendix 1 – NSW Health Organisational Structure*)[1]

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Prior to the pandemic the HAI/IPAC service within the CEC had the responsibility for managing the development, implementation and evaluation of processes and systems to support clinical governance strategies aimed at improving the safety and quality of healthcare across NSW. However, CEC has no operational responsibility for the governance of the IPAC clinicians who are based in public hospitals throughout NSW.

When Australia declared a pandemic in March 2020, the NSW Government brought relevant experts together to lead the State's coordinated, emergency response to the COVID-19 pandemic. This included establishing a Public Health Response Branch (PHRB) to lead the public health aspects of the response to COVID-19 and a State Health Emergency Operations Centre (SHEOC) to lead the state-wide operational response to the COVID-19 pandemic. The PHRB and SHEOC worked closely with publicly funded health services (local health districts, specialty networks), NSW health pillars (Agency for Clinical Innovation, CEC, NSW pathology, HealthShare NSW) and other NSW Government organizations in the NSW. Additionally, NSW formed an NSW COVID-19 Clinical Council, which comprised a multidisciplinary group representing clinical specialties to provide independent and impartial strategic advice on system-wide issues that affect preparedness and response to community and patient care in the COVID-19 environment. Furthermore, Clinical Communities of Practice (CoPs) were established across key clinical specialties to support the Statewide response to COVID-19. The CoPs are multidisciplinary and include representation from all districts and networks. Currently, there are 31 CoPs actively participating in the COVID-19 response.[2]

Several actions were taken by the CEC to effectively support HAI/IPAC work in 2020 and 2021. These included the temporary realignment of internal staffing resources at the CEC to support the HAI/IPAC program, a review of existing positions in the HAI/IPAC team, and an upgrading of responsibilities to reflect the enhanced statewide functions of the team and the breadth of additional duties (Appendix 2- Clinical Excellence Commission Organizational Structure). Additional expert clinical lead positions were employed to assist with the high volume of work, along with the formation of the NSW (COVID-19) Infection Prevention and Control Specialty Taskforce (Taskforce). The Taskforce provides a mechanism for rapid engagement of content experts for discussion, decision making, and approval of resources and guides developed by the CEC HAI/IPAC team relating to COVID-19. The Taskforce reports through existing IPAC operational and steering committee structures that support all other program strategies outside of COVID-19 (Fig 1 Clinical Excellence Commission HAI/IPAC Program Governance Structure).

KEY STAKEHOLDER ENGAGEMENT AND COMMUNICATION FORUM

The IPAC CoP provides a primary point of contact for clinical and operational IPAC expertise on COVID-19 and facilitates consistency of information dissemination through existing organizational and network governance structures. In addition, this group discusses, formulates, and validates advice on IPAC to the 30 other CoPs utilizing governance through consultation and collaboration. In addition, a weekly infection control professionals (ICP) webinar is provided which facilitates escalation and dissemination of advice to frontline clinicians.

Since January 2020, the CEC has developed extensive COVID-19 IPAC guidance for health care and other settings to build IPAC capacity and capability at a systems level, with a focus on providing timely expert advice on current and emerging problems in HAI impacted by COVID-19.[3] These resources are regularly reviewed and updated in line with new and emerging evidence. Resources are shared via the Clinical Excellence Commissions Website.

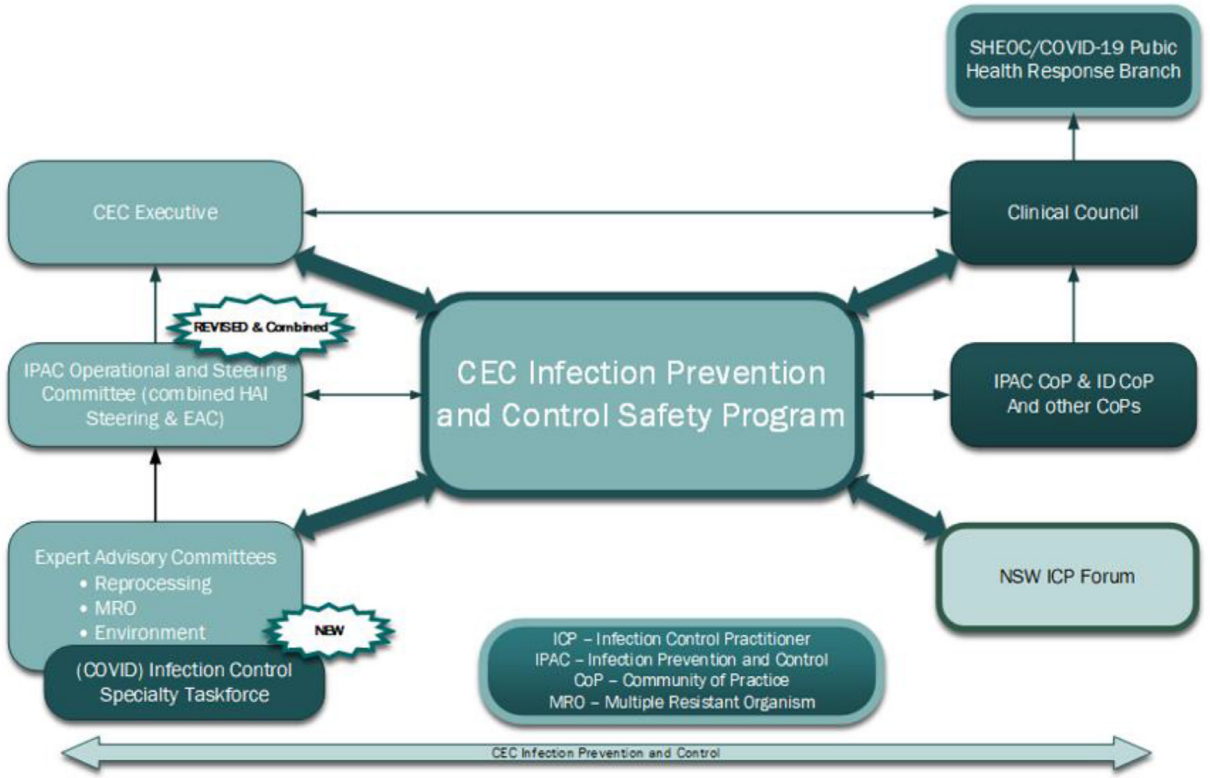

Fig 1. Clinical Excellence Commission HAI/IPAC Program Governance Structure 2022.

BORDER CONTROL AND HOTEL QUARANTINE

Australia implemented international border restrictions along with mandatory hotel quarantine early in the pandemic to prevent the spread of COVID-19. Initially all returning overseas residents were required to complete 14 days of quarantine in a designated hotel unless an exemption was granted for an alternate location. The CEC provided a comprehensive strategy to provide end-to-end IPAC for returning residents, HWs, and other travelers. This included context specific guidance, IPAC education and training, and implementation of audit and feedback, both at the airport and within the quarantine hotels. These were adapted for the variety of involved agencies, including Air Services, Maritime Services, Security, Hotel Staff, Australian Border Force, state and federal Police, private Health care providers, and transport staff.

This required staff enhancement but recruiting skilled ICPs proved difficult during the COVID-19 pandemic because ICPs were either fully engaged in their usual roles or deployed to other services. The lack of suitably trained ICPs created a unique training opportunity to recruit clinical staff who were able to be trained to provide increasingly skilled IPAC advice and guidance under the umbrella of expertise provided within the HAI/IPAC team. Additional general nursing personnel (called "IPAC Connects") were recruited and placed within the NSW Quarantine facilities, airport, and ports together with administration support and an experienced CEC ICP mentor and supervisor.

BUILDING CAPACITY FOR THE FUTURE LEADERS OF IPAC

In healthcare, succession-planning practices are often limited, and the HAI/IPAC team identified the need for strategic planning to delineate desired leadership competencies and identify future high-potential leaders. Proactive succession planning involves identifying high potential individuals and formally developing them to assume leadership roles.[4,5] Traditionally ICPs have provided IPAC advice within the health care environment. As the role of the IPAC connect team expanded outside of the traditional hospital environment, the skills required of the IPAC professionals nurse to perform the duties changed and evolved. The contemporary IPAC nurse must be trained in current evidence-based practice, and must be adaptable, consultative and be willing to work in challenging environments. Hence, the CEC decided to continue to support the growth of emerging IPAC leaders using a state-wide structure to ensure sustainability in IPAC moving into the future.

The IPAC Connect team is currently participating in a leadership and mentoring program with a university partner, which provides an opportunity for development of IPAC knowledge and critical thinking skills essential to the emerging IPAC leader. Building on this newly formed IPAC knowledge, in addition to the academic program, the IPAC connect staff are also completing the Australasian College for Infection Prevention and Control (ACIPC) Foundations Course to further develop their knowledge in infection prevention and control in addition to starting their pathway to credentialing. This program will be formally evaluated once completed.

SUMMARY

The NSW health COVID-19 pandemic response and recovery has positively contributed to the upskilling of HWs and NSW community. The various CoPs including IPAC CoP enabled NSW to advance and improve knowledge, policy and programs, clinical care, community, and health outcomes. Monitoring and evaluation of these strategies including impact on HAIs are underway and will be reported in the next iteration.

Looking ahead, there is a clear need for a sustained and well-resourced IPAC program that encompasses governance, assurance, safety, and improvement requirements in a COVID-19 "normal" environment. Additional key elements of this future program include the requirement to build IPAC capacity and capability at a systems level along with the need for more reliable IPAC program to ensure the organizations can effectively execute its IPAC role to meet current and future critical work in a COVID-19 endemic state or in a future pandemic.

SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at https://doi.org/10.1016/j.ajic.2022.07.002.

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