AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

MEDIA RELEASE

Clinical Care Standards

Wednesday 26 May 2021

# New standard to improve the care of 7.7 million Australians who receive IV cannulas or 'drips' each year

For the 7.7 million Australians who have a peripheral intravenous catheter (PIVC) – also known as a cannula or 'drip' – inserted each year, their hospital experience is set to become safer.

With up to 40%[1-2] of all first-time attempts to insert a PIVC in an adult failing, many patients face the prospect of undergoing multiple painful attempts before a PIVC is successfully inserted. Once inserted, there is also a risk of complications, some of which are serious.

From today, a new clinical standard will change our approach to the use of PIVCs, by providing national guidance on best practice care and skillful use of PIVCs – and prompting health workers to consider whether a cannula is really necessary before insertion.

The *Management of Peripheral Intravenous Catheters Clinical Care Standard* by the Australian Commission on Safety and Quality in Health Care (the Commission) outlines how to insert, maintain and remove PIVCs safely and effectively. It also describes the care that patients should expect to receive if they have a PIVC inserted during a hospital stay.

Associate Professor Amanda Walker, Commission Clinical Director, said it would be easy to overlook the opportunity to improve a medical procedure as common as cannula insertion – yet this makes it vital.

"This new standard for peripheral intravenous catheters will help to improve the techniques used by healthcare professionals and in turn, reduce the risk for patients who may experience issues with insertion or complications afterwards," said A/Professor Walker.

"It aims to ensure the best chance of cannulas being inserted correctly the first time, and once they are in, for them to be well maintained, to avoid blockages, infections and other problems such as leakage into the tissue or inflammation.

"An intravenous cannula insertion is an experience that almost everyone who goes to hospital will have. Yet there is a high failure rate of 40% for first-time insertions, and also a high rate of problems, with up to 69% of cannulas needing to be removed due to complications.[3-6] So let's embrace this opportunity with the new standard to consider how we can all do it better."

A/Professor Walker added: "When people ask why we need this new standard, my answer is simple: 'patients are not pin cushions'. It doesn't matter where a clinician fits in the health system, we all have a responsibility to improve patient outcomes."

She highlighted the importance of patient-centred care and listening to patients about their past experiences with cannula insertion, and what would work best for them. "Let's ask questions: Is there an alternative to a cannula? Where should it be inserted? Which clinician will get the best outcome for the patient?

"We want to improve the patient experience and to boost the confidence of all healthcare workers in knowing how to manage those difficult cannulations."

Over time, A/Professor Walker predicts that complications with vascular access are likely to become a bigger concern as the Australian population ages and becomes more chronically unwell. She says reducing unnecessary PIVC use and preventing device failures will allow resources to be used more efficiently.

## Greatest risk of any medical device: unacceptable

For nurse and vascular access expert Dr Evan Alexandrou, Senior Lecturer at Western Sydney University and Clinical Nurse Consultant at Liverpool Hospital in NSW, the new PIVC standard offers the chance to review the procedure in hospitals across the country.

“Peripheral intravenous catheter insertion is one of the most practiced clinical procedures in hospitals, yet it carries the greatest risk of failure of any medical device,” said Dr Alexandrou.

“Each day, thousands of PIVCs fail in Australian hospitals, and we continue to accept this unacceptable rate of failure. This standard is a way of re-setting our approach. We need to reduce the burden of multiple cannulation attempts on our patients and to achieve this, a standardised approach to promote first insertion success is necessary.”

Dr Alexandrou added: “Our patients deserve to receive the right device, by the right trained personnel at the right time to minimise delays with treatment and reduce post insertion failure. It’s time to stop accepting the unacceptable.”

Anaesthetist and Pain Medicine Specialist at St Vincent’s Hospitals in Sydney, Dr Jennifer Stevens, said even if a small percentage of people have complications from PIVCs, this translates into large numbers of people affected because it is such a common procedure.

“The new clinical care standard will help to improve the experience of all patients who have a PIVC,” said Dr Stevens.

“For those patients who have recurrent problems with cannula insertion, it may be appropriate to escalate more rapidly to a senior clinician than we have done in the past, which means adjusting our mindset.

“As an anaesthetist, part of my role is to ensure excellent peripheral access before a patient goes to the ward. The site where a cannula is inserted and the way it is secured – so that the entry point at the skin is visible and movement of the cannula is prevented – are two easy ways to help prevent infection and avoid the need to replace a cannula early. We need to get this right every time when a cannula is being left in.”

Dr Stevens added: “The site of the cannula makes a big difference. For example, a cannula in the elbow crease is painful, makes sleep impossible when the occlusion alarm keeps going off all night, doesn't last long and is more prone to infections.”

The new standard will be launched today via a live-streamed event. The panel discussion will include: the Commission’s Associate Professor Amanda Walker; nurse and vascular expert Dr Evan Alexandrou; anaesthetist and pain medicine specialist Dr Jennifer Stevens, the Australian Government’s Deputy Chief Medical Officer Professor Michael Kidd AM; and infectious diseases physician and microbiologist, Professor Peter Collignon AM. NSW Chief Nursing and Midwifery Officer Jacqui Cross is also participating in the launch, with Commission Board Chair, Professor Villis Marshall AC.

The new clinical care standard has been endorsed by 19 medical and nursing colleges and other professional bodies, including the Royal Australasian College of Physicians, the Australasian College for Emergency Medicine, the Australian and New Zealand Society for Geriatric Medicine, the Australian College of Nursing and the Australian Vascular Access Society.

ENDS

**Access the new standard** online from Wednesday 26 May at: safetyandquality.gov.au/pivc-ccs

**Tune in at 1:00pm AEST Wednesday 26 May**: https://kapara.rdbk.com.au/landers/17b225.html

**Highlights infographic:** Management of Peripheral Intravenous Catheters Clinical Care Standard

## Media enquiries

Angela Jackson, Communications and Media Manager, (02) 9126 3513 or 0407 213 522
angela.jackson@safetyandquality.gov.au

Leanne Findlay, Director, Communications, (02) 9126 3509 or 0468 740 540
leanne.findlay@safetyandquality.gov.au

## About the Commission

The Australian Commission on Safety and Quality in Health Care is an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care based on the best available evidence. By working in partnership with patients, carers, clinicians, the Australian, state and territory health systems, the private sector, managers and healthcare organisations, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care. www.safetyandquality.gov.au

## About Clinical Care Standards

A clinical care standard comprises a small number of nationally agreed quality statements. They describe the care that health professionals and health services should be providing to patients for a specific clinical condition or defined part of a clinical pathway in line with current best evidence. Clinical care standards indicators help health services review the performance of their organisation and make improvements in the care they provide.

The Commission develops clinical care standards in partnership with clinicians, researchers and consumers. Clinical guidelines form the evidence base for the clinical care standards. The Commission has previously released clinical care standards on heavy menstrual bleeding, antimicrobial stewardship, acute coronary syndromes, acute stroke, delirium, hip fracture, osteoarthritis of the knee, colonoscopy, venous thromboembolism and third and fourth degree perineal tears.

### References

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