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Clinical Information Network

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Exploring behavioural and organisational dynamics in Kenyan hospitals: Insights from embedded research

Key points

- Clinical Information Network (CIN) research, embedded in hospital settings and informed by the experiences of health care workers, provides critical insights into the behaviours, challenges, and organisational dynamics that shape the delivery of health care in Kenya.
- The research highlights the crucial role of clinical managers in improving care; however, many take on these responsibilities reluctantly, often without adequate training and support needed to drive meaningful change.
- Nurses and clinicians work under intense pressure, managing high patient loads, resource shortages, and weak accountability structures. While they develop coping strategies to sustain care, these can also reinforce inefficiencies in practice.
- Alongside these challenges, this brief highlights CIN interventions designed to support leadership and cross-disciplinary collaboration, breaking down professional silos and fostering a culture of shared responsibility for improving hospital care.

ABOUT THIS SERIES

This is **Brief 6** in a series exploring the evolution, implementation, and impact of the Clinical Information Network (CIN) in Kenya. Each brief focuses on a distinct aspect of CIN's work.

Laying the foundations for better care: Developing tools, guidelines, and information architecture to support learning and improvement in Kenya's hospitals

A theory-informed approach: Applying theoretical frameworks to guide the development of CIN and its interventions

Transforming care in Kenyan hospitals: Showcasing CIN's progress in improving care processes and outcomes

Assessing quality of care at scale: Demonstrating research contributions, including validating tools, evaluating guidelines, clinical trials

System influences and interventions: Presenting research on health system barriers and system interventions to improve care

Exploring behavioural and organisational dynamics: Investigating the human and organisational factors shaping care practices

Introduction

Health care workers are vital to delivering care in Kenya's county hospitals, where they navigate significant challenges including limited resources, high workloads, and inadequate infrastructure. Both individual and collective behaviours play a critical role in shaping health outcomes. Research from the CIN and CIN-N (focused on newborn care) provides insights into how these behaviours, along with organisational norms, impact the delivery of care in such constrained settings.

This brief summarises findings from qualitative studies using interviews, focus groups, and ethnographic observations conducted by researchers embedded in hospital routines. These studies explored the experiences of mid-level clinical leaders, nurses, and medical interns, highlighting how leadership, team dynamics, and institutional norms influence practices and behaviours.

Clinical leadership

Clinical leadership plays a pivotal role in improving the quality of health care, yet research in low- and middle-income countries (LMICs) rarely focuses on this area. In Kenya's county hospitals, mid-level clinical leaders, such as department heads, bridge the gap between frontline health workers and senior management by translating institutional objectives into practice and influencing the quality of care delivered by front-line workers (see figure 1).

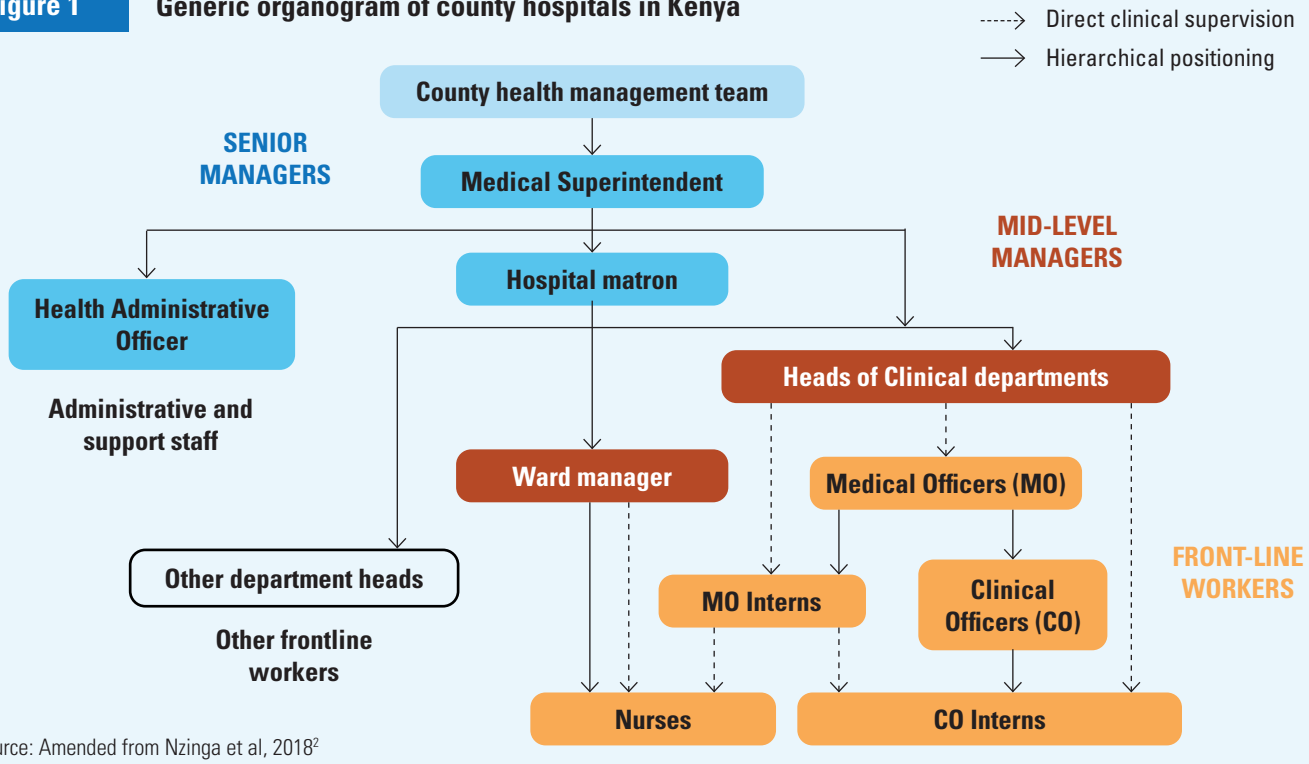
Navigating hybrid roles

Mid-level leaders often balance clinical and managerial responsibilities, making them hybrid clinical managers. Doctors frequently assume these roles reluctantly, driven by necessity or seniority rather than personal choice. Lacking formal managerial training and professional norms, they revert to informal strategies, or practical norms to cope with inefficiencies. These norms often involve accepting institutional constraints as unchangeable realities, resulting in a sense of powerlessness to drive meaningful change. While this mindset helps them manage stress, it risks entrenching inefficiencies and limiting opportunities for improvement.

A case study of two public county hospitals, involving repeated interviews with eight mid-level clinical managers, explored how they interpret and enact their roles in complex health care settings.[1] The research identified three types of hybrid clinical managers:

- **Reluctant hybrids:** Leaders who take on managerial roles out of necessity, exhibit no desire to learn how to manage, and consider additional duties an added burden.
- **Willing Hybrids:** Leaders who embrace their roles, leveraging mentorship and organisational support to drive positive change.
- **Ambivalent Hybrids:** A newly identified category, these leaders alternate between engaging with and distancing themselves from the role depending on factors such as professional credibility or personal priorities.

Figure 1 Generic organogram of county hospitals in Kenya



Source: Amended from Nzinga et al, 2018[2]

Box 1 **Encouraging willing hybrid leaders through CIN**

One of the challenges in achieving meaningful improvements in care lies in encouraging more leaders to adopt the willing hybrid role. The CIN has actively sought to address this through interventions designed to cultivate leadership skills, build professional confidence, and inspire a sense of agency among clinicians, countering the lack of formal management training and the perceived powerlessness that stems from institutional constraints.

Key interventions, such as regular audit and feedback cycles and opportunities for peer collaboration and networking, have played a central role (see Brief 2). A key aspect of this approach has been promoting a shift in professional identity, framing leadership roles as an integral part of delivering high-quality care. By aligning managerial responsibilities with clinicians' professional aspirations, these efforts encourage greater ownership of hybrid roles and build a cadre of capable, motivated leaders within the health system.

Parallel leadership structures and professional silos

The research also found that leadership often operates along parallel structures, where doctors and nurses manage separate teams with little collaboration.[2] These silos reinforce professional hierarchies, limiting integrated decision-making. Leadership decisions are often dominated by doctors, sidelining nurse managers who, despite their significant role in patient care, often assume passive roles in inter-professional discussions. This dynamic further entrenches hierarchical divides and impedes effective teamwork.

CIN has sought to address these silos by encouraging inter-professional collaboration through initiatives that actively involve senior nurses, clinicians, and health records officers. For example, audit and feedback processes have been designed to incorporate diverse professional perspectives, promoting shared accountability and collective learning (see Brief 2). While professional hierarchies and entrenched norms present significant barriers, these initiatives demonstrate the potential for structured collaboration to bridge divides and improve leadership dynamics.

Contextual and organisational influences

Leadership practices are shaped by organisational norms and cultural contexts that tolerate ineffective management and a lack of accountability. Departments frequently lack clear goals, standardised practices, or adequate supervision, allowing inefficiencies and negative practices to persist unchallenged. Interviews with health care workers revealed that conflicts and poor practices are often accepted or ignored, reinforcing harmful norms. Fear of retaliation often discourages the reporting of negligence, even in cases with severe consequences:

> *You have called the anaesthetist at 2pm, the guy shows up at 6pm. You go in and remove the dead baby, who was alive from 2pm to 5pm, and you are removing the foetus at around 5.30 to 6pm. I am afraid of going to report this guy because it will come back to me, and they will say I am the one who reported him. So you just keep quiet and maybe when the case is taken upstairs and when the matron looks at the file then she will summon him.*
>
> Medical Officer in an Obstetrics and Gynaecology department
>
> Source: Nzinga et al, 2018[2]

Despite these challenges, motivated leaders have shown that leveraging interpersonal skills and professional expertise can lead to meaningful improvements, even in resource-constrained settings. The findings, which align with theories underpinning the CIN, underscore the need for ongoing mentorship to help leaders, and future leaders, develop the necessary skills to tackle complex health care challenges.

> *'[I] solve problems rather than blaming others or shifting problems to others. Like if there is no oxygen for patients who need it, I won't start saying that the administration is not giving them oxygen. I will look, talk to maintenance; maintenance will tell me it is procurement. Procurement will tell me we have a debt. I actually went to see what the problem is, so I think that is what has helped me.*
>
> Paediatric Consultant
>
> Source: Nzinga et al, 2018[2]

Nursing and coping strategies

Nurses, as the largest professional group in Kenya's county hospitals, are central to patient care. Yet, their profession and contributions within hospitals have also been largely overlooked in health research. CIN research has explored the challenges nurses face in resource-constrained environments and the collective coping mechanisms they adopt to navigate their demanding roles and create moments of respite on the ward.

Workload challenges

Observations of nurses in their routines found that they often contend with overwhelming workloads due to chronic under-staffing, high patient-to-nurse ratios, and limited resources.[3] In neonatal units, for example, one nurse may be responsible for up to 40 infants during a shift, far exceeding recommended ratios. These conditions force nurses to prioritise technical tasks, such as administering medications, over non-urgent needs like patient education or emotional support.

> *You'll just give medication [and]… fluids to these patients, you will take vitals to this patient, but that personal care … you won't even have time for giving health talks to these patients.*
>
> Frontline nurse
>
> Source: Mbuthua et al, 2022[3]

To adapt, nurses developed informal 'working standards' to maintain continuity of care. They also frequently performed tasks beyond their official duties due to staffing shortages, highlighting the gap between nurses' professional ideals and the realities of their work environments.

> *You'd like to observe that patient four times, but you can't. So, you at least observe twice. You know now that is not what is prescribed… Actually, sometimes you let them [nurses] do what they can.*
>
> Mid-level nurse manager
>
> Source: Mbuthua et al, 2022[3]

Collective coping strategies

In neonatal units – among some of the most stressful hospital environments – nurses were found to adopt collective coping strategies to manage heavy workloads and stress.[4] Research identified several strategies:

- **Routinisation**: Structured routines provided order in chaotic environments, reducing emotional strain though often at the expense of patient-centred care.
- **Patient categorisation:** Informal triage systems prioritised care for the sickest patients, effectively managing resources but sometimes neglecting less critical cases.
- **Administration of records:** The high value placed on documentation tools, such as the Kardex, reduced stress by maintaining accountability. However, it also legitimised spending time on paperwork, even when pressing clinical care needs remained unmet.
- **Flexibility and autonomy:** Minimal oversight allowed nurses to adjust work informally, covering delays or absences and supporting colleagues. While this alleviated stress, it also introduced inconsistencies in care practices and occasionally undermined staff to patient ratios, especially at the start and end of shifts.
- **Pragmatism and improvisation:** Nurses 'made do' with limited resources, such as reusing single-use equipment.

> *And that prong is such a small thing in the whole circuit such that when the baby uses it, we are supposed to discard the whole system. But we can't afford 40,000 [Kenyan Shillings] a baby. So, what we usually take is that little thing and wash it.*
>
> Senior nurse
>
> Source: McKnight et al, 2020[4]

These strategies allowed nurses to sustain care under difficult conditions and maintain a sense of professional pride – particularly by meeting peer expectations. However, they also entrenched inefficiencies such as rationing and inadequate resource allocation. Addressing these issues requires comprehensive health system reforms to tackle chronic under-staffing and provide greater support to nurses, enabling them to align care practices with professional standards.

Medical students and internship experiences

Medical interns are an important workforce providing front-line care in hospitals where they are responsible for up to 85% of paediatric admissions.[5] The internship year is a significant transition period for doctors as they move from theoretical learning to clinical practice with considerable responsibility. However, their transition is marked by challenges stemming from high workloads and limited clinical preparation. For example, medical officer interns typically receive only eight weeks training in paediatrics during their medical training, with just two weeks dedicated to neonatal care. As a result, they often arrive on the wards with minimal hands-on experience in managing complex paediatric and neonatal cases.

Insights from qualitative research and surveys of 854 medical interns and junior doctors in Kenya and Uganda highlight these complexities.[6] While many interns expressed satisfaction with their roles, they frequently worked excessive hours – sometimes up to 72 hours consecutively – due to chronic staff shortages. These issues were exacerbated by poor supervision, as consultants were often unavailable, leaving interns to manage wards or perform procedures independently.

The findings emphasise the need to improve the resource capacity of internship hospitals, prioritise the well-being of interns, and implement standardised supervision and support systems.

Box 2 Improving skills of inexperienced clinicians

Medical interns and clinical officer interns play a crucial role in providing most paediatric admission care, yet many arrive with limited training and clinical skills. As the primary providers of paediatric admission care (see brief 5), their ability to deliver safe and effective care is critical. A key focus of the CIN has been to equip these clinicians with practical tools, training, and support to meet the demands of admission care.

- **Paediatric Admission Record (PAR):** The PAR offers a structured framework for documenting and managing admissions, guiding clinicians through key assessments and treatments to ensure consistency and reduce omissions in care.
- **Clinical guidelines:** CIN promotes the use of evidence-based clinical guidelines (Basic Paediatric Protocols), aligned with the PAR, to help junior clinicians follow best practices for managing severe illnesses effectively.

- **ETAT+ Training:** Emergency Triage, Assessment, and Treatment plus Admission Care (ETAT+) training, now part of Kenya's undergraduate medical curriculum, equips clinicians with life-saving skills and prepares them to manage critical situations with confidence.
- **Supportive leadership and mentorship:** Through its wider activities, CIN has focused on developing supportive leadership to foster supervision and mentorship, enabling junior clinicians to learn on the job, build confidence, and feel well-equipped to manage their responsibilities.

Interprofessional collaboration and teamwork

Research into newborn units (NBUs) provides a lens to understand relationships within and between professions in Kenya's county hospitals.[7] While health care delivery often suffers from silos between doctors and nurses, the reality is more complex. Within NBUs – high-pressure environments with diverse cadres such as nursing students, nurses, medical interns, clinical officers, and specialists – team dynamics vary by context and task.

Poor coordination and limited collaboration often stem from institutional challenges such as low staff-to-patient ratios and heavy workloads, which force staff to focus on technical tasks at the expense of communication and shared decision-making. Yet, emergencies, such as resuscitations, reveal the potential for efficient multidisciplinary teamwork. In such situations, silos break down, and teams collaborate more effectively, driven by a shared commitment to patient care.

Examination of the process of conducting Morbidity and Mortality (M&M) audits in NBUs further illuminated interprofessional dynamics.[8] M&M audits are structured reviews of patient cases where adverse outcomes, such as complications or deaths, occurred. When conducted effectively, M&M audits can improve care outcomes by facilitating shared learning and actionable changes, such as revised clinical protocols. However, limited participation – particularly from nurses – and strained doctor-nurse interactions often hinder their effectiveness.

Leadership and addressing staff shortages, especially for nurses, emerge as the central factors in shaping interprofessional collaboration, both in daily practice and processes like M&M audits. By promoting openness, reducing blame, and encouraging contributions from all cadres, leaders can bridge silos. Investing in leadership training to build cognitive and behavioural skills is essential to unlocking the full potential of collaboration and improving quality of health care in resource-constrained settings.

Conclusion

Findings from research embedded in hospital settings reinforce the importance of strong leadership in improving care, fostering teamwork, and mentoring junior clinicians. However, many hybrid managers step into these roles without adequate preparation, highlighting the need for targeted support to develop their leadership skills and confidence.

Chronic workforce shortages, particularly among nurses, result in heavy workloads and reliance on collective coping strategies such as pragmatism and improvisation to sustain care delivery. While these strategies reflect the resilience of nurses, they also underscore the urgent need to address staffing gaps and improve working conditions.

Mentorship is vital for supporting inexperienced clinicians, building leadership capacity, and fostering skill development across all health care roles. Effective mentorship builds confidence, enhances collaboration, and promotes professional growth.

Beyond equipping clinicians with essential tools and skills, CIN interventions aim to shift attitudes, strengthen motivation, and promote behaviour change. By creating a sense of ownership and commitment to excellence, CIN seeks to embed these values into routine clinical practice.

References

1 Nzinga J, McGivern G, English M. Hybrid clinical-managers in Kenyan hospitals. J Health Organ Manag. 2019 Mar 28;33(2):173-187. doi: 10.1108/JHOM-08-2017-0203. Epub 2019 Feb 11. PMID: 30950310; PMCID: PMC6776117.

2 Nzinga J, McGivern G, English M. Examining clinical leadership in Kenyan public hospitals through the distributed leadership lens. Health Policy Plan. 2018 Jul 1;33(suppl_2):ii27-ii34. doi: 10.1093/heapol/czx167. PMID: 30053035; PMCID: PMC6037084.

3 Mbuthia D, Brownie S, Jackson D, et al. Exploring the complex realities of nursing work in Kenya and how this shapes role enactment and practice-A qualitative study. Nurs Open. 2023 Aug;10(8):5670-5681. doi: 10.1002/nop2.1812. Epub 2023 May 24. PMID: 37221938; PMCID: PMC10333853.

4 McKnight J, Nzinga J, Jepkosgei J, et al. Collective strategies to cope with work related stress among nurses in resource constrained settings: An ethnography of neonatal nursing in Kenya. Social Science & Medicine, 2020 Volume 245, 112698, ISSN 0277-9536, https://doi.org/10.1016/j.socscimed.2019.112698.

5 Ogero M, Akech S, Malla L, Agweyu A, et al. Examining which clinicians provide admission hospital care in a high mortality setting and their adherence to guidelines: an observational study in 13 hospitals. Arch Dis Child. 2020 Jul;105(7):648-654. doi: 10.1136/archdischild-2019-317256. Epub 2020 Mar 12. PMID: 32169853; PMCID: PMC7361020.

6 Zhao Y, Mbuthia D, Gathara D, et al. 'We were treated like we are nobody': a mixed-methods study of medical doctors' internship experiences in Kenya and Uganda: BMJ Global Health 2023;8:e013398.

7 Jepkosgei, J., English, M., Adam, M.B. et al. Understanding intra- and interprofessional team and teamwork processes by exploring facility-based neonatal care in kenyan hospitals. BMC Health Serv Res 22, 636 (2022). https://doi.org/10.1186/s12913-022-08039-6.

8 Jepkosgei J, Nzinga J, Adam MB, English M. Exploring health care workers' perceptions on the use of morbidity and mortality audits as an avenue for learning and care improvement in Kenyan hospitals' newborn units. BMC Health Serv Res. 2022 Feb 10;22(1):172. doi: 10.1186/s12913-022-07572-8. PMID: 35144594; PMCID: PMC8832787.

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