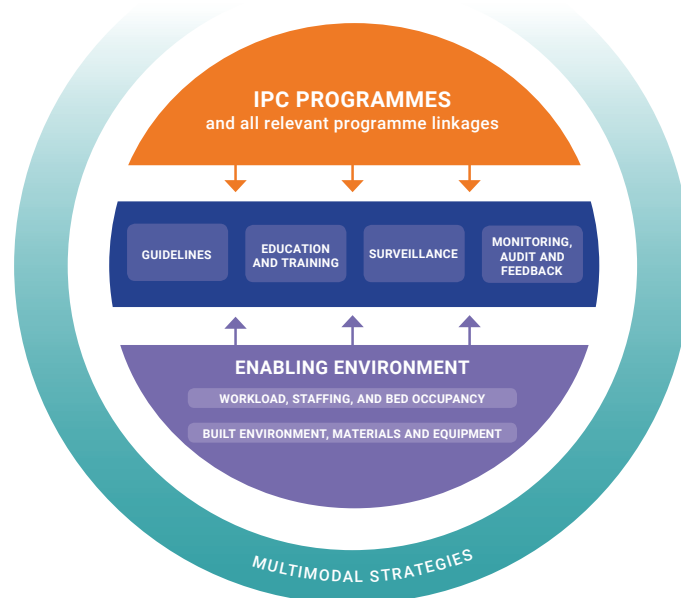


# NURSES AND MIDWIVES CRITICAL FOR INFECTION PREVENTION AND CONTROL



Preventing harm to patients, health workers and visitors due to infection in health care is fundamental.

Strong, effective infection prevention and control (IPC) programmes have the ability to:

- **enable a country and a facility to be ready for the emergence of any epidemic event, including pandemics;**
- **achieve high-quality care;**
- **grant patients their right to clean care and ensure their safety;**
- **protect all those providing care across the health system.**

No country, no health care facility, even in the most advanced and sophisticated health care systems, can claim to be free of the problem of health care-associated infections (HAI) and antimicrobial resistance (AMR).

Clean health care is among the top most urgent challenges identified by the United Nations to be tackled in the next 10 years by the global community in the run-up to meeting the Sustainable Development Goals' deadline<sup>1</sup>.

**This brief aims to provide you - a decision or policy maker, doctor, nurse, midwife, IPC professional, public health specialist or advocate - with an overview of the strategy for implementing effective IPC in health care while emphasizing the critical role that nurses and midwives play in achieving this.**

<sup>1</sup>United Nations. Sustainable Development Goals. Decade of action. 2020. (<https://www.un.org/sustainabledevelopment/decade-of-action/>, accessed 30 April 2020).

Supported by many stakeholders in the field of IPC, the World Health Organization (WHO) recommends all countries to implement the core components (CC) of effective IPC programmes<sup>2</sup>.

All countries should have active national and facility-level.

### CC1: IPC programmes

WHO core components for IPC identify four main interventions:

### CC2: IPC guidelines

### CC3: IPC education and training

### CC4: HAI and AMR surveillance

### CC6: IPC indicators' monitoring and feedback

Supported by two enabling structures:

### CC7: Appropriate workload, staffing and bed occupancy

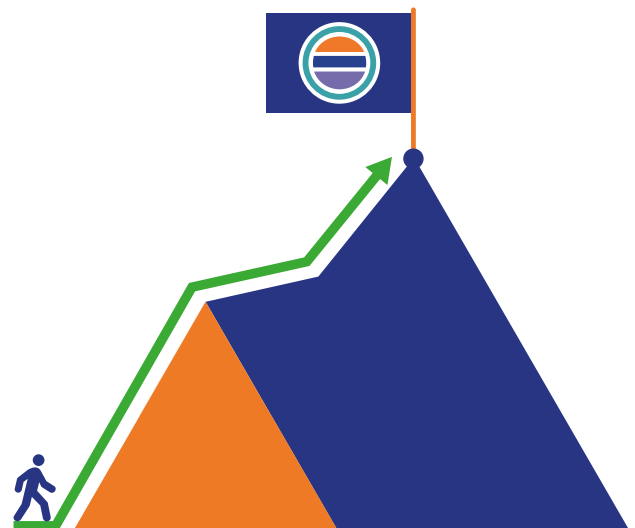
### CC8: A built environment with suitable materials and equipment

To be implemented:

### CC5: Through multimodal strategies that combine different approaches

The journey to have the IPC CC in place in countries should begin with having established at least the **minimum requirements**<sup>3</sup>, which represent the starting point to build strong and effective IPC programmes at the national and facility level and to provide minimum protection and safety to patients, health care workers and visitors.

The approach for the implementation of the IPC CC and their minimum requirements is presented in associated manuals for both the national<sup>4</sup> and facility<sup>5</sup> levels.



<sup>2</sup> Guidelines on core components of infection prevention and control programmes at the national and acute health care facility level. Geneva: World Health Organization; 2016 (<https://www.who.int/infection-prevention/publications/core-components/en/>, accessed 30 April 2020).

<sup>3</sup> Minimum requirements for infection prevention and control programmes. Geneva: World Health Organization; 2019 (<https://www.who.int/infection-prevention/publications/min-req-ipc-manual/en/>, accessed 30 April 2020).

<sup>4</sup> Interim practical manual supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes. Geneva: World Health Organization; 2017 (<https://www.who.int/infection-prevention/tools/core-components/en/>, accessed 30 April 2020).

<sup>5</sup> Interim practical manual supporting implementation of the WHO guidelines on core components of infection prevention and control programmes. Geneva: World Health Organization; 2018 (<https://www.who.int/infection-prevention/tools/core-components/en/>, accessed 30 April 2020).

# What is the role of nurses and midwives?

**“Together with doctors and other health workers, nurses are the front-line heroes saving lives in the age of COVID-19, while midwives continue to help women to give birth, renewing life during these hard times<sup>6</sup>.”**

The 72<sup>nd</sup> World Health Assembly designated 2020 as the international year of the nurse and midwife not only to honour the 200th anniversary of Florence Nightingale, but also to spotlight the daily contributions of nurses and midwives to the health and wellbeing of all populations .

This is why the WHO SAVE LIVES: Clean Your Hands 2020 campaign calls upon all health workers and other target audiences to join hands in celebrating and empowering nurses and midwives in the monumental work that they do to keep our patients, families and their colleagues safe by preventing avoidable infections.

**“Nurses are important to ensuring quality of care and patient safety, preventing and controlling infections, and combating antimicrobial resistance<sup>7</sup>.”**

Nurses are the backbone of the health sector, accounting for approximately 59% of health professionals<sup>7</sup>. Their predominance in IPC is evident, with most IPC professionals having a nursing background.

When considering the role of nurses in making the CC of IPC programmes become a reality, we know that there exists a strong participation in all areas, with some being particularly crucial, such as:

**CC1: IPC programmes**

**CC3: IPC education and training**

**CC5: Implementation using multimodal strategies**

**CC7: Staffing, workload and bed occupancy**

<sup>6</sup> Elizabeth Iro, Chief Nurse Officer, World Health Organization, Geneva, Switzerland.

<sup>7</sup> State of the world's nursing 2020: investing in education, jobs and leadership. Geneva: World Health Organization; 2020 (<https://www.who.int/publications-detail/nursing-report-2020>, accessed 30 April 2020).

The boxes below explain the role of nurses and midwives in implementing four critical IPC core components.

### CC1



#### Core component 1 – AN IPC PROGRAMME

**A dedicated, trained team should be in place for the purpose of preventing HAIs and combating AMR.**

- IPC programmes are integral to improving quality of health care and ensuring prompt response to outbreaks; in many cases, these are simple, low-cost life-saving measures.
- For many IPC programmes, nurses are most often the health professional designated as the IPC leadership.
- As the vast majority of health care is nurse-driven, nursing staff must be engaged to form a central part of the IPC programme.
- Nurse leadership is essential in promoting IPC programmes across the organization, including disseminating and implementing IPC measures.

### CC3



#### Core component 3 – IPC EDUCATION & TRAINING

**At the facility level, IPC education should be in place for all health workers.**

- Nurses represent the majority of the health sector workforce; all nurses should receive basic IPC education and training and periodical refreshers and updates.
- Nurses are often responsible for overseeing and delivering IPC training programmes to many health professionals.
- In many countries, most IPC professionals are nurses; IPC curricula for postgraduate training, as well as clear career pathways for IPC professionals, should be in place in all nations.
- Given their special proximity to the woman, her companion and the family, midwives are also best placed to advise them on good hand hygiene and IPC practices at the time of birth.

### CC5



#### Core component 5 – MULTIMODAL STRATEGIES\*

**Critical for implementation, at the point of care, critical role in IPC at the point of care**

- Successful multimodal strategies include the involvement of champions – a role often played by nurses and midwives as they are individuals who actively promote the CC and their associated evidence-based practices within an institution.
- Nurses and midwives serve as role models for other staff by educating and mentoring at the point of care and influence behaviour towards adherence to IPC practices.
- Successful multimodal interventions are associated with an overall organizational culture change – as the health workforce is largely comprised of nurses and midwives, culture change can be achieved and influenced by their engagement and leadership.

### CC7



#### Core component 7 – STAFFING & WORKLOAD

**In order to reduce the risk of HAI and the spread of AMR, the following should be addressed: 1) bed occupancy should not exceed the standard capacity of the facility; 2) health care worker staffing levels should be adequately assigned according to patient workload.**

- The world needs 6 million more nurses and midwives to achieve health for all by 2030<sup>7</sup>.
- Low nurse-to-patient ratio is associated with the spread of pathogens, leading to increased HAI rates and outbreaks.
- Increased nurse staffing levels and education in skill-mix teams correlate with reduced adverse events to hospitalized patients, including catheter-associated urinary infections, bloodstream infections, and ventilator-associated pneumonia<sup>2,8</sup>.
- Burnout among nurses due to high workload, long hours, and ineffective social relationships has been associated with worsening patient safety<sup>8</sup>.
- Nurses can contribute to improved quality of care and patient safety through the prevention of adverse events, but this requires that they work at their optimal capacity<sup>8</sup>.

\* Multimodal strategy: A multimodal strategy comprises several components or elements (three or more, usually five) implemented in an integrated way with the aim of improving an outcome and changing behaviour. The five most common elements include: (i) system change (availability of the appropriate infrastructure and supplies to enable IPC good practices); (ii) education and training of health care workers and key players (for example, managers); (iii) monitoring infrastructures, practices, processes, outcomes and providing data feedback; (iv) reminders in the workplace/communications; and (v) culture change within the establishment or the strengthening of a safety climate.<sup>5</sup>

<sup>8</sup> Garcia CL, Abreu LC, Ramos JLS, Castro CFD, Smiderie FRN, Dos Santos JA, et al. Influence of burnout on patient safety: systematic review and meta-analysis. *Medicina (Kaunas)*. 2019;55(9): 553. (<https://doi.org/10.3390/medicina55090553>, accessed 30 April 2020).