



HOSPITAL MANAGEMENT INTERVENTION TOOLKIT

IMPRESS

Innovative Management PRactices
to Enhance HoSpital Quality and
Save Lives in Malawi

January 2026



**KAMUZU
UNIVERSITY**
OF HEALTH SCIENCES



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Abbreviations and acronyms

CHAM	Christian Health Association of Malawi
COIN	Care of the Infant and Newborn
CPAP	Continuous Positive Airway Pressure
CPD	Continuous Professional Development
DHMT	District Health Management Team
DHSS	Director of Health and Social Services
DMO	District Medical Officer
DNMO	District Nursing and Midwifery Officer
KMC	Kangaroo Mother Care
KUHeS	Kamuzu University of Health Sciences
LSHTM	London School of Hygiene & Tropical Medicine
MIP	Management Implementation Plan
MoH	Ministry of Health
NEST360	Newborn Essential Solutions and Technologies
NNU	Neonatal Unit
ODK	Open Data Kit
QI	Quality Improvement
QIST	Quality Improvement Support Team
QMD	Quality Management Directorate
TA	Technical Assistants
ToR	Terms of Reference
WIT	Work Improvement Team



Introduction

IMPRESS (Innovative Management PRactices to Enhance hoSpital quality and Save lives in Malawi) was a five-year research project funded by the UK's National Institute for Health and Care Research (NIHR) Global Health Programme. It was delivered through a partnership between Kamuzu University of Health Sciences (KUHeS) and the London School of Hygiene & Tropical Medicine (LSHTM), working closely with the Malawi Ministry of Health (MoH), NEST360, and participating hospitals. The project aimed to co-design and evaluate a hospital management intervention to improve the quality of care and reduce newborn mortality.

This toolkit outlines the core components of the IMPRESS hospital management intervention and consolidates the tools used to implement it. It is intended for policymakers, programme implementers, and hospital managers who wish to adapt the intervention – or specific components of it – to their own settings.

The toolkit does not present formal impact or process evaluation findings; these are reported separately.

Guidance on using this document

Part A provides a detailed description of the IMPRESS hospital management intervention. It outlines the rationale for the intervention, the process through which it was designed, and its key components, giving readers the background needed to understand and interpret the tools in Part B.

Part B contains the tools that make up the IMPRESS intervention. Each tool can be accessed directly by clicking its icon within the navigation page and is arranged in the order used during implementation. The text shown in each template serves as an example of how the tool can be completed.

Blank, editable Word versions of all templates are provided as separate accompanying documents to this toolkit.

Click the Home button on any page to return to the main tools menu



IMPRESS

10 Intervention hospitals

12 1 week visits per hospital

627 Hours of onsite engagement per hospital

11k Baby admissions in intervention hospitals



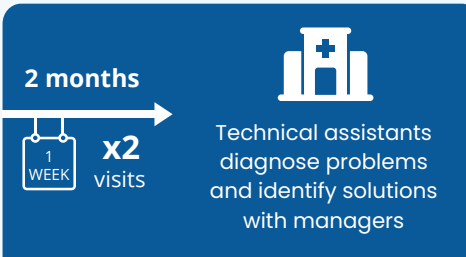
INTERVENTION TIMELINE

Co-design



JANUARY 2023

Phase 1: Diagnostic



JUNE 2023

Phase 2: Implementation



AUGUST 2023

JUNE 2024

ACTIVITIES



Part A: IMPRESS hospital management intervention

The description of the intervention aims to give readers a comprehensive understanding of what the IMPRESS intervention entailed. It is guided by the Template for Intervention Description and Replications (TIDieR), the purpose of which is to ensure that interventions are described in enough detail to allow their replication. While useful, the template is not comprehensive and we use it as a guide only. In particular, it gives insufficient emphasis to two items that are important for understanding the intervention. The first is the process through which the intervention was developed. The second is the programme theory – that is, an outline of the mechanisms through which the intervention is expected to work and the contextual factors that determine whether the mechanisms operate.

1. Aim and rationale of the intervention

The aim of the IMPRESS hospital management intervention was to improve the quality of small and sick newborn care and ultimately reduce in-hospital mortality through the adoption of specific management practices and processes. The multi-component intervention provided structured, intensive on-site support to health professionals in the neonatal unit and their managers. Trained technical assistants (TAs), working in pairs, visited secondary-level district hospitals for one week every month over a period of one year. TAs undertook multiple activities with hospital staff, focusing on management practices within the hospital's control and hence amenable to change. The intervention did not provide financial remuneration or incentives to hospital staff.

The rationale for the intervention was that clinical care depends not only on the availability of qualified staff, devices and supplies, but also on management-related factors. Our overarching theory of change was that the adoption of certain management practices could address barriers to, and spur continuous improvement in, clinical care by institutionalising the use of data to identify and solve problems, improving coordination, strengthening skills, increasing motivation, and optimising how staff are allocated (see Section 4 for more details). The intervention focused on management practices that hospitals themselves purposively selected as those most likely to drive improvements in clinical care in the neonatal unit (NNU) (see Section 3 for more details). In this sense, the intervention was not prescriptive – it was designed to provide a framework for change, supporting hospitals to tailor activities to their needs.



1.1. Why neonatal clinical quality of care?

Newborns in their first 28 days of life represent some of the most vulnerable users of the health system, as they can die quickly. Reducing neonatal deaths requires large-scale implementation of care during labour, delivery, and the first week of life, particularly for small and sick babies. The government programme addressing this target population in Malawi is NEST360, which seeks to implement a set of clinical interventions: the provision of affordable technologies to keep babies warm, help them breathe, treat jaundice, and control infections; and the training of clinicians and technicians. The IMPRESS intervention sought to build on and add value to NEST360. These links also enabled us to leverage rich data on mortality and clinical practices, and to facilitate access to hospitals to collect further data on management. While the intervention focused on neonatal care, there is no reason why it could not be adapted to other areas of clinical care within a hospital.

1.2. Why management practices?

There are two reasons why the intervention focused on management practices. First, there is a prevailing view that management practices can unlock better hospital performance. This is supported by observational evidence on the relationship between management practices and quality of care in hospitals. A recent systematic review by the IMPRESS research team found evidence supporting the relationship between management quality and hospital outcomes, but the evidence is mixed, and few studies have investigated this using a randomised controlled trial design. Moreover, poor management practices typically persist in organisations – for example, because hospitals may not know they are performing poorly or what they need to do to improve – thereby providing justification for externally provided support to hospitals. Second, NEST360 was addressing shortages in medical devices and capacity of staff – two key inputs necessary for providing quality small and sick newborn care. However, it was anticipated that institutionalising management practices supporting the efficient use of these inputs could generate additional improvements in outcomes.

1.3. Why management practices under the control of the hospital?

The formative phase of the research helped us understand the management-related factors that influence the quality of care in Malawian hospitals, and which were within and beyond the hospital's control. For example, despite efforts to decentralise the health system, the MoH continues to be responsible for making decisions about the allocation or posting of health professionals across public hospitals. This is a constraint that a hospital management intervention cannot readily address. There are also other system-level resource constraints that can influence the quality of care, such as drug shortages. The intervention instead focused on management-related practices and systems that could feasibly be improved, as they are within the hospital's control.



1.4. Why continuous improvement?

Continuous quality improvement is a management process that encourages health care workers and managers to continuously ask, “How are we doing?” and “Can we do it better?” It is based on the idea that improvements in quality of care cannot be achieved and sustained through one-off actions (such as an external audit). It requires a different mindset and organisational culture, founded on continuous monitoring and follow-up actions that strive for better quality. The concept of continuous improvement is at the core of similar initiatives or approaches, such as the Japanese kaizen management system and quality improvement collaboratives.

1.5. Why a multi-component intervention?

The intervention is multi-faceted, comprising multiple components. The rationale is that multiple strategies are needed to address different constraints on quality, so they work synergistically. In other words, the binding constraints to improving the quality of care are multi-faceted. This is consistent with recent reviews showing that multi-component strategies have a larger effect on improving health providers’ practices compared to single-component strategies. The various components of the IMPRESS intervention are designed to work together, in the sense that they are complementary (e.g. target setting requires data monitoring) and sequenced logically over time (e.g. hospital situation analysis is required before developing a management implementation plan).

1.6. Why secondary hospitals?

NEST360 has established a network of 36 hospitals to be part of its programme. These hospitals account for the vast majority of secondary and tertiary care in Malawi. There is a mix of levels, including all four central government hospitals, all 24 district hospitals, and 8 of the 38 largest Christian Health Association of Malawi (CHAM) hospitals. Under IMPRESS, we worked with 30 secondary hospitals from this network (defined as being part of the programme since 1 January 2022). In selecting the IMPRESS trial hospitals, we excluded the four central-level hospitals and two CHAM hospitals with the lowest in-hospital neonatal mortality. The intervention was not designed to address the complexity of the management structure or the types of management problems encountered in central hospitals.



2. Co-design process

The development of the management intervention followed MRC guidance on complex interventions¹ and drew on practical, generic guidance on the importance of middle-level principles. The following inter-linked components informed the co-design process: 1) a formative phase of research conducted over a 15-month period; 2) an externally-commissioned landscape review of different approaches that seek to improve the quality of clinical care in hospitals through better management practices; 3) insights from implementation science in applied health; and 4) a series of intervention design workshops with hospital managers and health workers, central level experts, and other stakeholders in Malawi.

2.1. Guiding principles

The development of the intervention was shaped by several guiding principles established during the co-design process. First, the intervention should be multi-faceted – that is, it should comprise multiple components and activities, recognising that it is a health systems intervention addressing a complex set of issues. Second, the intervention should have a clearly articulated theory of change, with buy-in from stakeholders and participants. Third, the intervention should be feasible to implement with the resources available to IMPRESS and acceptable to the stakeholders involved. Fourth, the intervention should complement NEST360 activities to leverage synergies. Fifth, the intervention should closely align with existing government guidelines and hospital governance structures (i.e., Quality Improvement Support Teams (QISTs), Working Improvement Teams (WITs), and the Senior Leadership Team).

2.2. Formative phase of research

In-depth interviews and group model building with health workers and managers, conducted between September 2021 and February 2022 across four hospitals, helped inform the intervention design in several respects. They helped define the different domains of management relevant to hospitals in Malawi, identify the government management systems and processes within each domain, and assess the extent to which they are implemented in practice. They also provided insights into the sphere of control – identifying the management practices that fall within and those that fall outside the hospital's decision-making authority. Finally, through the development of causal loop diagrams, they enhanced understanding of how management practices hinder or facilitate quality of care, and the underlying causes of the weak management systems most important for quality.

1. Skivington K, Matthews L, Simpson S A, Craig P, Baird J, Blazeby J M et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance BMJ 2021; 374 :n2061 doi:10.1136/bmj.n2061 <https://www.bmj.com/content/374/bmj.n2061>



2.3. Landscape review

The landscape review was an externally commissioned piece of work that provided a high-level overview of strategies to improve the quality of clinical care in hospitals through better management. These include: external review and control of norms and standards; total quality management and excellence models; performance and quality reporting; and strategies to strengthen management and leadership. Within these broad strategies, it examined specific approaches used (in terms of their historical roots, theoretical basis, pathways of impact, derailers, and evidence of effectiveness), as well as the tools (e.g., plan-do-study-act cycles) and activities (e.g., training) that are integral to their design and implementation. Country examples were used to illustrate some of the approaches, including the objectives of the “intervention”, where it was implemented, at what scale, and the tools and types of activities that were implemented.

2.4. Implementation science insights

Implementation strategies are defined as “methods or techniques used to enhance the adoption, implementation, and sustainability of a clinical programme or practice”². We applied the conceptual development of such strategies by implementation scientists to inform the IMPRESS management intervention. Our starting point was the refined compilation of implementation strategies defined by the Expert Recommendations for Implementing Change (ERIC) study³. As a study team, we assessed the potential role of each strategy for IMPRESS based on feasibility, acceptability, and effectiveness. We consolidated and narrowed these generic implementation strategies into a list of potential candidates, which have been further developed with specific ideas for activities and tools put forward by participants at district-level workshops (see below).

2.5. Co-design workshops

The aforementioned components supported the most important phase of the co-design process: a series of participatory workshops that brought together key stakeholders in Malawi to inform the development of the management intervention. The purpose of these workshops was twofold: to generate a set of coherent ideas for specific tools and activities that could improve hospital management systems to support clinical care in the neonatal unit; and to describe the causal principles at work, as well as the support factors, derailers, and safeguards against them. Separate workshops with each of the 36 hospitals in NEST360 provided an opportunity for large numbers of staff at all levels of the hospital to propose activities and tools they believed could address management problems identified during the formative phase of the research. These ideas were carried over to a subsequent workshop involving participants from district and CHAM hospitals, the zonal health offices, and the central level MoH to refine, prioritise, and elaborate on the components of the intervention.

2. Proctor EK, Powell BJ, McMillen JC. Implementation strategies: recommendations for specifying and reporting. *Implement Sci.* 2013 Dec 1;8:139. doi:10.1186/1748-5908-8-139. PMID: 24289295; PMCID: PMC3882890 <https://pmc.ncbi.nlm.nih.gov/articles/PMC3882890/>

3. Powell BJ, Waltz TJ, Chinman MJ, Damschroder LJ, Smith JL, Matthieu MM, Proctor EK, Kirchner JE. A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implement Sci.* 2015 Feb 12;10:21. doi: 10.1186/s13012-015-0209-1. <https://pubmed.ncbi.nlm.nih.gov/25889199/>



3. Description of the intervention

3.1. Technical assistants and materials

The IMPRESS intervention provided structured, on-site support to health professionals and their managers within participating hospitals. Trained TAs, working in pairs, visited hospitals for one week each month over a one-year period (a total of 12 x one-week visits). Each pair covered three hospitals, meaning they spent three weeks in every four supporting hospitals on-site and one week in every four back in Blantyre with their colleagues reflecting on the past visit and planning for the next. One supervisor oversaw the TA teams. The TAs were hired by KUHeS and recruited through a competitive process, with essential criteria including a master's degree in health care management and experience working in Malawi's health system.

The intervention provided limited materials. The IMPRESS Hospital Champion was given some mobile phone airtime to facilitate communication with the TAs. Printed copies of tools and dashboards were provided to hospital staff during visits. High-performing hospitals were given a kettle as recognition of their achievement. No financial incentives were given to hospital staff.

3.2. Target of the intervention

The intervention was targeted at secondary (district) hospitals. As part of NEST360, these hospitals were tasked with providing Level 2 small and sick newborn care (including continuous positive airway pressure). The intervention primarily targeted health staff in the NNU and their mid-level managers. A secondary target was the hospital leadership. In terms of institutional structures within the hospital, the focus was on the WIT at the neonatal unit level and the QIST at the hospital level.

3.3. Activities

TAs undertook a range of activities (Figure 1), delivered in two phases. During the diagnostic phase (2 months), TAs supported hospital teams in conducting a situation analysis, developing a management implementation plan, and identifying an 'IMPRESS Hospital Champion'. During the implementation phase (10 months), TAs provided ongoing support to hospitals to adopt management practices consistent with the MoH's standards and guidelines. These activities included coaching on management, local problem-solving, target setting, monitoring management practices, feedback and review of hospital performance, achievement recognition, and hospital peer-to-peer learning. The activities were carefully sequenced and designed to be complementary, supporting hospital staff in implementing solutions to identified problems through a cycle of learning and reflection.



Figure 1: Activities undertaken by the Technical Assistants



Situation analysis (phase 1)

TAs worked with hospital staff to assess the functioning of the quality management teams, identify what clinical areas within small and sick newborn care to prioritise, and identify what management practices to prioritise within IMPRESS. The situation analysis drew heavily on clinical data (from the NEST360-supported neonatal inpatient dataset) and management practices data (from the baseline hospital management survey). The situation analysis formed the basis for the development of the management implementation plan (MIP).

Management implementation plan (phase 1)

TAs supported hospital staff to develop an MIP. This plan provided a roadmap for how hospitals would improve specified management practices, detailing the activities of hospital staff and the support needed from the TAs. The plan served as a basis for tracking progress during subsequent hospital visits in phase 2.

IMPRESS Hospital Champion (phase 1)

The IMPRESS champion was a hospital staff member appointed to act as the main point of contact for the TAs and to take a leadership role in driving forward change. The champions were identified by the hospitals themselves, with guidance from the TAs. Implementation learnings indicate that this person, specifically whether they were proactive and motivated, was critical to the success of the intervention.

Coaching in support of management practices (phase 2)

The TAs provided coaching on skills and tasks on a needs-based basis in response to hospital-specific requests. The coaching typically focused on the management practices prioritised within the MIP – for example, how to undertake a death audit, set the agenda and write minutes for a WIT meeting, or conduct supportive supervision.

Target setting (phase 2)

The TAs led hospital staff through a process of setting targets for both priority clinical indicators (available from the neonatal inpatient dataset) and management practice scores (from the monitoring of practices). These targets were then integrated into regular performance reviews.



Monitoring of management practices (phase 2)

The TAs worked with hospital staff to conduct a structured monitoring exercise every two months during the intervention. This was done collaboratively as a team. The tool used a scoring system to provide a quantitative measure of how well different management practices were implemented across four domains. It also captured possible reasons when a management practice was poorly implemented.

Hospital performance reviews (phase 2)

The TAs organised hospital performance review meetings every two months. These reviews focused on feedback of data (in the form of dashboards showing changes over time with respect to targets and performance relative to other hospitals) from the monitoring of management practices and the neonatal inpatient dataset. TAs equipped staff with the skills to understand the data and facilitated deliberations on what actions to take.

Achievement recognition (phase 2)

At each bi-monthly performance review, an award (a certificate and a kettle) was given to the hospital with the largest improvement in its overall management practices score as recognition of achievement.

Local problem solving (phase 2)

TAs undertook a range of mostly ad hoc activities to support hospital staff in day-to-day problem solving linked to the MIP. The TAs facilitated and supported hospital staff in identifying challenges in sick and newborn care and in developing solutions to address them using locally available resources and expertise. For instance, in cases where there was staff shortage in the NNU, the TAs engaged hospital management, explaining when in the day the problem was most acute and discussing what staff re-allocations could help address the situation.

Peer-to-peer learning (phase 2)

TAs provided a platform for regularly sharing learning on improving management practices to benefit clinical quality. One structured, three-hour online session included several presentations from well-performing hospitals on a specific management area (e.g., neonatal death audit), followed by questions and discussion. For the in-person peer-to-peer visits, well-performing hospitals were matched with poorly performing hospitals based on their management strengths and weaknesses, using data from the monitoring of management practices. Nominated hospital staff from the poorly performing hospital visited the better performers. The visits included presentations by hospital managers on how management practices are carried out at their hospital and gave staff from the visiting hospital a chance to observe the activities firsthand, see the tools in use, and ask questions. Peer-to-peer learning relationships continued through regular group communication via WhatsApp.



4. Programme theory

Our overarching theory of change was that adopting certain management practices can help overcome barriers to clinical care and drive continuous improvement by institutionalising the use of data to identify and solve problems, improving coordination, strengthening skills, increasing motivation, and optimising staff allocation. Before unpacking these mechanisms in more detail, we describe the management practices that were the focus of the intervention, as these are critical to understanding how the intervention might work.

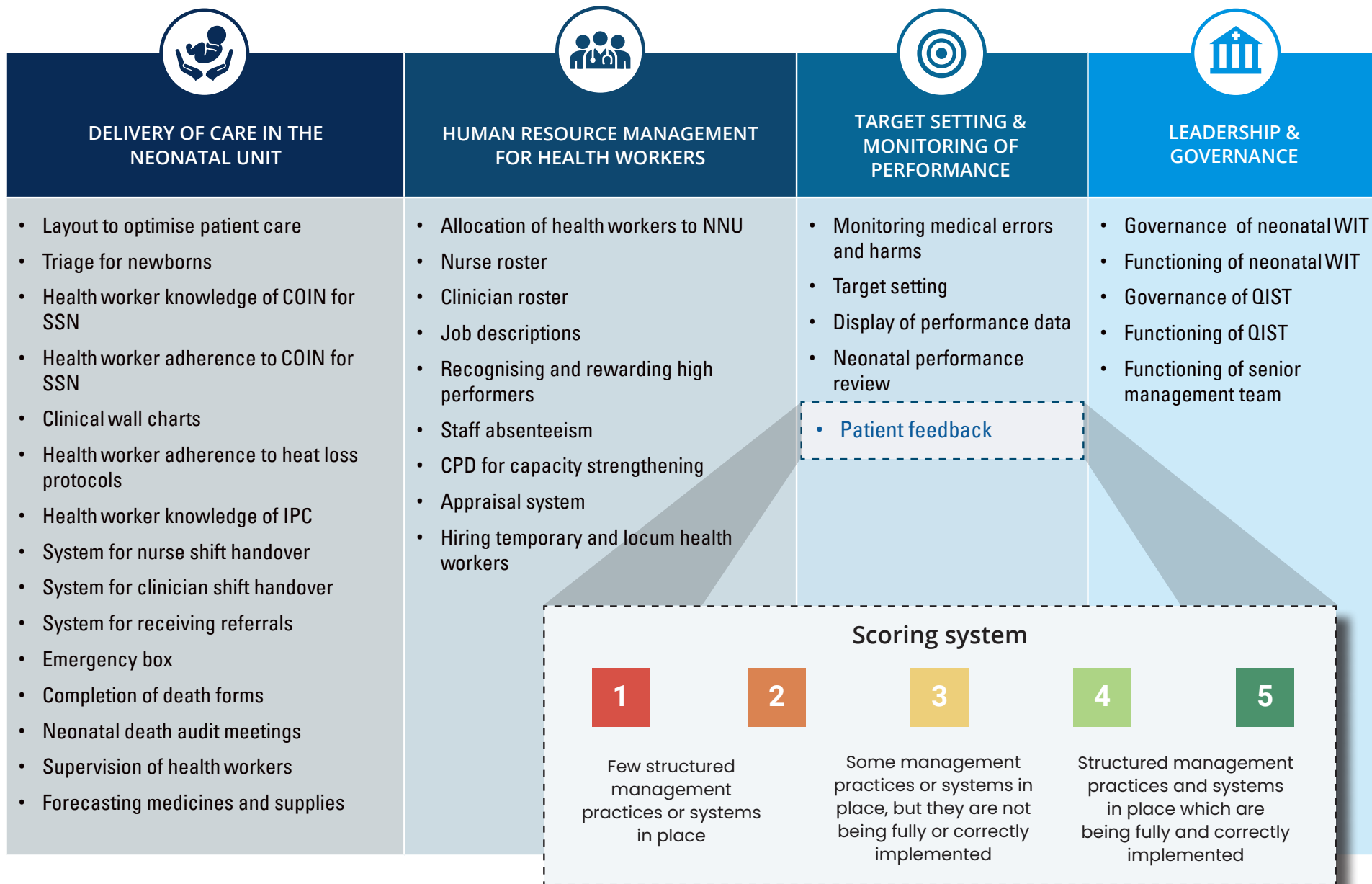
4.1. Management practices

The intervention deliberately focused on a clearly defined set of management practices. It did this in two ways. First, during the bi-monthly monitoring exercise, the TAs assessed how well each hospital implemented specific management practices described in Figure 2. Second, as part of developing the MIP, hospitals selected a list of management practices to prioritise – typically a subset of those presented in Figure 2.

The management practices monitoring tool in Part B describes each management practice in more detail and defines what a well-implemented and a poorly implemented management practice looks like. For example, the fourth management practice concerned the presence of a system to monitor health workers' adherence to COIN (care of the infant and newborn) protocols. A well-implemented system would be one in which adherence to COIN protocols in the neonatal unit is regularly and comprehensively monitored in a systematic manner, with constructive feedback given to health workers on a regular basis. A poorly implemented system would be one in which there is no systematic mechanism to monitor health worker adherence to COIN protocols in the neonatal unit.



Figure 2: Management practices targeted by the IMPRESS intervention

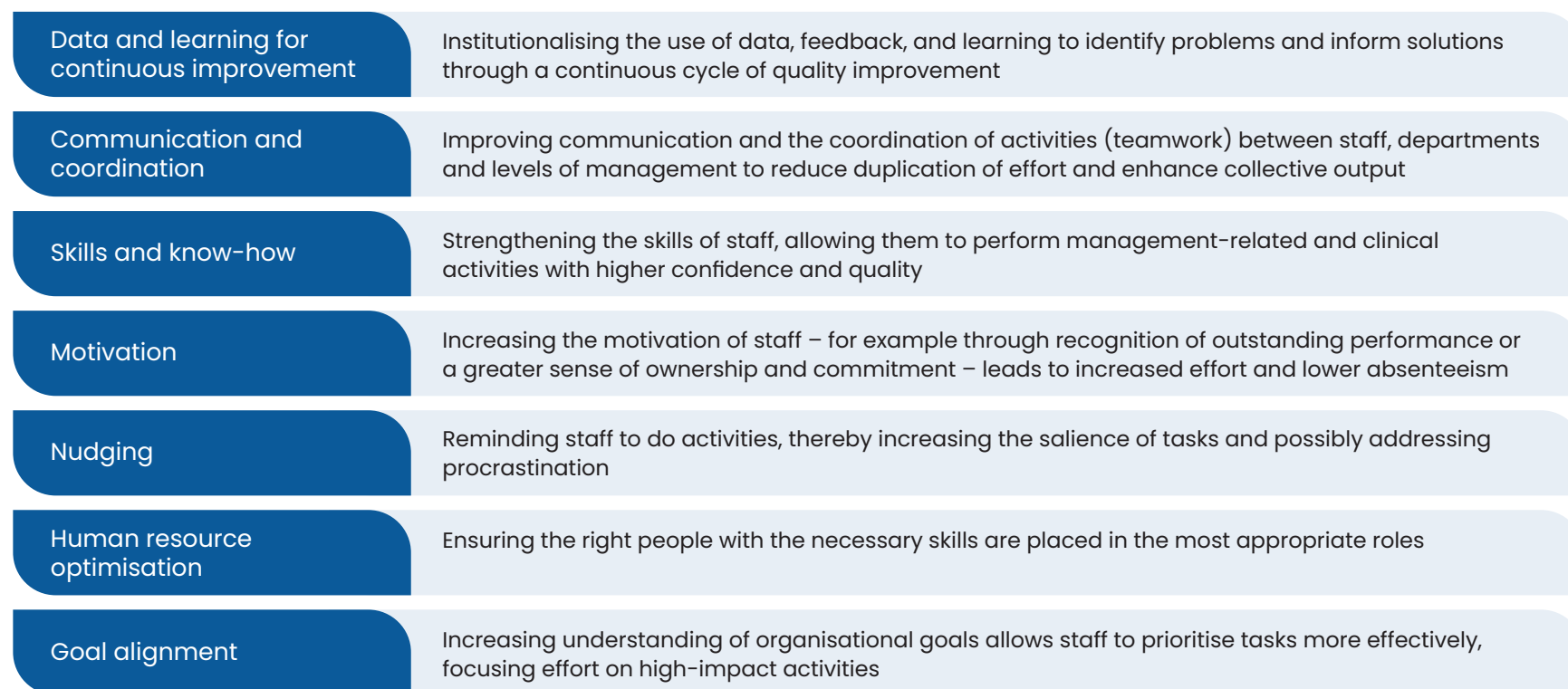


4.2. Mechanisms

The programme theory held that, if adopted and well implemented, these management practices would lead to better clinical care for neonates and ultimately reduce mortality. But through what mechanisms? During the co-design process, the IMPRESS study team made a concerted effort to articulate how the intervention was expected to contribute to these outcomes. Figure 3 summarises our thinking about these programme mechanisms.

The intention was to specify a set of mechanisms that were abstract enough to be generalisable beyond the IMPRESS intervention and the study setting. At the same time, we recognised that separating the change process into discrete mechanisms is artificial and fails to reflect interdependencies, even if it is a useful simplification for analysis.

Figure 3: Mechanisms through which IMPRESS improves quality of care



4.3. Context

It was recognised upfront that various contextual factors may influence how well the programme mechanisms operate. Thinking around contextual factors was not designed to be exhaustive but rather to provide a starting point for the qualitative research in the process evaluation. The following factors were identified as important a priori:

- **Decision space:** the extent to which hospitals and individual staff have, and exercise, autonomy in decision making.
- **Supportive leadership:** the extent to which the senior leadership team supports mid-level managers and clinical staff to engage with the intervention and implement changes.
- **Adequate staff:** the availability of staff to engage with the intervention and implement changes.
- **Incentives culture:** the extent to which expectations or the culture around incentives shape engagement with the intervention (given that it is not offering any financial benefits).

5. Implementation

5.1. Technical Assistants' activities

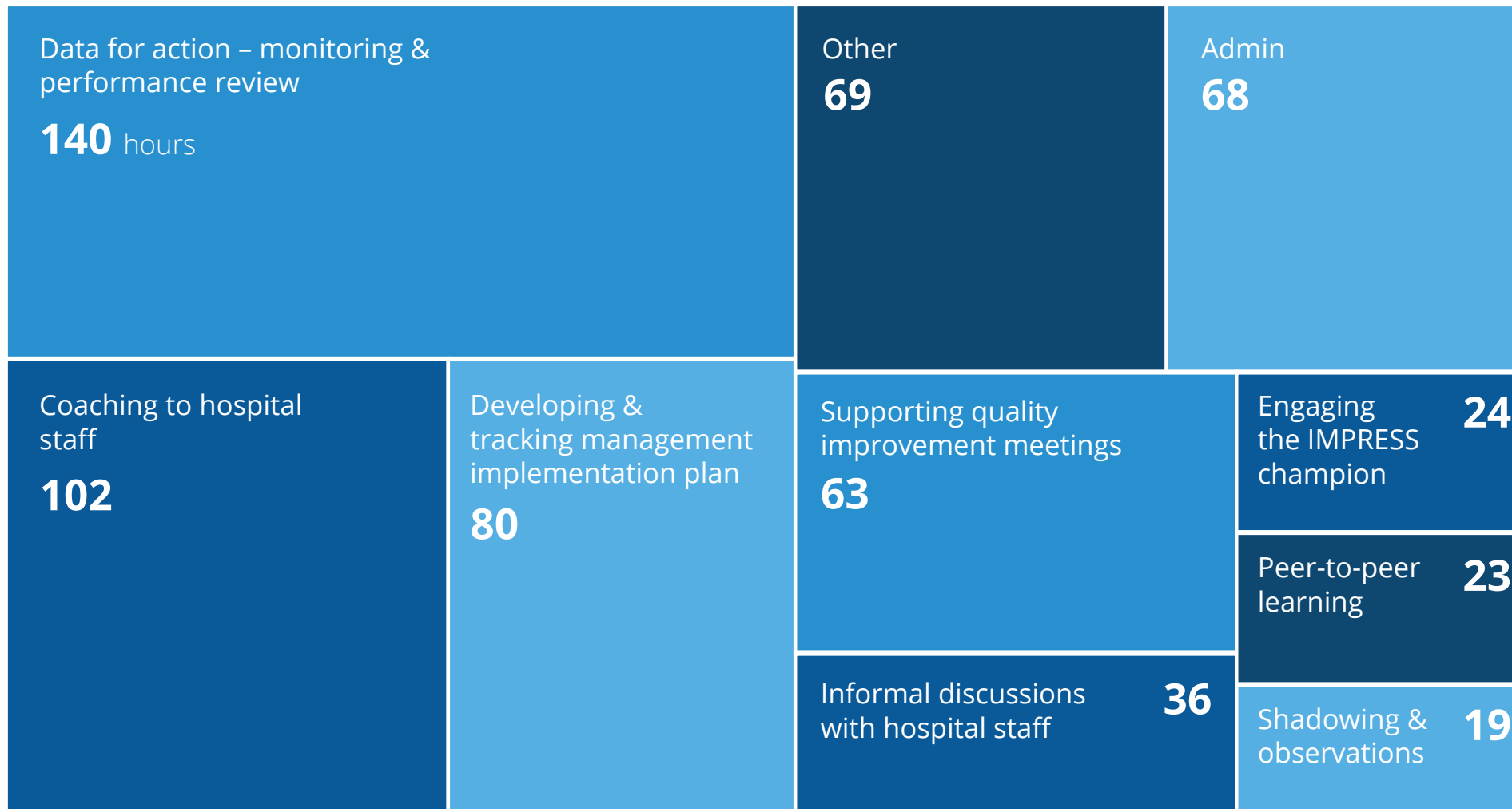
The intervention was implemented from 19 June 2023 to 28 June 2024. Each hospital received 12 one-week visits from the TAs. Process evaluation findings suggest that the intervention was implemented largely as intended, demonstrating its feasibility. The intervention was well accepted by hospital staff, in large part because it was, by design, closely aligned with government policy on the practices and systems that should be in place.

Daily activity log data from the TAs provide insight into how they spent their time. On average, they spent 627 person-hours per hospital engaging with and supporting staff (Figure 4). The largest share of time – approximately 140 hours per hospital – was spent on “data for action”: monitoring performance on management practices and clinical care, and discussing feedback with hospital staff. This was followed by coaching to hospital staff, which averaged 102 hours per hospital.



Figure 4: Average number of technical assistant hours spent per task, per hospital

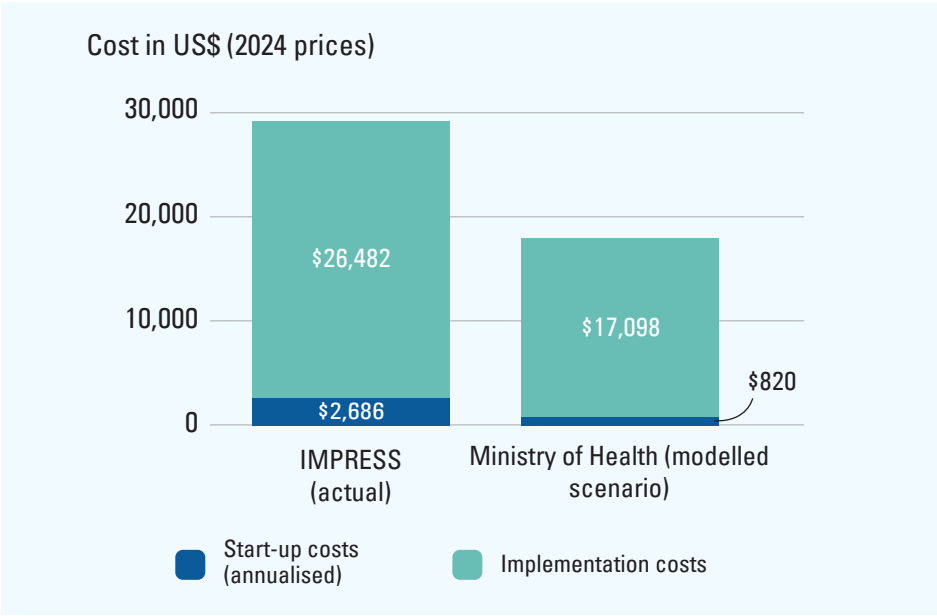
627 person hours of onsite engagement per hospital



5.2. Cost of the intervention

The cost of the IMPRESS intervention was MWK50,207,441 (US\$29,168) per hospital (Figure 5). These costs can be separated into start-up (design and preparation of the intervention) and implementation (delivering the intervention for one year) phases. We annualised start-up costs because such activities support the intervention across multiple years, beyond the first year, so it would overstate the true annual cost to assign them all to year one. Activities in the start-up phase and the implementation phase accounted for 9.2% and 90.8% of the total cost, respectively. Under a modelled scenario in which the Ministry of Health implements the intervention with the same staffing levels, the total cost would be MWK30,842,763 (US\$17,918) per hospital.

Figure 5: Cost of IMPRESS intervention per hospital



Part B: Tools

The IMPRESS hospital intervention toolkit is a consolidation of all tools that were employed during the intervention and the TAs' training material. The tools include:

1  Hospital Situation Analysis	2  Hospital Management Implementation Plan (and Progress Tracker)	3  IMPRESS Hospital Champion
4  Coaching Needs	5  Target Setting	6  Monitoring of Management Practices
7  Management Practices Feedback Dashboard	8  Hospital Peer-to-Peer Learning	9  Technical Assistants' Activity Log



1. Hospital Situation Analysis



Overview

The Hospital Situation Analysis is a comprehensive approach designed to assess the functioning of the quality management teams, identify what clinical areas within small and sick newborn care to prioritise, and identify what management practices to prioritise within IMPRESS. The situation analysis drew heavily on clinical data (from the NEST360-supported neonatal inpatient dataset) and management practices data (from the baseline hospital management survey). The situation analysis underpinned the development of the management implementation plan.

Key hospital staff were involved in the analysis, including: neonatal unit (NNU) staff (Sister in-Charge, nurses, clinicians, patient attendants); Quality Improvement Teams (NNU Quality Improvement Support Team (QIST), Neonatal Work Improvement Team (WIT)); the Ombudsman; data personnel; the Maintenance Department; and the Senior Management Team.

The following steps were followed to conduct the analysis:

1. Familiarising with the hospital by reviewing:
 - The latest data from the neonatal inpatient dataset dashboard
 - The hospital management practices and record review data
 - The latest NEST360 Quality Improvement (QI) visit report
2. Making prior arrangements with the hospital before the visit and ensuring expectations are clear.
3. Engaging with the hospital's quality improvement teams to assess the functioning of the quality management teams.
4. Prioritising the clinical areas that the hospital identified for focus.
5. Identifying management practices requiring support to improve priority clinical areas.
6. Producing a short report summarising the agreed recommendations for change. This report was then shared with hospital staff.



Hospital Situation Analysis template

Hospital details:		Date of visit 1:	
Hospital name:		Date of visit 2:	
Hospital ID:		TA team (names):	

Assessment of the functioning of the quality management teams

In the table below, summarise the findings from your assessment of the functioning of the quality management teams in the hospital.

	Quality Improvement Support Team	Neonatal Work Improvement Team
Who are the members?	Administrator, DMO, DNMO, Lab Manager, Rehabilitation Officer, Senior Medical Officers, Hospital Matrons, Infection Prevention Coordinator, Pharmacist, HR Manager, Environmental Health Officer, Data Clerk	Nurses, Clinical Officers, Data Clerk, Auxiliary Nurse, Hospital Attendant
Who is the chair?	Hospital Matron	Unit In-charge
How often did they meet in the last 6 months?	Twice (May 2023)	Twice (Only one report available)
What is the focus of a typical meeting?	Work-plan development, Review of accreditation results, Follow up on action points, Supervision of WITs	Review of ward performance, Discussion of assessment results
Who do they report to?	QMD, Partners in Quality Improvement	
What works well?	Engagement of junior staff in meetings and planning, QIST has been well supported on M&E, Improved accreditation results	Stronger teamwork and coordination, Commitment to meetings and activities.
What are the main challenges to the functioning of this team?	Members have multiple roles and may miss meetings, Lack of commitment among some members	Low attendance due to competing responsibilities
Is this one of the structures that IMPRESS will be engaging with?	Yes, IMPRESS will work with QIST	Yes, IMPRESS will work with WIT
If yes, who are the key focal people? How will you contact them?	District QI Focal	NNU In-charge



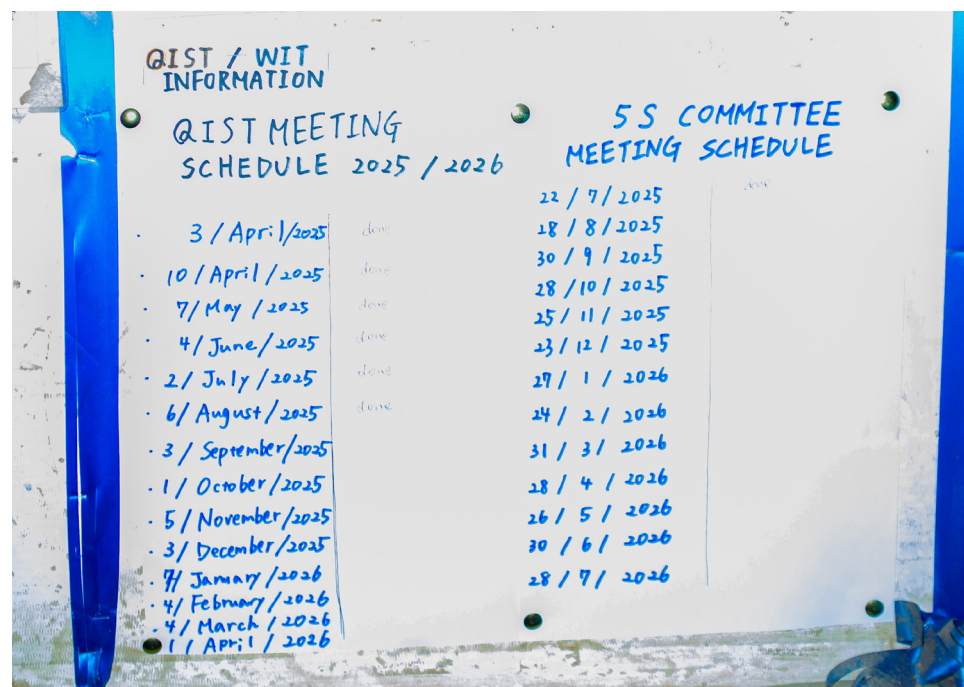
Assessment of the functioning of other relevant quality management structures

In this section, summarise the existence, role and functioning of any other quality management structures in the hospital (including those created by donor projects) that you might engage with as part of the IMPRESS intervention.

Examples include the IPC committee or the maternal WIT. It is not necessary to include the DHMT.

1. Infection Prevention Committee: The committee met in February 2023 for a planning meeting and reviewed progress in June 2023 following the results of the IPC assessment; however, the team is expected to meet monthly. The main role is to support and supervise IPC activities in the district. It collaborates with QIST and they are both functional teams.
2. QIST oversees departmental quality improvement activities while WIT manages the neonatal unit. The team is functional and does conduct meetings. Meeting minutes were present to prove their functionality.

Neonatal unit WIT said they are running QI projects to improve neonatal health outcomes, however, the team did not meet in the past six months due to work pressures. The WIT is functional with minutes present for some of their meetings and a journal for their projects. Currently, the team has plans to run a QI project on Continuous Positive Airway Pressure (CPAP) initiation for all babies seen fit for CPAP.



Priority clinical areas for IMPRESS

In this section, summarise the priority clinical areas that will be focused on during the IMPRESS intervention and the justification for their selection.

You can choose up to three clinical areas.

List the areas in order of priority.

Name of clinical area	Why has this area been chosen?
Describe a clinical area that affects small and sick newborns e.g. hypothermia.	<ul style="list-style-type: none"> Describe the clinical data that supports the choice of this clinical area (refer to relevant indicators in the NEST360 dashboard data) Describe the conversations with hospital staff or quality management structures that support this choice Describe any other relevant information e.g. other current or previous quality improvement initiatives to address this area
<p>CPAP</p> <p><i>Target:</i> All babies fit for CPAP to be put on CPAP.</p>	<ul style="list-style-type: none"> Data from the NEST360 dashboard showed poor performance, with coverage below 10%. Staff rotations have created knowledge and skills gaps among new neonatal unit staff. During the situation analysis, the QIST agreed to develop a quality improvement project on CPAP to address this gap. Mentorship and CPD sessions were identified as priorities to strengthen skills and supervision. The IMPRESS project may support this through improved target setting and monitoring.
<p>Hypothermia</p> <p><i>Target:</i> 0% of babies admitted to the nursery should have hypothermia.</p>	<ul style="list-style-type: none"> NEST360 data showed worsening performance: 79% of inborn babies had hypothermia in Q4 2022 compared to 60% in Q1. The team noted the need to improve thermal care practices in the labour ward to reduce exposure to cold before admission. Health education and adherence to immediate postpartum care were suggested interventions. A QI project with the labour ward team will be developed to address these causes.
<p>Jaundice</p> <p><i>Target:</i> 100% of babies on phototherapy should have bilirubin checked.</p>	<ul style="list-style-type: none"> Dashboard data showed only 8% of babies were tested in Q4 2022. Gaps were linked to limited staff knowledge on using the bilirubinometer and occasional device errors. The Nursery WIT plans to monitor bilirubin testing through a QI project, supported by supervision and refresher training.



Priority management practices for IMPRESS

In this section, summarise the key management practices that will be focused on during the IMPRESS intervention and the justification for their selection.

The number of management practices you choose depends on the scope of the management practice area and how feasible you think it will be to address this practice within the intervention time frame, given the available resources.

You can choose between five and ten management practices.

Name of management practice	Why has this management practice been chosen?
Describe a management practice, e.g. neonatal audit meeting	<ul style="list-style-type: none">• Describe the management data that supports this choice (interview results and record review results)• Describe the conversations with hospital staff or quality management structures that support this choice• Describe how this relates to the clinical areas of focus• Describe any other relevant information e.g. other current or previous initiatives to address this area
COIN protocols	<ul style="list-style-type: none">• The situation analysis highlighted that some staff were new to the neonatal unit and had gaps in using COIN protocols. Some had not received COIN training.• The hospital management team agreed to mentor the new staff and to orient new staff to maintain care quality.• In-service training will equip them with skills in managing key conditions such as hypoxia (CPAP treatment).• IMPRESS will support by advocating for the in-service training.
Referrals	<ul style="list-style-type: none">• The 2022 management survey scored 3.5 on referrals, but the situation analysis revealed gaps. For example, there was poor communication and limited education on managing neonates during transfers, leading to overexposure to cold.• The Hospital Matron proposed strengthening communication within the institution's catchment area and improving health education in the labour wards on how to prevent hypothermia.
Audit	<ul style="list-style-type: none">• The 2022 management survey score was 4.0, but few death audits were conducted, and data on causes of death were underused.• The team suggested developing and following a neonatal death audit schedule under the supervision of the unit Matron.• IMPRESS will support by reminding teams of audit dates.



Supervision	<ul style="list-style-type: none"> • The institution scored 3.0 on supervision. The team acknowledged weaknesses in this area. • Regular weekly supervision by the Unit Matron was proposed to improve oversight. • Supportive supervision will help identify gaps such as in CPAP and bilirubin checks. • IMPRESS will provide coaching on conducting supportive supervision.
Equipment	<ul style="list-style-type: none"> • The institution scored 4.0 on equipment management • Hospital managers highlighted its importance for managing neonatal conditions such as hypoxia but noted poor communication between the neonatal unit and PAM department. • IMPRESS will help improve coordination and communication between these teams.
Capacity strengthening	<ul style="list-style-type: none"> • The management survey score was 3.4 Some new staff lacked skills in using neonatal devices. • The hospital plans to strengthen CPD and mentorship to improve performance. • IMPRESS will follow up on progress.
Target communication	<ul style="list-style-type: none"> • The institution scored 3.4 in this component of the IMPRESS management survey. • Target communication is essential for improving quality of care, but no recent actions had been taken. • IMPRESS will remind supervisors and WIT leaders to share and discuss targets regularly.
Target range	<ul style="list-style-type: none"> • The management survey score was 2.8 and the situation analysis revealed that there were no targets set. • The team agreed this practice would help improve key indicators such as CPAP and hypothermia management. • IMPRESS will encourage leadership to consult staff when setting targets.
Rewards	<ul style="list-style-type: none"> • During IMPRESS management survey of 2022. The institution scored 4.40 on this management practice. • Moreover, during situation analysis it was revealed that the institutions do not reward performers. • Rewards and recognition can create a better working environment in the neonatal unit, thereby enabling improvement of quality of clinical care from the motivated staff. • We believe IMPRESS management intervention can strengthen this area with doable and non-monetary interventions such as recognition of best performers – by offering them challenging tasks.



2. Management Implementation Plan (and Progress Tracker)



Overview

The Hospital Management Improvement Plan (MIP) was designed to provide a clear roadmap for how hospitals would strengthen the quality of clinical care through the adoption of improved management practices. Developed from the situation analysis, the MIP served as a foundational tool for the IMPRESS intervention by outlining the activities hospitals needed to carry out.

The MIP and progress tracker is a strategic tool hospitals used to monitor progress on the activities defined in the MIP. Regular tracking helped strengthen hospital teams' motivation, confidence, accountability, and adaptability. During each facility visit, TAs reviewed and validated progress together with hospital staff and the IMPRESS Champion. This joint review formed the basis for ongoing monitoring and feedback throughout the IMPRESS intervention.

The tracker includes sections for documenting:

- IMPRESS management practice and clinical area that it addresses
- Objective
- Planned hospital activities
- Output
- Timelines
- Hospital staff responsible for the activity
- Technical Assistant responsibilities
- Status of the activity (done, not done or in progress)
- Comments



Management practice: Performance review

Hospital activities	Timeline	Hospital staff responsible	TA support	What clinical area(s) is this contributing to?
Update and display the ward data (monthly statistics)	Monthly	DD	Facilitation, monitoring	Hypothermia, CPAP, KMC
Update and display unit performance data on quality-of-care indicators & QI projects	Sep 2023	DD	Organisation, facilitation, monitoring	Hypothermia, CPAP, KMC
Develop a schedule for data review meetings	Sep 2023	HH	Facilitation, monitoring	Hypothermia, CPAP, KMC
Conduct data review	Monthly	KK	Facilitation	Hypothermia, CPAP, KMC
Orient staff on interpretation of dashboard and data utilisation	Sep 2023	KK	Facilitation	Hypothermia, CPAP, KMC

Management practice: Target setting and communication

Hospital activities	Timeline	Hospital staff responsible	TA support	What clinical area(s) is this contributing to?
Display all targets set on the wall in neonatal ward	Aug 2023	JJ	Facilitation, monitoring	Hypothermia, CPAP, KMC
Involving the team (unit staff, neonatal WIT, QIST, DHMT & Partners i.e. MOMENTUM) in setting targets	On-going	JJ	Coordination, monitoring	Hypothermia, CPAP, KMC
Communicate targets during QIST meetings and to DHMT	On-going	JJ	Facilitation, monitoring	Hypothermia, CPAP, KMC



Hospital Management Implementation Plan and Progress Tracker

Hospital details:		Date of visit 1:	
Hospital name:		Date of visit 2:	
Hospital ID:		TA team (names):	

Management practice: Neonatal death audit

Problem: NNDs are conducted once every quarter; some NNDs are not audited

Objective: To improve the conduct of NND audits and their frequency from quarterly to monthly

Clinical area that this addresses: Hypothermia, CPAP, KMC

Improving conduct of NND audits will improve case management and prevention of hypothermia, CPAP initiation and KMC initiation					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop schedule for neonatal death audits	Schedule developed	Aug 2023	NNU in-charge	Work with in-charge to draft the schedule	Done	The schedule was developed collaboratively in Sept 23
Conduct audits weekly	NNDs conducted	Weekly	NNU in-charge	Facilitate the conduction of audits	Done	NND files audited in Sept 23 (x2), Nov 23 (x2), Dec 23, Jan 24 (x2), Mar (x4), April (x4), May (x2)
Producing report to all management members	Monthly NND reports	Monthly	XX	Facilitate and monitor the writing of the report	Done	Reports available for Jan, Feb, Mar, Apr and May 2024
Ensure that the consolidation form is filled immediately after audit meeting	Monthly consolidation reports	Ongoing	YY	Coaching, monitoring	Done	Consolidation form completed for Apr 2023 to Feb 2024
Follow up with management on the action points	All action points implemented	Ongoing	YY	Coordinating, monitoring	Work in progress	Action points are assigned to the in-charge, Safe Motherhood coordinator and matron



Management practice: Triage

Problem: Triage of neonates is not done

Objective: To improve triage of small sick and newborns in the neonatal unit through identification of a triage space and orientation of staff to triage guidelines from September 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Enhanced triage will improve Case Management of hypothermia, CPAP treatment initiation and commencement of KMC					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Identify triage area	Set space for triage	Aug 2023	CC	Facilitate, monitoring	Done	Sept 23
Display triage guidelines	Triage guidelines displayed on triaging Area	Aug 2023	CC	Facilitation in getting the guidelines	Done	Sept 2023
Update and monitor emergency tray	Up to date emergency tray with checklist	Weekly	MM	Sourcing checklist and orienting staff on how to update and monitor	Done	
Orient (refresher training) all neonatal unit staff to triage	Staff training report, participants list	Sept 2023	CC	Organize a meeting in liaison with Neonatal WIT	Not done	A topic on triage has been included in the CPD list
Triage the sick and newborn	Triaged newborns, good outcomes, documentation	Ongoing	SS	Monitoring the exercise	Done	Triage is being conducted and documented



Management practice: Performance review

Problem: Quality care indicators and targets are not reviewed

Objective: To conduct monthly performance review of neonatal unit data and Nest360 dashboard from September 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Routine performance review will improve the neonatal unit's Management and prevention of hypothermia, CPAP and KMC treatment					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Update and display monthly ward data	Ward data displayed on wall	Monthly	SS, CC	Facilitation, monitoring	Done	Data displayed in NNU in Sept 2023
Update and display monthly performance data (QoC indicators & QI projects)	Monthly performance data up to date	Monthly	SS, CC	Organising, coaching, monitoring	Done	Updated in Jan 2024, May 2024
Develop schedule for review meetings	Meeting schedule available	Sept 2023	CC	Facilitate scheduling with NNU in-charge	In progress	Schedule produced Oct 2023
Orient staff on dashboard interpretation and data use; share login credentials	Staff oriented; credentials displayed in NNU	Sept 2023	MM, SS	Coaching, monitoring, coordination	Done	Orientation done in Nov 2023, login details posted in Nov 2023
Conduct data review meetings including file audits	Meeting minutes available	Monthly	SS	Coaching on data review	Done	Reviews conducted in Oct 2023, Feb-May 2024



Management practice: Target setting and communication

Problem: The targets available are out of date and were set by few individuals. The targets were not adequately shared to other staff and partners.

Objective: To set targets through a multidisciplinary team and ensure that the set targets are adequately communicated to staff and partners from August, 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Setting targets on hypothermia, CPAP and KMC clinical areas will help to improve quality care in the neonatal unit, thereby reducing neonatal morbidity and mortality					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Involve whole team (including unit staff, neonatal WIT, QIST, DHMT and partners) in setting targets	Multidisciplinary team set targets; Meetings are minuted and attendance sheet signed for	Ongoing	SS	Facilitation	Done	Neonatal unit staff involved in setting targets on reducing hypothermia, KMC and Bilirubin monitoring (Sept 2023)
Display all targets on the wall in the neonatal ward	Targets set and shared	Aug 2023	SS	Monitoring	Done	Some targets displayed (Sept 2023) All targets displayed (Mar 2024)
Communicate targets to QIST, DHMT and partners	Targets are communicated and known by everyone	Ongoing	SS	Monitoring, coordinating	Done	Shared to WIT, QIST and DHMT (Sept 2023)



Management practice: Supervision

Problem: Supervision in the neonatal unit was not supportive or structured. No supervision tools were used and action points were not documented

Objective: To improve supervision by increasing its frequency from once a month to once every two weeks starting August 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Routine performance review will improve the neonatal unit's Management and prevention of hypothermia, CPAP and KMC treatment					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop a neonatal-specific supervision tool	Supervision tool finalised	Sept 2023	Hospital matron	Facilitate sourcing/drafting the tool	Done	Supervision tool available from Sept 2023
Develop a supervision schedule	Schedule developed	Sept 2023	Hospital matron	Draft schedule	Done	Schedule developed, supervision is done weekly
Orient neonatal staff on the tool and schedule	Staff familiar with supervision tool	Sept 2023	Hospital matron	Coordination, monitoring	Done	Matron orientated to the tool, and she orientated to the nurses
Conduct supportive supervision	Supportive supervision carried out	Every 2 weeks	Matron, Neonatal In-charge	Ensure supervision is conducted	Done	Weekly supervision from Jan-May 2024
Provide supervision findings and individual feedback	Feedback provided after each supervision	Immediately after supervision	Hospital matron	Facilitation, monitoring	Done	
Conduct regular spot checks	Spot checks conducted	Daily	Unit in-charge	Facilitation	Done	Checks conducted on daily basis on IP, staffing, patient care and availability of resources



Management practice: User satisfaction

Problem: No user satisfaction feedback is solicited from mothers, families and their communities

Objective: To improve the capture of feedback through exit interviews, a suggestion box and phone call to the Ombudsman from August 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Improving how we collect and use patient-satisfaction feedback will strengthen hypothermia prevention, CPAP use, and KMC services					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Display ombudsman contact information in the neonatal unit and around the hospital	Staff and clients become aware of the ombudsman office	Aug 2023	KK	Work with the Ombudsman to ensure contacts are displayed	Not Done	Not done as of Oct 23; The ombudsman has no phone, although purchased
Provide scheduled health education sessions to inform clients	Weekly health-education sessions conducted	Weekly	KK	Facilitate the exercise	In progress	A hardcover book has been provided; morning health talks are ongoing
Install suggestion boxes in the neonatal unit and other areas of the hospital	Suggestion boxes placed in strategic locations	Aug 2023	KK	Monitoring	Not done	An improved suggestion box was installed in Jan 2024
Write and share reports summarising feedback received	Monthly patient-satisfaction reports	Monthly	KK	Coach staff on report writing	Done	Reports available for Sept 2023, May 2024
Form a committee to review and analyse feedback	Data analysed	Sept 2023	KK	Coordinate the exercise	Not done	
Conduct exit interviews	Completed exit interview forms	Monthly	KK	Facilitation, coaching	Done/ In progress	Interviews conducted every month.



Management practice: Quality of care governance (QIST)

Problem: The QIST exist but it is not functional. Members were not formally appointed and are not conversant with the ToRs

Objective: To improve the governance of QIST through monthly meetings and orient members to QIST ToRs from September 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Strengthening the quality and consistency of supervision will lead to better management of hypothermia and more effective initiation of CPAP and KMC					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Formal appointment of QIST members	All QIST members are given appointment letters	Sept 2023	DHSS	Monitoring	In progress	Appointment letters drafted, follow up required
Develop QIST meeting schedule	QIST have scheduled meetings	Sept 2023	CC	Monitoring	Done	Schedule developed for monthly meetings. QIST convened in Oct 2023, Jan-Mar 2024
Produce monthly reports to DHMT	QIST meetings are minuted; QIST reports to DHMT	Monthly	CC	Coaching, monitoring	Done	Meetings are minuted with action points
Share ToRs with QIST members	QIST members are briefed on ToRs	Sept 2023	CC	Facilitation, monitoring	Not done	Despite a series of coaching and peer-to-peer learning



Management practice: Performance appraisal

Problem: Staff performance appraisal is not being conducted

Objective: To ensure all staff in the NNU are appraised by January 2024

Clinical area that this addresses: Hypothermia, CPAP, KMC

Conducting performance appraisal will improve management and prevention of hypothermia, CPAP and KMC treatment through identification of gaps among staff in the NNU					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop an appraisal schedule	Appraisal schedule	Sept 2023	HR officer	Follow up	Done	Schedule developed Feb 2024
Orient staff on updated appraisal forms	Orientation report and attendance	Sept 2023	HR officer	Monitoring	Done	Staff orientated on new forms
Conduct staff appraisals	All staff appraised	Oct 2023	HR officer	Facilitation, monitoring	Done	Conducted Feb 2024
Print and distribute appraisal forms	Printed appraisal forms	Sept 2023	HR officer	Facilitation	Done	Oct 2024



Management practice: Capacity strengthening

Problem: CPD sessions are not being conducted regularly

Objective: To ensure that CPD sessions and emergency drills are conducted regularly from August 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Conducting performance appraisal will improve management and prevention of hypothermia, CPAP and KMC treatment through identification of gaps among staff in the NNU					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Conduct needs identification for NNU CPD	Needs identification conducted	Aug 2023	SS	Facilitation, monitoring	Done	Conducted and schedule printed Oct 2023
Develop CPD schedule for NNU	CPD schedule developed	Monthly	SS	Monitoring	Done	
Conduct emergency drills	Conducting CPD sessions	Monthly	SS	Peer-to-peer learning, monitoring	Done	Drills are now part of the CPD schedule from Feb 2024
Conduct CPD	Conduct CPD regularly	Every two weeks	SS	Coordination	Done	Mentorship session (Nov 2023); CPD conducted Jan–April 2024 covering Resuscitation, CPAP, CPAP initiation, CPAP management, COIN mentorship; 2xNurses attended COIN training in May 2024 1x nurse attended Essential Newborn Care training in May 2024



Management practice: Rewarding staff

Problem: Best performing staff are not recognised and rewarded at the hospital

Objective: To ensure that a rewarding system is developed and well performing staff are rewarded from January 2024

Clinical area that this addresses: Hypothermia, CPAP, KMC

Rewarding well performing staff/departments will improve management and prevention of hypothermia, CPAP and KMC treatment through staff motivation					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop a reward criteria	Reward criteria developed and made known to staff	Oct 2023	DHSS	Facilitation, monitoring	Done	Developed and staff voted in Dec 2023; In March 2024 it was agreed the best performers should be recognised monthly (Picture Frame)
Establish a multi-disciplinary reward committee	Committee appointed	Sept 2023	DHSS	Coaching, monitoring	Done	Reward committee established Apr 2024
Reward best performing departments	Individual staff or departments rewarded	Oct 2023	DHSS	Monitoring, recognising achievement	Done	Well-performing staff rewarded in Dec 2023, Apr 2024



Management practice: COIN protocols

Problem: Some health workers in the NNU were not trained in COIN protocols

Objective: To ensure staff are aware of the COIN protocols by October 2023

Clinical area that this addresses: Hypothermia, CPAP, KMC

Understanding COIN protocols will improve management and prevention of hypothermia, CPAP and KMC treatment					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop mentorship programme to share COIN knowledge and best practices	Mentorship programme developed	Aug 2023	NNU Head of Department	Coaching, observing	Work in progress	Needs assessment conducted Dec 2023; Mentorship programme developed Feb 2024
Make COIN manual available to all users in the NNU	Coin manual accessible	Daily	Unit in-charge	Observing, monitoring	Done	Sept 2023
Orient new staff on COIN protocols	CPD plan and orientation plan	Ongoing	Unit in-charge	Monitoring and advising	Work in progress	2x nurses received COIN mentorship in Oct 2023; 2x nurses attended COIN training in May 2024; 2x nurses still to receive training
Conduct spot checks on COIN protocol use	Weekly spot checks	Ongoing	Ward in-charge	Observing, coaching	Work in progress	Monitoring adherence through spot checks, handovers, audits and mentorship



Management practice: Equipment management

Problem: Preventive maintenance of Equipment is not being done regularly

Objective: To ensure that Planned Preventative Maintenance (PPM) is conducted regularly and all equipment is in good working condition

Clinical area that this addresses: Hypothermia, CPAP, KMC

Regular equipment maintenance will improve management and prevention of hypothermia, CPAP and KMC treatment					Tracking	
Hospital activity	Output	Timeline	Hospital staff responsible	TA responsibility	Status	Comments
Develop a PPM plan and schedule for the NNU	PPM plan	Aug 2023	BioMed Engineering Tech	Develop the schedule with the technician	Done	PPM schedule in place
Conduct maintenance reviews and repairs of equipment	Maintenance review reports	Monthly	BioMed Engineering Tech	Monitoring	Work in progress	PPM and maintenance of faulty devices taking place every Monday
Perform spot checks on equipment maintenance activities; Conduct staff handover of equipment functionality during shift handovers	Spot check forms; Equipment status checklist	Daily	MM	Coaching, monitoring	Work in progress	A hard cover book is in place
Write a report on PPM	Monthly PPM reports	Monthly	BioMed Engineering Tech	Monitoring	Done	
Share PPM reports with all stakeholders	Monthly PPM reports	Monthly	BioMed Engineering Tech	Facilitating	Work in progress	



3. IMPRESS Hospital Champion



Overview

The IMPRESS champion served as the main link between IMPRESS and the hospital, leading and guiding the improvement activities. Each hospital selected its own champion. This template outlines the steps used to identify the hospital champions and the criteria applied in their selection.

IMPRESS Hospital Champion template

Question	Response
Which people or teams did you discuss with about the selection of the hospital champion?	DHMT; NNU WIT; Labour ward & Postnatal WITs; QIST
What process did you follow to select a hospital champion?	Set out the criteria and allowed the Matron to take time before providing the particular individual for the role
What criteria were used to select the champion? e.g. performance, workload, soft skills (such as communication), knowledge.	The selected champion is the only full-time clinician technician working in the NNU; They are knowledgeable with neonatal care; They have passion in neonatal care and always available when needed
What is the name and position of the selected champion?	Mr CK., a Clinician for the NNU
How do they meet the criteria outlined above?	The champion was selected by the DHMT; They are a full time clinician for the neonatal unit which makes him suitable for the post; They are very supportive and attended all IMPRESS meetings; They are knowledgeable in care of neonates and dedicated
Can you foresee any challenges with the selected IMPRESS Hospital Champion? How might you mitigate for these?	Commitment maybe compromised, since he has other responsibilities as a clinical technician; Timely communication and updates on our activities would help him to plan his time properly; But we do not foresee major challenges working with selected hospital Champion; Provision of airtime to the champion would also enhance communication



4. Coaching Needs



Overview

Coaching is a collaborative and ongoing process designed to unlock the potential of hospital staff and the hospital as a whole. During the IMPRESS intervention, TAs provided coaching as one of the key support activities. All coaching needs were aligned with each hospital's MIP.

The purpose of coaching was to strengthen staff and hospital performance by improving targeted management practices. Coaching was provided to various groups, including NNU staff, the NNU WIT, the hospital QIST, the DHMT, and the Ombudsman. It focused on areas where hospitals were performing below expected standards.

A coaching needs template was completed during the hospital situational analysis and updated as necessary during ongoing monitoring and tracking of management practices by the TAs.

The coaching needs template includes the following sections:

- Coaching need
- Who will be coached
- Who will be the coach
- TAs needs
- The management practice that the coaching activity will improve
- Skill(s) that will improve with the coaching activity
- Outcome from the coaching
- Frequency of the coaching



Coaching needs template

Hospital name:		TA name:	
Hospital ID:		Date:	

Coaching needs	Which management practice will this coaching activity support?	Who will be the coach?	Who will be coached?	TA needs	What skill(s) will you aim to improve with this coaching activity	Outcome from the coaching	Frequency of the coaching
Data literacy	Data literacy	TAs	Hospital staff	NEST360 Dashboard	Data literacy	Data literacy	Monthly
Analysing user feedback data	User satisfaction	TAs	Ombudsman	User satisfaction data	Analysis of data, report writing and action plan	Staff are able to use patient feedback to improve neonatal care	Monthly
PDSA cycle	WIT functionality; QIST functionality	QIST and WIT chair, secretary and vice secretary	TAs and QI mentors	N/A	Identify change ideas, root cause analysis, draw run charts	Staff are able to apply PDSA cycle	Monthly



5. Target Setting



Overview

Target setting is a strategic process in which hospitals identify and define numerical goals for specific management practices and clinical indicators they aim to improve within a set period. For targets to be effective, they must be SMART: Specific, Measurable, Achievable, Relevant, and Time-bound.

During the IMPRESS intervention, target setting served several key purposes:

- Motivating hospitals to work harder and stay committed
- Helping with prioritisation and effective planning
- Strengthening accountability
- Providing a clear sense of purpose
- Enabling easy tracking of progress
- Promoting a culture of continuous improvement

The IMPRESS TAs led the target-setting process, working closely with key hospital staff. There they were two areas of target setting as follows:

1. Setting targets for the management practices (scores)

- TAs facilitated the setting of realistic and achievable 6-month targets for each management practice.
- TAs ensured that the hospital had results from the first round of monitoring to inform the targets. Hospitals retained a copy of all agreed targets.
- Plans were made to communicate the new targets to relevant staff – often as part of the feedback from the first monitoring round.

2. Setting targets for some clinical interventions (indicators)

A standard template was used to record targets for up to three priority neonatal clinical intervention indicators. These were chosen to align with the hospital's MIP and were monitored using the hospital/NEST360 neonatal inpatient data. If a hospital had previously set targets for these indicators, the same template captured the existing targets. For each indicator, the hospital documented:

- The current or most recent coverage estimate (%) and when it was measured
- The target set by the hospital
- The time horizon for achieving the target (recommended: 6 months)
- Any additional comments or justification, including longer-term targets if applicable



Management practice target setting template

Management practice	Baseline (July 2023)	Round 2 (Oct 2023)	Round 3 (Dec 2023)	Target (6 month)
A. Delivery of clinical care in the neonatal unit				
1 Functioning triage system	1.5	3.0	3.0	↑ 5.0
2 Layout of neonatal unit to optimise patient care	1.0	1.0	2.0	↑ 3.0
3 Health worker knowledge of COIN protocols	3.0	3.5	4.5	↑ 5.0
4 System monitoring adherence to COIN protocols	3.0	3.5	4.0	↑ 5.0
5 COIN wall charts widely displayed	4.5	5.0	5.0	5.0
6 System monitoring protocols to minimise newborn heat loss	1.0	2.0	3.0	3.0
7 Staff familiar with IPC protocols	4.0	5.0	5.0	5.0
8 Standardised process for nurse shift handover	4.5	4.5	5.0	5.0
9 Standardised process for clinician shift handover	1.0	1.0	1.0	↑ 3.0
10 Staff protocols for managing neonatal referrals to this facility	3.0	3.5	4.0	↑ 5.0
11 Fully equipped emergency box for neonatal care	2.5	4.0	4.0	↑ 5.0
12 Neonatal death review forms completed in a timely manner	1.5	4.0	4.0	↑ 5.0
13 Audit of neonatal death review meetings regularly done	2.5	3.0	4.0	↑ 5.0
14 Effective supervision of health workers	1.0	3.0	2.0	↑ 5.0
15 System for accurately forecasting medicines & supplies	1.0	3.5	4.0	↑ 5.0
B. Human resource management				
16 Health workers allocated to neonatal unit in a responsive manner	3.0	3.5	3.5	↑ 4.0
17 Up-to-date nurse roster in neonatal unit	2.5	3.0	4.0	↑ 5.0
18 Up-to-date clinician roster in the neonatal unit	1.0	1.0	3.0	↑ 5.0
19 Job description for each member of staff in neonatal unit	1.0	1.0	4.0	↑ 5.0
20 Staff performance recognised / rewarded	1.0	2.0	2.0	↑ 3.0
21 Staff absenteeism monitored & routinely reported to managers	1.5	2.5	2.5	↑ 4.0
22 CPD (continuous professional development) schedule	1.0	3.5	3.5	↑ 5.0



<i>Management practice</i>	<i>Baseline (July 2023)</i>	<i>Round 2 (Oct 2023)</i>	<i>Round 3 (Dec 2023)</i>	<i>Target (6 month)</i>
C. Performance monitoring and target setting				
23 System for reporting medical errors or harmful practices	1.0	1.0	2.0	↑ 3.5
24 Target setting for quality of care indicators in the neonatal unit	3.5	3.5	4.0	↑ 5.0
25 Display of performance data on quality of care indicators	1.0	3.0	3.0	↑ 5.0
26 Performance review of neonatal quality of care indicators	3.0	3.5	3.5	↑ 5.0
27 Patient feedback system	1.0	2.5	3.0	↑ 5.0
D. Leadership and governance				
28 Governance of neonatal WIT	3.0	4.0	4.0	↑ 5.0
29 Functioning neonatal WIT	4.5	5.0	5.0	5.0
30 Governance of QIST	3.0	3.0	3.0	↑ 5.0
31 Functioning QIST	3.0	4.0	4.0	↑ 5.0
32 Functioning hospital senior management team	4.5	5.0	5.0	5.0

- 1** Few structured management practices or systems in place
- 2**
- 3** Some management practices or systems in place, but they are not being fully or correctly implemented
- 4**
- 5** Structured management practices and systems in place which are being fully and correctly implemented



Template for target setting for neonatal clinical intervention indicators

<i>Indicator</i>	<i>Most recent %</i>	<i>Period of most recent estimate</i>	<i>Target %</i>	<i>Time horizon for target</i>
1 % of inborn babies that have hypothermia at admission	79%	2023 Q1	55%	2023 Q4 (6 months)
<p>Comment: Hospital also wanted to set a target of 65% for 3 months time. This indicator is consistent with one of the priority clinical areas specified in the MIP. The indicator is measured through the NEST360-supported neonatal inpatient dataset.</p>				
2				
3				
4				



6. Monitoring of Management Practices



Overview

The tool was used to continuously and systematically assess whether management practices were being implemented and to track progress over time. It included the following components:

- A list of all 32 management practices and their descriptors
- Scoring criteria
- A scoring section
- A comment box

Monitoring served to verify implementation and track progress of activities in the MIP, to identify management practices that required coaching or peer-to-peer learning, and to identify best practices.

Monitoring was carried out every two months by one or two hospital staff members familiar with the MIP and the IMPRESS monitoring system, together with the IMPRESS TA(s). All 32 management practices were scored on a scale of 1 to 5:

- 1** Few structured management practices or systems in place
- 2**
- 3** Some management practices or systems in place, but they are not being fully or correctly implemented
- 4**
- 5** Structured management practices and systems in place which are being fully and correctly implemented



After each monitoring cycle, the IMPRESS team compiled and shared a Management Practices Dashboard with the hospital.

Purpose of the dashboard

The dashboard provided feedback following each monitoring round. Its primary purpose was to help hospitals track their progress on each management practice and identify areas needing additional effort.

The dashboard included:

- The hospital's overall management score across all 32 practices, and an average score across all hospitals
- Scores by domain, including baseline values and cross-hospital averages
- Scores from the previous and most recent monitoring rounds

For each of the 32 practices, the following was included on the dashboard:

- Previous monitoring scores
- Baseline score
- Set targets
- Latest monitoring scores

Hospitals that showed the most improvement in a given round were recognised and rewarded.



Monitoring tool

A. Delivery of care in the neonatal unit		
1. Triage for newborns		
Assess if hospital has a functioning triage system to identify, assess and provide appropriate care for newborns with life-threatening problems		
Score 1: No triage system exists in the newborn unit.	Score 3: Triage system exists but is not fully standardised or used consistently. Not all health workers doing triage are trained in triage.	Score 5: Triage system according to standardised triage guidelines (emergency, priority, non-urgent) is known and used consistently by trained persons.
Comment		

2. Layout to optimise patient care for the neonatal unit		
Assess if there is a regular review of how well the layout of the neonatal unit is configured to optimise patient care and promote infection prevention and control		
Score 1: There is no process for regularly reviewing how well the layout of the neonatal unit is configured to optimise patient care and promote infection prevention and control. As a result, there is no clear rationale for the layout.	Score 3: The layout of the neonatal unit is reviewed on occasion in an informal manner. Some changes to the layout may be made in response.	Score 5: There is a systematic process for regularly reviewing how well the layout of the neonatal unit is configured to optimise patient care and promote infection prevention and control. Recommended changes are actioned.
Comment		



3. Health worker knowledge and familiarity with COIN protocols for small and sick newborns

Assess if health workers have good knowledge and familiarity with COIN protocols for small and sick newborns



Score 1: None of the health workers are familiar with COIN protocols, as they have received no formal training or on-the-job coaching. There is no COIN manual in the neonatal unit

Score 3: Some but not all health workers are familiar with COIN protocols through either formal training or on-the-job coaching. There is a COIN manual in the neonatal unit.

Score 5: All health workers are familiar with COIN protocols, including the use of tools and checklists (e.g. scoring gestational age, phototherapy chart, asphyxia grading), through either formal training or on-the-job coaching. There is a COIN manual in the neonatal unit.

Comment

4. System to monitor health worker adherence to COIN protocols for small and sick newborns

Assess if there is an effective system in place to monitor health workers to ensure they are following COIN protocols



Score 1: There is no system in place, systematic or otherwise, to monitor health worker adherence to COIN protocols in the neonatal unit

Score 3: There is a system to monitor adherence to COIN protocols in the neonatal unit but it is used only sometimes, not routinely. Feedback from the monitoring is sometimes given to health workers and in an ad hoc manner.

Score 5: Adherence to COIN protocols in the neonatal unit is regularly and comprehensively monitored in a systematic manner. Constructive feedback is given to health workers on a regular basis.

Comment



5. Clinical wall charts for management of small and sick newborns

Assess if COIN wall charts for the management of small and sick newborns are widely displayed in the neonatal unit



Score 1: There are no COIN wall charts displayed in the neonatal unit.

Score 3: There are three clinical wall charts displayed in appropriate places around the neonatal unit.

Score 5: A large number of clinical wall charts (e.g. phototherapy chart, management of seizures, asphyxia grading, feeding) are displayed in appropriate places around the neonatal unit.

Comment

6. System to monitor adherence to protocols to minimise heat loss in newborns during transport from maternity to neonatal unit

Assess if there is an effective system in place to monitor health workers to ensure they are following protocols to minimise heat loss in newborns during transport from the maternity unit to the neonatal unit



Score 1: There is no system in place, systematic or otherwise, to monitor health worker adherence to protocols to minimise heat loss in newborns during transport from the maternity unit to the neonatal unit.

Score 3: There is a system to monitor adherence to protocols to minimise health loss in newborns during transport from the maternity unit to the neonatal unit, but it is used only sometimes, not routinely. Feedback from the monitoring is sometimes given to health workers and in an ad hoc manner.

Score 5: Adherence to protocols to minimise heat loss in newborns during transport from the maternity unit to the neonatal unit is regularly and comprehensively monitored in a systematic manner. Constructive feedback is given to health workers on a regular basis.

Comment



7. Health worker knowledge and familiarity with protocols for infection prevention and control in the neonatal unit

Assess if staff in the neonatal unit are familiar with the infection prevention and control protocols



Score 1: None of the health workers are familiar with IPC protocols, as they have received no formal training or on-the-job coaching. There is no poster displaying IPC in the neonatal unit.

Score 3: Some but not all health workers are familiar with IPC protocols through either formal training or on-the-job coaching. There is a poster displaying IPC in the neonatal unit (e.g. handwashing).

Score 5: All health workers are familiar with IPC protocols (hand hygiene, decontamination of devices and equipment, environmental cleaning, outbreak detection, aseptic techniques), through either formal training or on-the-job coaching. There is a poster displaying IPC in the neonatal unit (e.g. handwashing)

Comment

8. Standardised process for handover between shifts for nurses

Assess if there is a standardised process for handover between nurse shifts



Score 1: There are no systems in place for nurses to pass information between each other between their shifts. There is no handover book in the neonatal unit.

Score 3: A standardised process exist but is not used all the time by nurses. There is a handover book but it does not appear to be used routinely.

Score 5: A standardised process exists for handover and is routinely used by nurses. There is a handover book in the neonatal unit that is routinely used.

Comment



9. Standardised process for handover between shifts for clinicians

Assess if there is a standardised process for handover between shifts used by clinicians on duty at the neonatal unit



Score 1: There is no practice of clinicians doing a handover between shifts that involves going in-person to the neonatal unit to discuss patient file notes at the bedside at the point of handover.

Score 3: Clinicians sometimes do a comprehensive handover between shifts that involves going in-person to the neonatal unit to discuss patient file notes at the bedside of each neonate at the point of handover

Score 5: It is routine practice for clinicians to do a comprehensive handover between shifts that involves going in-person to the neonatal unit to discuss patient file notes at the bedside of each neonate at the point of handover.

Comment

10. System for receiving referrals from other health facilities

Assess if staff use protocols for managing the referrals of neonates to this facility



Score 1: There is no system in place to standardise inward referral of patients; there is little communication between the referring facility and the hospital. There is no organised transport.

Score 3: Some referral standardisation exists; a referral communication system exists but may not be adhered to. Feedback between facilities is ad hoc.

Score 5: A standardised process for receiving inward referrals exists. Referral communication is functional using a referral form and organised transport. There is feedback between facilities.

Comment



11. Emergency box in neonatal unit

Assess if there is fully equipped emergency box for neonatal care available



Score 1: There is no emergency box for neonatal care. Emergency drills are never done.

Score 3: There is an emergency box for neonatal care but it is not fully equipped or it is not easily accessible. Emergency drills are done on ad hoc basis.

Emergency box for neonatal care is accessible and fully equipped. Emergency drills are done every month.

Comment

12. Neonatal death form completion

Assess if neonatal death review forms are completed in a timely manner



Score 1: Standard audit forms for neonatal deaths are rarely, if ever, done. There are no neonatal death forms available.

Score 3: Standard audit forms for neonatal deaths are completed but more than 72 hours after the death (typically 3 days to 21 days).

Score 5: Standard audit forms for neonatal deaths are completed within 72 hours.

Comment



13. Audit of neonatal death review meetings

Assess if there is regular audit of neonatal death review meetings in this facility leading to actionable outcomes and follow-up



Score 1: There is no system in place to standardise auditing of neonatal deaths.

Score 3: Neonatal death audit consolidation forms are sometimes, but not always, completed. There are mortality audit review meetings on occasion. They tend to produce limited follow-up and action.

Score 5: Neonatal death audit consolidation forms are completed; there are regular mortality audit review meetings with actionable outcomes and follow up.

Comment

14. Supervision

Assess if there is effective supervision of health workers in the neonatal unit by hospital managers



Score 1: Supervision is unstructured, not documented and does not follow a regular schedule. Tools to support supervision are not available or used. Supervision is not supportive.

Score 3: Some structure and tool exist for supervision. Supervision is conducted infrequently, typically once a month.

Score 5: Supervision is conducted weekly, using a schedule and standardised tool. Supervision is supportive and involves demonstration.

Comment



15. Forecasting medicines and supplies needed for the neonatal unit

Assess if there is a system for accurately forecasting medicines and supplies needed for the neonatal unit



Score 1: There is no system of forecasting needs for medicines and supplies.

Score 3: The needs for medicines and supplies in the neonatal unit are forecasted every quarter and well communicated to procurement managers. Forecasting is not always accurate.

Score 5: The needs for medicines and supplies in the neonatal unit are accurately forecasted on a monthly basis and well communicated to procurement managers.

Comment

B. Human resource management for health workers

16. Allocation of health workers to the neonatal unit

Assess if the hospital allocates health workers to the neonatal unit in a responsive manner that recognises the skills and experience needed



Score 1: The allocation of health workers across units, including the neonatal unit, takes no account of the skills and experience of staff.

Score 3: A process exists for assessing which departments need what skills but it is not always applied systematically. Staff with skills in neonatal care tend to be allocated to the neonatal unit but not always.

Score 5: Hospital has a responsive and systematic approach to assessing which staff are needed by the neonatal unit and allocating staff accordingly. There is two-way communication and feedback between the hospital and neonatal unit to discuss staffing allocation.

Comment



17. Nurse roster in neonatal unit

Assess if there is an up-to-date nurse roster in the neonatal unit



Score 1: There is no nurse roster in the neonatal unit or it is completely blank for the month ahead.

Score 3: There is a nurse roster in the neonatal unit but it is only partially completed (e.g. for some days but not the full month ahead, or for some staff only).

Score 5: There is a nurse roster in the neonatal unit that is complete (for all staff) and up-to-date for the month ahead.

Comment

18. Clinician roster in neonatal unit

Assess if there is effective supervision of health workers in the neonatal unit by hospital managers



Score 1: There is no clinician roster in the neonatal unit or it is completely blank for the month ahead.

Score 3: There is a clinician roster in the neonatal unit but it is only partially completed (e.g. for some days but not the full month ahead, or for some staff only).

Score 5: There is a clinician roster in the neonatal unit that is complete (for all staff) and up-to-date for the month ahead.

Comment



19. Job descriptions

Assess if there is a job description for each member of staff in the neonatal unit



Score 1: None of the staff have a written job description.

Score 3: Some but not all staff are familiar with their own job description. This is either because some staff lack a job description in the first place or because some staff, even though they do have a job description, are not familiar with it.

Score 5: There is a job description for each member of staff working in the neonatal unit and all the staff are familiar with their own job description.

Comment

20. Recognising and rewarding high performing health workers

Assess if there is a system which recognises and/or rewards staff from all cadre based on performance



Score 1: There is no process of recognising or rewarding health workers

Score 3: There is a system in place that recognises or rewards individuals but it is for some cadres only and is based on ad hoc or poorly defined performance measures. Top performers are not routinely publicly recognised.

Score 5: There is a system which both recognises and rewards (financial or non-financial) individuals from all cadres based on performance. Rewards are based on transparent, well-defined achievements. Top performers are publicly recognised.

Comment



21. Staff absenteeism

Assess if staff absenteeism is monitored and routinely reported to managers for further action



Score 1: Staff absenteeism is not monitored.

Score 3: There is a system for monitoring staff absenteeism but it is not done routinely and information is rarely fed up to managers.

Score 5: There is a system in place for routinely monitoring staff absenteeism. Information is routinely reported to managers who take remedial action.

Comment

22. Programme for capacity strengthening for staff in neonatal unit

Assess if there is a CPD (continuous professional development) schedule for staff working in the neonatal unit



Score 1: There is no CPD schedule for staff working in the neonatal unit for the current year.

Score 3: There is a CPD schedule but it is not complete – either for some staff only or not for the entirety of the current year.

Score 5: There is a complete CPD schedule for staff working in the neonatal unit for the current year.

Comment



C. Hospital and ward level target setting and monitoring of performance

23. Monitoring medical errors or harmful practices

Assess if there is a system in place where medical errors or harmful practices (e.g. medication errors, wrong procedure) are reported.



Score 1: There is little awareness of the importance of avoiding harmful practices. There is no system for reporting medical errors or harmful practices. Safety depends on individual efforts only.

Score 3: Systems for reporting medical errors or harmful practices do exist but are rarely used. Medical errors are addressed primarily through broader quality improvement efforts (e.g. QIST, death audits).

Score 5: Systems for avoiding/reducing harmful practices are in place and monitored, for example, supervisors regularly investigate medical errors.

Comment

24. Target setting in the neonatal unit

Assess if there are targets (specific numerical targets) for quality of care indicators in the neonatal unit



Score 1: There are no targets for quality of care indicators in the neonatal unit.

Score 3: There are targets for quality of care indicators in the neonatal unit but they are not set by the hospital.

Score 5: There are up-to-date targets with a timeframe for a range of quality of care indicators that have been set by the hospital. Targets are displayed in the neonatal unit.

Comment



25. Display of performance data in the neonatal unit

Assess whether performance data on quality of care indicators (clinical pathways) are displayed in the neonatal unit



Score 1: There are no performance data on quality of care indicators displayed in the neonatal unit.

Score 3: Performance data on quality of care indicators are displayed but for a small set of neonatal conditions or the data are not up-to-date (last quarter).

Score 5: Up-to-date performance data on a range of quality of care indicators covering different neonatal conditions are displayed in the neonatal unit. The information shows trends over time and is up-to-date (last quarter).

Comment

26. Neonatal performance review

Assess whether there is regular review of data on quality of neonatal care indicators (clinical pathways) by the hospital management



Score 1: Data on quality of care in the neonatal unit are never reviewed. The focus of any review is primarily on patient volume indicators. No actions are developed.

Score 3: The neonatal WIT or QIST sometimes review data on quality of care for the neonatal unit but there is limited follow-up of actions (actions are either not routinely written or they are not communicated to relevant staff).

Score 5: The neonatal WIT and QIST routinely review quarterly data on quality of care for the neonatal unit. Actions to be taken are agreed (e.g. written in meeting minutes) and these are communicated to relevant staff to ensure continuous improvement.

Comment



27. Patient feedback

Assess if there is a system in place for receiving and acting upon patient feedback, including that from families of patients in the neonatal unit



Score 1: There are no systems in place to capture patient or family questions or concerns.

Score 3: Systems to capture patient feedback exist but are not comprehensive. Efforts tend to be sporadic. There is no system to review feedback and take action.

Score 5: Multiple systems are functioning to capture patient/family concerns (e.g. exit interviews, suggestions box, hospital ombudsman). Feedback is regularly reviewed by staff (e.g. in the neonatal WIT or QIST). Actions are developed and communicated with relevant staff.

Comment

D. Leadership and governance

28. Governance of neonatal work improvement team

Assess if the neonatal WIT has effective governance structures in place



Score 1: The neonatal unit WIT is non-existent, with no terms of reference or active chair.

Score 3: The neonatal unit WIT does exist but is lacking one of the following: terms of reference, active chair, and membership that represents the key relevant stakeholders within the hospital.

Score 5: The neonatal unit WIT has terms of reference, an active chair and membership that represents the key relevant stakeholders within the hospital.

Comment



29. Functioning of neonatal work improvement team

Assess if the neonatal work improvement team is functioning effectively



Score 1: The neonatal WIT is not operational and does not meet.

Score 3: The neonatal WIT does meet but not every month. The agenda is informal. Minutes may be produced but without clear action points. Some members are in attendance.

Score 5: The neonatal WIT meets every month with an agenda. Minutes, with action points, are produced and circulated. There is good attendance.

Comment

30. Governance of quality improvement support team

Assess if the QIST has effective governance structures in place



Score 1: The QIST has no terms of reference or active chair.

Score 3: The QIST does exist but fulfils only two of the following: terms of reference, active chair, membership that represents the key relevant stakeholders within the hospital, and QIST members receiving appointment letters.

Score 5: The QIST has terms of reference, an active chair and membership that represents the key relevant stakeholders within the hospital. QIST members have received appointment letters.

Comment



31. Functioning of quality improvement support team

Assess if the QIST is functioning effectively



Score 1: The QIST is not operational and does not meet.

Score 3: The QIST does meet but not every month. The agenda is informal. Minutes may be produced but without clear action points. Some members are in attendance.

Score 5: The QIST meets every month with an agenda. Minutes, with action points, are produced and circulated. There is good attendance.

Comment

32. Functioning of hospital senior management team

Assess if the hospital senior management team is functioning effectively



Score 1: The hospital management team is represented by a small subset of senior leaders, meets infrequently with little structure or purpose to the meetings. Attendance is poor. Decisions are not well communicated with hospital staff.

Score 3: The hospital management team fulfills only three of the following: is a multidisciplinary team representing the key managers, meets every month, produces and circulates minutes with actions point, has good attendance, and effectively communicates decisions with hospital staff.

Score 5: A multidisciplinary hospital management team meets every month. Minutes, with action points, are produced and circulated. There is good attendance. Decisions are effectively communicated with hospital staff.

Comment



7. Management Practices Feedback Dashboard



Overview

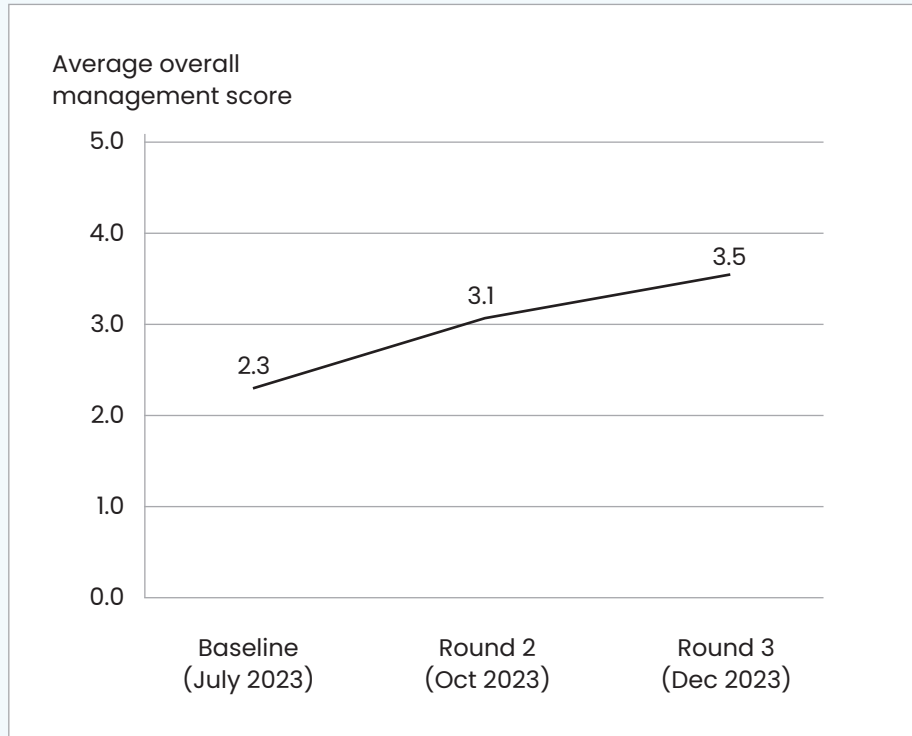
The Management Practices Feedback Dashboard was developed to provide hospitals with clear, timely, and actionable insights into their progress across all 32 IMPRESS management practices. It compiles monitoring data from each round and presents it in a format that allows hospital teams to quickly identify strengths, gaps, and trends over time.

The dashboard supported routine reflection and performance review by presenting both the hospital's own scores and cross-hospital averages for comparison. By visualising changes across domains—clinical care, human resources, performance monitoring, and leadership and governance – it helped managers determine where additional effort was needed and where improvements had been sustained.



Management Practices Feedback Dashboard: overall and domain-specific scores across monitoring rounds

Overall management score across all 32 management practices



Management score by domain

Management domain	[name of] district hospital			Average of hospitals
	Baseline (Jul 23)	Round 2 (Oct 23)	Round 3 (Dec 23)	Round 3 (Dec 23)
A. Delivery of clinical care in the neonatal unit	2.3	3.3	3.6	3.9
B. Human resource management for health workers	1.6	2.4	3.2	4.2
C. Target setting and monitoring of performance	1.9	2.7	3.1	4.0
D. Leadership and governance	3.6	4.2	4.2	4.1
Average across all management practices	2.3	3.1	3.5	4.0

■ Above or equal to average

■ Below average



8. Hospital Peer-to-Peer Learning



Overview

The main purpose of the peer-to-peer learning component was to support the sharing of best practices and experiences from hospitals that performed well. IMPRESS TAs led and facilitated this peer learning process, which took place through several platforms, including virtual sessions and site visits.

The **hospital peer-to-peer learning needs template** was used to document and describe the learning needs identified during the situation analysis. These needs aligned with the hospital's MIP.

The **best practice template** was used by TAs to record best practices observed in hospitals during the IMPRESS intervention phase. A best practice was defined as any action taken by hospital staff, aligned with the IMPRESS intervention, that contributed to the delivery of high-quality clinical care. These best practices were shared during monthly TA reflective practice sessions and informed the content of peer-to-peer learning activities.

The template was used to capture local knowledge on how hospitals strengthened their management practices, enabling them to share practical strategies with others. The template included sections for documenting:

- The best practice
- A description of the best practice
- The management practice area that the best practice supported



Peer-to-peer learning needs template

Hospital name:		TA name:	
Hospital ID:		Date:	

Which management practice will this peer-to-peer learning activity support?	Capacity strengthening
What is the topic of the peer-to-peer learning activity?	CPAP Utilisation
Who will participate in the peer-to-peer learning activity?	Neonatal staff (nurses and clinician)
Outcome from the peer-to-peer learning activity	Increased proportion of eligible newborns initiated on CPAP; Increased survival rate of newborns receiving CPAP treatment
What next step(s) will you take? E.g. meetings with hospital staff, engage with hospital champion, rapid assessment of networks and platforms for sharing best practice	Meeting neonatal unit staff; Engaging with the hospital champion ; Monitoring of CPAP targets using the NEST360 Dashboard



Best practices template

Hospital name:		TA name:	
Hospital ID:		Date:	

Best practice	Description	Area that it contributes towards
Set aside funds for refreshments to support NND audits (ORT)	Hospital X has included NND audits in their ORT budget	Audit of neonatal death
Monthly best performers' recognition for all departments	Hospital Y has designed portraits which are shared on whatsapp forum. Portraits of best performers	Rewarding of highly performing health workers
Data use on NEST360 dashboard	Hospital Z NNU Team regularly access their Nest 360 care pathways dashboard and use the information for their QI projects	Performance review and target setting
Governance structures coordination (QIST, WIT, DHMT, HMIS)	Hospital Y is well coordinated and teams work together. Supervision according TOR's is adhered to.	Governance and functionality of QI structures
CPAP initiation based on COIN protocols	Hospital X NNU team strictly adheres to CPAP management standards and most babies eligible for CPAP are initiated	CPAP treatment



9. Technical Assistants' Activity Log



Overview

This tool was used by IMPRESS TAs to record the daily activities they performed and the time spent on those activities during the IMPRESS intervention period. Its main purpose was to track the support provided by TAs to hospital staff and the total number of on-site hours spent at each facility.

TAs completed the activity log at the end of each day. The log included sections for documenting:

- Facility name
- Date
- TA activities
- Time spent on each activity
- Purpose of the activity
- Staff engaged or involved
- Key achievements
- Key challenges of the day
- TA comments



Technical assistants' daily activity log

Hospital name:		Date:	
Hospital ID:		Total hours spent in the hospital on this day	
TA team (names):			

Assessment of the functioning of the quality management teams

In the table below, summarise the findings from your assessment of the functioning of the quality management teams in the hospital.

Impress activity conducted (Indicate one per column)	Who participated	Purpose of the activity	Time (hr/min) per activity
<ul style="list-style-type: none"> • Informal discussion with hospital staff • Attended scheduled meeting with hospital staff for IMPRESS • Attended DHMT meeting • Attended QIST meeting • Attended WIT meeting • Deskwork • Coaching • Supporting peer-to-peer learning • Shadowing or observing hospital staff • Other (specify) 	<ul style="list-style-type: none"> • Matron • Nurse in-charge • Hospital administrator • Finance officer • DNMO • DMO • Clinician • Nurse technician • No one • Other (specify) 	<ul style="list-style-type: none"> • Making introductions with hospital staff • Assessing functioning of quality management teams • Prioritising clinical areas for IMPRESS • Prioritising management practices for IMPRESS • Developing activities for management implementation plan • Monitoring of management practices • Identifying the IMPRESS champion • Liaising with the IMPRESS champion • Assessing coaching needs • Providing coaching to hospital staff • Assessing peer-to-peer learning needs • Attending peer-to-peer learning • Other (specify) 	
Key achievements			
Key challenges			
Comments			



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