





# **Understanding accelerators and overcoming barriers - the journey for developing or adapting an infection prevention and control guideline**

An easy to follow country approach

# THE OBJECTIVES OF THIS BOOKLET ARE:

- To outline high level milestones (not minutiae detail) required to achieve the desired outcome which is IPC guideline publication.
- To make it easy to follow a cyclical approach to IPC guideline publication.
- To ultimately accelerate a country's journey to guideline publication by providing real world insights.

- ✓ Apply the steps in this journey, that are framed within the WHO 5 steps implementation cycle.
- ✓ Use the accelerators  and barriers  presented in each step to help speed up IPC publication progress.
- ✓ Use it at any time when planning to develop, adapt or update infection prevention and control (IPC) guidelines.
- ✓ Involve a wide range of people in the steps in this journey from the start!

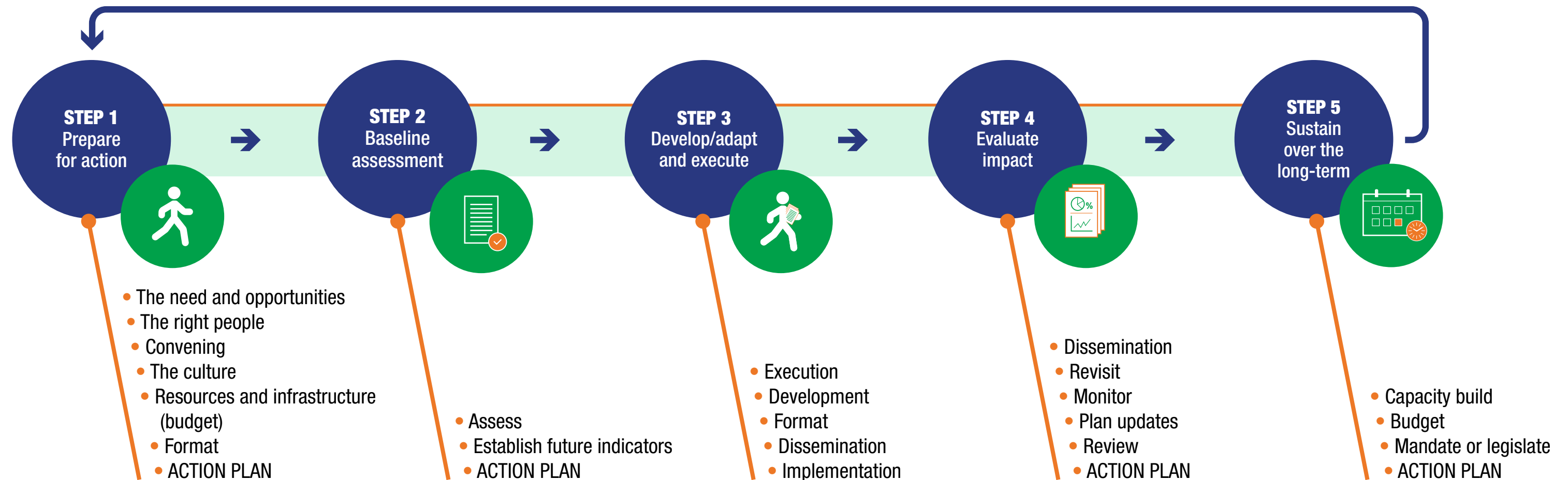
The steps are based on the WHO implementation manuals and collated country experiences.

WHO outlines an IPC guideline as follows 'Guidelines are developed to improve decision-making by providing guidance and recommendations according to the best available evidence. IPC guidelines provide a means by which health care facilities/workers can be held accountable.'

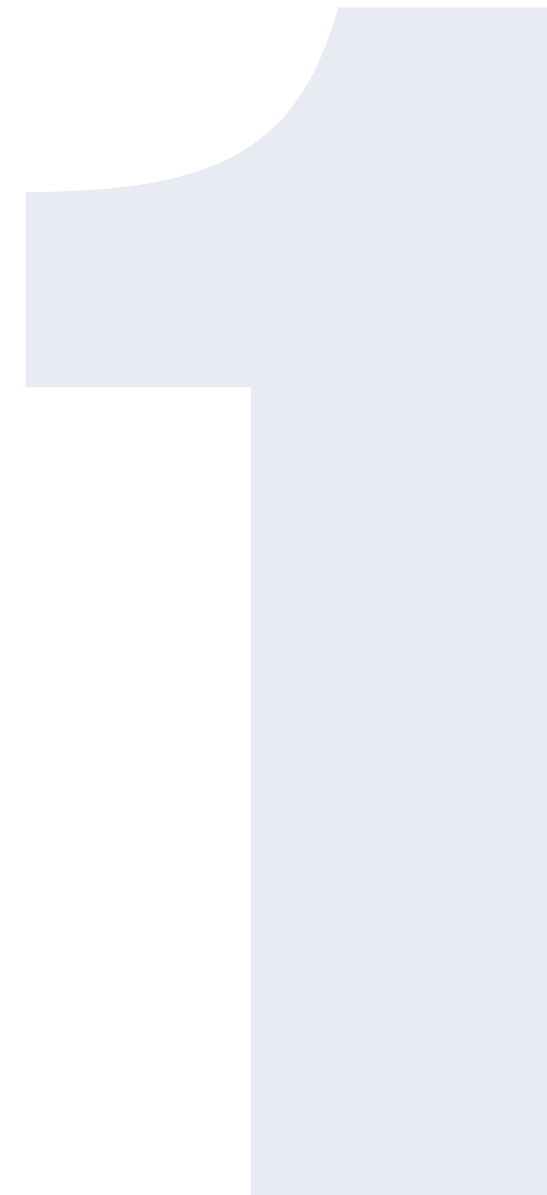
# THE 5 STEPS FOR DEVELOPING OR ADAPTING IPC GUIDELINES



# A SUMMARY OF YOUR ROUTE TO SUCCESS WHEN FOCUSING ON KNOWN ACCELERATORS AND BARRIERS



# STEP 1 Prepare for action



STEP 1



STEP 2



STEP 3



STEP 4



STEP 5



**STEP 1**  
 Prepare  
 for action


▶▶▶ **THE NEED AND OPPORTUNITIES<sup>1</sup>** – Capitalize on **circumstances** for the timeliness and need for guideline development/adaptation to ensure the right support and impact. \* **Invest time** in the possibility to adapt existing guidelines. \*\*

\* WHO Handbook for guideline development 2nd edition'

<https://apps.who.int/iris/restbitstreams/651924/retrieve>

\*\* WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 26)

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

▶▶▶ **PEOPLE<sup>1</sup>** – Explore the **right people<sup>2</sup>** for your guideline group. Read up on **who is critical** to this. \*

\* WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 24/25)

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>



**SHORTCUT** – If the right people have been convened and resources are in place, this implies a supportive culture for the journey and it might be possible to issue.

**ACTION PLAN 1.0** at this stage and go straight to step 2 (i.e. if you get these first steps right you can move faster in your process!). \*

\* WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 27/28)

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>



**STEP 1**  
 Prepare  
 for action


**!!!** Explore the **perceived lack of benefit<sup>2</sup>** and **conflicts of interest<sup>2</sup>**.

**▶▶▶ CONVENING<sup>1</sup>** – Secure all the right expertise to **launch your guideline group**, will the balance of expertise “feel right” in meetings?

**▶▶▶ THE CULTURE<sup>1</sup>** – **Understand** the prevailing type of culture. This might strongly influence the guideline development/adaptation process.



**KEY MESSAGE** – Get the start of the journey right – it will take you further faster! The approach to adapting and adopting should follow a similar journey to the guideline development process to ensure relevance, validity and accuracy of evidence; be prepared for this.



**STEP 1**  
 Prepare  
 for action

**▶▶▶ RESOURCES AND INFRASTRUCTURE<sup>1</sup> \* –**

**Explore** what is needed to develop/adapt a new guideline and make it available. There may be a need to create a **business case.**<sup>2</sup> Explore and secure (if possible) budget.

\* WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 25)

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

**▶▶▶ FORMAT<sup>1</sup> –** Think who will use the guideline and how it will be supported. It might be a different than you first think.

**● ISSUE ACTION PLAN 1.0**


**FOCUS –** Be prepared to revisit the existing (and required) people, infrastructure/resources – be ready to finalize ACTION PLAN 1.0, if you have not already done so. Ensure that the desired outcome, resulting from the issue of the IPC guideline has been agreed with all the right people.





## ASSOCIATED RESOURCES TO USE ALONGSIDE THIS ROADMAP - PROGRESSING YOUR JOURNEY

**WHO Handbook for guideline development 2nd edition**

<https://apps.who.int/iris/rest/bitstreams/651924/retrieve>

**WHO Interim practical manual: supporting national implementation of the WHO guidelines  
on core components  
of infection prevention and control programmes (page 26)**

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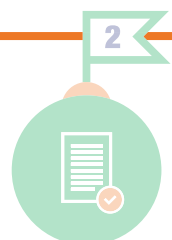
**STEP 1**  
Prepare  
for action



**STEP 1**



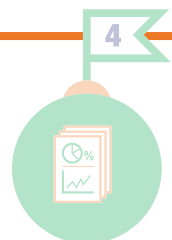
**STEP 2**



**STEP 3**



**STEP 4**





**STEP 5**





## STEP 1 ACCOMPLISHED!

If you have invested time in the milestones and associated country insights/further reading for step 1, including how to accelerate  and overcome known barriers , you will be ready for step 2.

STEP 1  
Prepare  
for action



# STEP 2

## Baseline assessment

(assess your current situation with IPC/guidelines)



**STEP 2**  
Baseline  
assessment


- ▶▶▶ **ASSESS<sup>1</sup>** – Use existing IPC tools/results and other data sources or conduct an assessment. Prioritise - Understand your priority areas for targeted IPC guidelines. Associations - Understand the status of existing guidelines and the relationship with monitoring, education and training and overall IPC programme activities. This supports early planning for operationalization of a guideline.


**Progress your journey, based on the assessment results:**

- If you answer “no” to IPC assessment tool ([IPCAT2](#)) at national level questions 2.1.1, 2.1.6, go back to step 1 “PEOPLE”.
- ✂ **SHORTCUT** – If you answer “yes” to the IPC assessment framework ([IPCAF](#)) at facility level questions, your action plan is likely to be well organized, go to step 3!
- If you answer “yes” to the IPC assessment framework at facility level questions 2.2, 2.3, 2.8, you might need to go back to step 1 “FOCUS”.
- If you have low scores on the WHO hand hygiene self-assessment framework and surgical site infection data collection fields, for example, consider these topics for new/updated guidelines and associated implementation and improvement plans. **WHO recommends IPC guideline topics<sup>1</sup>.**



**STEP 2**  
Baseline  
assessment


- **ESTABLISH FUTURE INDICATORS – Process and outcome.** Agree on the indicators to be used to assess the new guideline implementation. Use existing WHO minimum requirements as a starting point.
- **ISSUE ACTION PLAN 2.0 – Readjust ACTION PLAN 1.0** as necessary, including in relation to the need and opportunities for issuing the guideline as discussed during the convening time in step 1.



**START THINKING IMPLEMENTATION –** Recap on the qualities of an IPC leader and consider ➦ a plan to build capacity if needed. Explore implementation champions now!



**FOCUS –** The results from assessments should be used for guideline development/adaptation and its agreed desired outcome.



**KEY MESSAGE –** If any early assessment prognosis is not undertaken it may negatively influence the steps in your journey and cause delays.



## ASSOCIATED RESOURCES TO USE ALONGSIDE THIS ROADMAP - PROGRESSING YOUR JOURNEY

### IPCAT(2)

[https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/core-components/ipcat2.xls?sfvrsn=d087b1de\\_4](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/core-components/ipcat2.xls?sfvrsn=d087b1de_4)

### IPCAF

<https://apps.who.int/iris/handle/10665/330072>

### HHSAF (Hand Hygiene Self-Assessment Framework)

[https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/hand-hygiene/monitoring/hhsa-framework-october-2010.pdf?sfvrsn=41ba0450\\_6](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/hand-hygiene/monitoring/hhsa-framework-october-2010.pdf?sfvrsn=41ba0450_6)

### SSI data collection tools

<https://www.who.int/teams/integrated-health-services/infection-prevention-control/surgical-site-infection>

### WHO Core competencies for infection prevention and control professionals

<https://apps.who.int/iris/rest/bitstreams/1310381/retrieve>

### WHO Minimum requirement for infection prevention and control programmes (page 14)

<https://apps.who.int/iris/rest/bitstreams/1262934/retrieve>

### WHO IPC training: leadership and management in infection prevention and control module

<https://www.who.int/teams/integrated-health-services/infection-prevention-control/core-components>

### WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 27)

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

**STEP 2**  
Baseline  
assessment





## STEP 2 ACCOMPLISHED!

Your assessments are now complete and you can move to step 3.

**STEP 2**  
Baseline  
assessment



# STEP 3

## Develop/adapt and execute

your new IPC guideline plan



# 3





- **EXECUTE ACTION PLAN 2.0** – Ensure that **the right people<sup>2</sup>** are still in place to make this happen. ➡📄
- **UNDERTAKE THE GUIDELINE DEVELOPMENT PROCESS!**
- !!! **DISSEMINATION STRATEGY<sup>2</sup>** ➡📄 – Provide a **written document** that firmly outline **roles and responsibilities**, including those of the implementation champions. **Issue the guideline!**
- ▶▶▶ **IMPLEMENTATION PLANNING<sup>1</sup>** – Outline guideline implementation **deadlines**.

**STEP 3**  
Develop/adapt  
and execute



**FOCUS** – Follow the WHO Guideline development handbook.



**KEY MESSAGE** – **(RE)CONSIDER FORMAT<sup>1</sup>** – the guideline layout should be relevant for the intended audience and to make the guideline visible within the health care setting.



**STEP 3**  
Develop/adapt  
and execute



**ASSOCIATED RESOURCES TO USE ALONGSIDE THIS ROADMAP -  
PROGRESSING YOUR JOURNEY**

**WHO Interim practical manual: supporting national implementation of the WHO guidelines  
on core components of infection prevention and control programmes (page 24/25)**

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

**WHO Interim practical manual: supporting national implementation of the WHO guidelines  
on core components of infection prevention and control programmes (page 26)**

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

**WHO Handbook for guideline development 2nd edition**

<https://apps.who.int/iris/rest/bitstreams/651924/retrieve>





## STEP 3 ACCOMPLISHED!

You have developed/adapted your guideline and it is ready to be disseminated and implemented. You can move to step 4.

**STEP 3**  
Develop/adapt  
and execute



# STEP 4

## Evaluate the impact of your IPC guideline



# 4



- **ISSUE AND EXECUTE THE GUIDELINE DISSEMINATION STRATEGY**

**!!! ADJUST<sup>2</sup>** – Create **ACTION PLAN 3.0**  as necessary.

- **REVISIT** – The **agreed indicators** to demonstrate guideline implementation success (for both the expected process and outcomes).

**!!! MONITOR<sup>2</sup>** – Use a **validated approach** to monitor the indicators in line with the guideline content.

**STEP 4**  
Evaluate  
impact



**KEY MESSAGE – MOVING FORWARD** – If your answer is now “yes” to [IPCAT2](#) point 2.1.3, you are clearly ready to focus on sustainability (step 5).



- **SCHEDULE UPDATES** – Guideline updates using a **systematic** approach and at least **every 5 years**.
- **REVIEW** – The guideline development/adaptation processes – **did your plan work?**
- **EXECUTE ACTION PLAN 3.0 WITH A CLEAR, ONGOING TIMELINE** ↗📄

**STEP 4**  
Evaluate  
impact



**STEP 4**  
Evaluate  
impact



### ASSOCIATED RESOURCES TO USE ALONGSIDE THIS ROADMAP - PROGRESSING YOUR JOURNEY

**WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 28)**

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>

**IPCAT(2)**

[https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/core-components/ipcat2.xls?sfvrsn=d087b1de\\_4](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/core-components/ipcat2.xls?sfvrsn=d087b1de_4)

**WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 29)**

<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>





## STEP 4 ACCOMPLISHED!

You have understood the guideline development/adaptation process and put in place the actions to monitor impact, and can now move to step 5.

STEP 4  
Evaluate  
impact





# STEP 5

## Sustain

(up-to-date  
IPC guidelines)  
over the long term



**!!! CAPACITY BUILDING<sup>2</sup>** – Is important when executing the action plan, to address **what is needed** for future guideline development (and implementation).

- **BUDGET** – Ensure that a budget is **available** on an ongoing basis and **targeted** at guideline development/updates and implementation.  
Revisit your **business case<sup>2</sup>**, if you created one.
- **MANDATORY OR LEGISLATIVE CONSIDERATIONS** – How might national IPC or related health programmes **support ongoing guideline development/adaptation** and implementation, to help achieve your process and outcome indicators?
- **MAINTAIN ACTION PLAN**

**STEP 5**  
Sustain  
over the  
long-term



**KEY MESSAGE** – Return to step 1 as outlined in your current guideline action plan.



**STEP 5**  
Sustain  
over the  
long-term



**ASSOCIATED RESOURCES TO USE ALONGSIDE THIS ROADMAP - PROGRESSING YOUR JOURNEY**

**WHO Interim practical manual: supporting national implementation of the WHO guidelines on core components of infection prevention and control programmes (page 28)**  
<https://apps.who.int/iris/rest/bitstreams/1262885/retrieve>





## STEP 5 ACCOMPLISHED!

You have addressed any findings from your evaluation of the process and adapted your action plan to ensure sustainability, including a timeline for returning to step 1.

STEP 5  
Sustain  
over the  
long-term

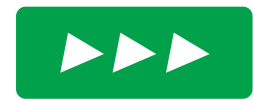




## WHAT CAN YOU EXPECT? THE END POINT IN THIS JOURNEY:

- **A NATIONAL DESCRIPTION OF THE PROCESS**  
(in a national handbook for development of IPC and other guidelines)
- **CURRENT IPC GUIDELINES AVAILABLE AND ACCESSIBLE FOR ALL TO USE**





# <sup>1</sup>Additional country insights to making the journey successful (1/3)

## STEP 1 - THE NEED AND OPPORTUNITIES

- Discuss the topic or issue to be addressed in the new/adapted guideline at length. Consider integration/alignment with other health programmes. Be sure to identify other (country) priorities that could help to adopt, embed or influence IPC guidelines.
- Additionally, opportunities for the right time for publication of IPC guidelines, and high level support for these, might include:
  - an urgent situation – an outbreak or even undue media attention (in this situation, an IPC guideline may have to be reviewed and updated in a short timespan);
  - prevalence or incidence data – local, national, regional or global;
  - professional or patient pressure – local demand;
  - an annual submission process – for national-level guidelines to be supported and approved (and funded; this could be related to resources being available or diminished);
  - progressing the availability of guidelines – e.g. as a priority function of the national IPC programme. The availability of technical guidelines on IPC programme organization and key IPC practices is usually a prerequisite for rolling out IPC education and training, IPC monitoring and evaluation, as these should adhere to IPC principles and standards referred to in national guidelines;
  - a global “mandate”/stimulus - e.g. launch of a new WHO IPC guideline.

## STEP 1 - PEOPLE

- The right people with the perceived expertise, and the benefits that they will bring to the guideline group, is critical. This includes IPC, GRADE methodology, guideline development, clinicians, occupational health, those in charge of budgets/resources, etc. Enlist visionary leadership, including experts, influencers and stakeholders, existing role models and opinion leaders who can motivate. IPC leads are often those who will explore and identify others to sit on the group. External technical expertise may be needed for the writing process, e.g. from other countries, organizations/ societies. [↗](#) [📄](#)

## STEP 1 - CONVENING

- Use convening time effectively to get the most from people on the group and to identify any obstacles that might transpire. Ensure the plan of work and timeline is clear to all, address any issues, identify people who may still be missing from the group and agree new member invites – be open to a wide range of expertise from different programmes. A strong guideline group with a range of skills can only help IPC awareness and improvement.



## <sup>1</sup>Additional country insights to making the journey successful (2/3)

### STEP 1 - THE CULTURE

- The type of culture in a country (e.g. technocratic, autocratic, democratic or other) will influence the approach to guideline development and acceptance, including guideline format, and it is important to acknowledge this.

### STEP 1 - RESOURCES AND INFRASTRUCTURE

- Resources do not have to mean new money, e.g. use existing WHO documents and other international (or quality national) guidelines to progress the journey. The process of adapting existing guidelines can speed up the availability of IPC guidelines in country.

### STEP 1 AND STEP 3 - FORMAT

- Ensure there is a focus on people and patients in the guideline. A process to engage a cohort of engaged clinicians could help ensure the guideline is formatted in the right way for implementation into practice. Clinicians should also be made aware of other supporting tools and resources that will assist successful implementation of the new guideline.

### WHO IPC guideline topic recommendations include:

- standard and transmission-based precautions;
- sterilization and decontamination of medical devices;
- patient placement and respiratory hygiene and cough etiquette;
- principles of asepsis, aseptic technique and device management for clinical procedures, according to the scope of care. Since the scope of practices may be very different in health-care facilities, depending to the type of care offered, the guidelines should prioritize the most frequent and/or risky practices (e.g. use of indwelling catheters and other devices, surgery and other invasive procedures) and settings (e.g. operating room, ICUs, neonatal wards, central reprocessing, haemodialysis unit, etc.).



## <sup>1</sup>Additional country insights to making the journey successful (3/3)

### STEP 2 - ASSESS

- It is important to use **local results**, e.g. prevalence/incidence, audits, i.e. related to microorganisms, infections or interventions, if available, to drive the focus and acceptance of the continued need for the guideline.
- Use **WHO tools** - [IPCAT2](#) (for guidelines, refer to sheet 2), [IPCAF](#) (for guidelines, see pages 4–5)
- Other useful tools i.e. [Hand Hygiene Self-Assessment Framework \(HSAF\)](#), [Surgical site infection data collection forms](#).
- Consider health worker and patient surveys; does the topic being addressed resonate with their needs/opinions? Consider undertaking facility culture assessment(s). Review mandated country indicators as well as national approaches to auditing (e.g. insurance, regulatory/legislative, accreditation schemes), for relevance to the IPC guideline situation.

### STEP 3 - IMPLEMENTATION PLANNING

- For further in-depth steps on implementation, refer to WHO [implementation manuals](#).
- Continue to explore the notion of “implementation champions” among health workers as well as influential leaders, and use the prompts in the WHO implementation manuals to support this. Consider unique ideas for implementation planning, i.e. linking guidelines to standard operating procedures, pocket “how-to” guides, smartphone applications.



## !!! <sup>2</sup>Some ideas to encourage positive progress against commonly encountered barriers (1/2)

### STEP 1 - THE RIGHT PEOPLE

- Without people on the guideline development group who hold all the right clinical (subject) expertise there may be challenges with content and implementation. When group members resign or do not attend group meetings, it can affect the outcome. Manage the group and actively revisit membership. In advance of meetings, make time to prepare scripts and plans for managing difficult situations that stall progress. If there is no established “team”, which might be the case in some countries, the guideline process will be challenging but is still be possible with commitment.

### STEP 1 - PERCEIVED LACK OF BENEFIT

- Use statements from peoples’ experiences on guideline development, outline the expected impact (emotive stories of IPC and patient and health worker safety), explain personal acknowledgements and/or an intended scientific publication process.

**IPC guidelines can be the entry point to achieving an IPC programme, at national and facility levels, and all WHO-recommended IPC core components.**

### STEP 1 - CONFLICTS OF INTEREST

- Lack of transparency and bias from group members will influence guideline content. A strong leader should be in place to prognose and manage this and themselves have no conflict/be a neutral moderator. Preparation (a script) for managing expected conflicts, finding consensus and reducing fragmentation within group meetings will help.

### STEP 1 - THE NEED FOR A BUSINESS CASE

- Be prepared to present your case for IPC guidelines, and seek out people with the ability and skills to help you do this. The right elements to present your case might not be available, e.g. return on investment information, but be prepared with a clear narrative (for example, use “business” language to talk to the managers). If resources are affected during the guideline development or adaptation process, this journey may look different, but all steps are still recommended, even if undertaken in a different order.

## !!! <sup>2</sup>Some ideas to encourage positive progress against commonly encountered barriers (1/2)

### STEP 3 - THE NEED FOR A DISSEMINATION STRATEGY THAT SUPPORTS IMPLEMENTATION

- This step is critical, but it might be undertaken at different times in the development/adaptation journey; still, it must be decided upon, written and executed. Not considering a multimodal improvement strategy, means it is unlikely that improvements will be seen in practice, even if a perfect, technical guideline is issued.

### STEP 4 - THE NEED TO ADJUST

- Be alert to things that could be going wrong. Put in place an alert mechanism and perform exercises to understand any arising barriers not yet addressed, such as adequate resources to help meet the standards in the guidelines, the distribution process, etc.

### STEP 4 - THE PERCEIVED BURDEN OF MONITORING

- The implementation of new guidance gives rise to new evidence of impact and new research questions; ongoing monitoring is exciting and critical, as is repeating the implementation cycle as described in this roadmap.

### STEP 5 - THE NEED FOR A BUSINESS CASE

- Losing the opportunity to build country capacity will slow down future guideline updates or development and will not lead to the overall desired effect of reduced variability in IPC practice and improved behaviours and perceptions. Consider a programme for capacity-building, empower IPC specialists/focal points as experts in guideline development (include in job descriptions); use WHO core component document statements and core competences to drive this agenda. A gold standard national guideline process can take years to establish!
- The budget for IPC guidelines and indeed IPC programmes might be achieved/highlighted during this journey of guideline development, even if not on the first attempt. There might be an opportunity to have a visible pledge from ministers or other national/facility leads towards an on-going budget during this time.

# YOUR ROUTE TO SUCCESS FOCUSED ON **ACCELERATORS** AND **BARRIERS**

## WHERE WILL YOU START YOUR JOURNEY?

