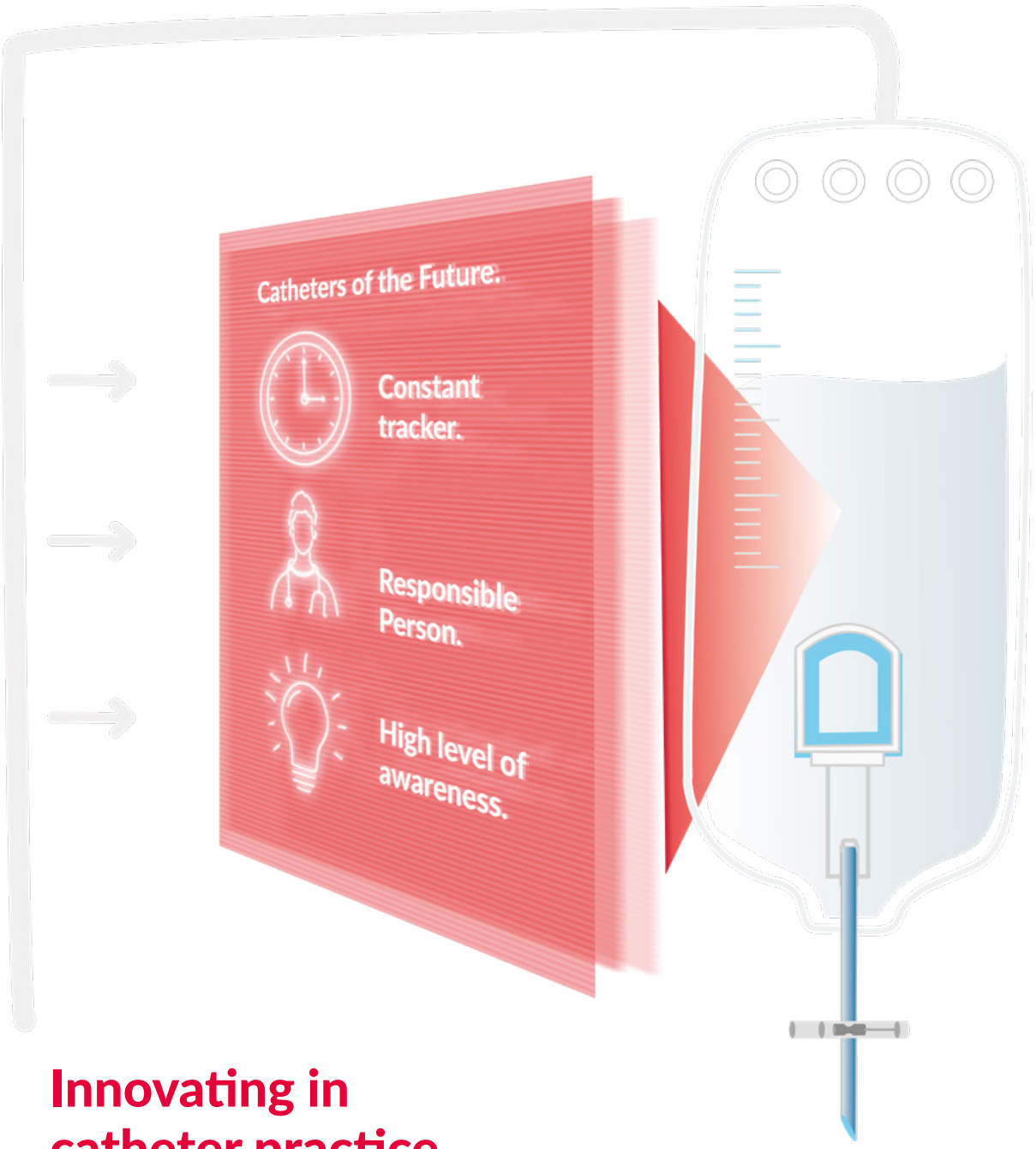

Innovating in catheter practice in the hospital and community

REVEALING REALITY

Contents

Foreword

Imagine if catheters were consistently tracked throughout the whole patient journey (spanning both acute and community care). Imagine how easy removal of catheters would be if the reasons for catheter insertion were readily available in every case; if there were clear lines of responsibility linked to the removal of each catheter; and if there was an active system to prompt staff and check this had been done in a reasonable time frame.

At the moment, what we see is quite a different picture. Poor tracking around catheters throughout the care system (and along patient journeys), combined with a lack of training and few reminders in healthcare spaces, means that checking catheters is largely de-prioritised by healthcare professionals in favour of more seemingly 'urgent' types of care.

This means that healthcare professionals do no check catheters as often as they could do – which raises problems when we see how, if this pattern persists in the long term, patients will be left with catheters longer than necessary. We also see patients with a poor understanding of how to look after catheters, or of when they should be removed.

When information erosion occurs and information about catheters is lost (as patients move between staff, wards or between acute and community settings), even those staff motivated to tackle issues around catheter care are put off – as it becomes effortful and time consuming to track down the data required to make useful decisions around removal of catheters. In addition, this lack of clarity enables myths and inaccurate ideas around catheter care to proliferate, further obfuscating the guidance around catheter care.

This report aims to inspire action. We hope that the ideas outlined here will be taken forward to improve catheter care. There are multiple angles into the issues, and many more opportunities than are listed here to improve catheter care. Going forward, our next phase of work will involve testing a specific bundle of interventions. However, there are many possible ideas here, some of which may work better in different environments. We encourage readers to use the ideas listed in this report as a starting point, and find solutions to reduce CAUTI rates the settings appropriate to them.

Our recommendations are that each trust review its processes around catheter care in order to prevent the development of CAUTIs. In line with the ideas in this report, this may include reviewing training and staff knowledge; environmental cues such as magnets or timers; information transfer and storage systems – including how catheters are spoken about in board or ward rounds; as well as how catheters themselves are stored, tracked and talked about.

Catherine Dale
Programme Director | Patient Safety and Experience
Health Innovation Network
June 2020

Executive summary

Introduction

Imagine if catheters were consistently tracked throughout the whole patient journey (spanning both acute and community care). Imagine how easy removal of catheters would be if the reasons for catheter insertion were readily available in every case; if there were clear lines of responsibility linked to the removal of each catheter; and if there was an active system to prompt staff and check this had been done in a reasonable time frame.

This work was funded by The Health Foundation to understand how urinary catheter care could be improved in both the acute and community setting. Catheter associated urinary tract infections (CAUTIs) are considered to be one of the most common forms of healthcare-associated infections (HCAIs), with infection rates rising the longer a catheter remains in situ. Yet, with some simple changes to practice these rates could be minimised or avoided altogether[1]. Data from this work will feed into design interventions which aim to reduce the incidence rates of CAUTIs.

Our planned work covers two phases:

- **Phase 1: Explore –** Using on-site observation at healthcare sites and interviews with practitioners to understand issues with catheter care and how it can be improved
- **Phase 2: Innovation** – The development, testing and evaluation of a bundle of interventions to minimise CAUTI rates in healthcare settings

This report surmises the 'explore' phase of the work. The innovation phase, due to be carried out in summer 2020 has been paused during the coronavirus outbreak and will be resumed later. In this phase, we will work to develop, test and evaluate specific ideas developed as a result of this research.

1 https://www.nice.org.uk/Guidance/QS61/chapter/quality-statement-4-urinary-catheters

Key findings

A key, **overarching issue** observed during this research is the lack of consistent tracking throughout the care journey. It is essential to get this right in order to empower healthcare professionals to make decisions around the removal of catheters in a timely way.

Related to the issue of tracking, we saw three key problems – linked to different levels of **myths and lack of knowledge** in healthcare settings, **non-prioritisation** of catheters in the healthcare environment and **unclear lines of responsibility** among healthcare professionals.

There are specific opportunities to tackle each problem, which include training and information to boost staff confidence and awareness, modifications in the environment to keep catheters top-of-mind and to boost trackability, and clearer lines of responsibility and accountability around catheter related incidents.

*There is **no consistent system** for tracking catheters throughout the care journey, and notifying staff and patients when they need to be removed.*

PROBLEM 1

Myths and lack of knowledge

Knowledge, myths and the witching hour

OPPORTUNITY AREAS

- Staff lacked training around catheters
- Staff lacked confidence around catheters, and so avoided dealing with them
- Staff were not sufficiently informed of risks surrounding catheterisation
- Catheters are misperceived as being convenient
- Myths spread across healthcare sites

PROBLEM 2

Non-prioritisation

Out of sight, out of mind

- A lack of prompts means catheters are not top-of-mind
- Catheters are seen as time consuming, so staff put-off dealing with them
- Staff aren't aware of what catheters are under their charge

PROBLEM 3

Unclear lines of responsibility

Who, me?

- The system makes it easy to do nothing, and to blame others when things go wrong
- It is unclear who should resolve issues of information erosion
- No accountability around catheter care incidents

About this research

This was a collaborative project funded by the Health Foundation

Imagine if catheters were consistently tracked throughout the whole patient journey (spanning both acute and community care). Imagine how easy removal of catheters would be if the reasons for catheter insertion were readily available in every case; if there were clear lines of responsibility linked to the removal of each catheter; and if there was an active system to prompt staff and check this had been done in a reasonable time frame.

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The Health Innovation Network (HIN), Revealing Reality and Hill + Knowlton Strategies (H+K) are collaborating using ethnographic methods, particularly place-based observation, to identify key areas of catheter care that can be improved. Data from this work will help design interventions which aim to reduce the incidence rates of CAUTIs in both acute and community settings.

After initial research, we decided to focus our work specifically on the *checking behaviours of healthcare professionals*, which is the basis for many of the issues around catheters.

Our planned work covers two phases:

Phase 1 – Explore: Using on-site observation at healthcare sites and interviews with practitioners to understand issues with catheter care and how it can be improved. *This report related to the first 'explore' phase of the work.*

Phase 2 – Innovation: The development, testing and evaluation of a bundle of interventions to minimise CAUTI rates in healthcare settings.

Our goal is that the findings in this report will inspire healthcare professionals to tackle issues leading to CAUTIs

Our aim is to encourage healthcare professionals at all levels to think about how catheter care can be improved. We hope they will use this report to develop their own interventions. Throughout this report, we have outlined the main problems we observed, and opportunity areas to improve on.

There are several aspects where healthcare professionals may choose to focus their ideas, such as environmental cues, policies and administration, or staff behaviours – including motivations/barriers that people encounter when checking catheters.

2 https://www.nice.org.uk/Guidance/QS61/chapter/quality-statement-4-urinary-catheters

The findings are grouped into three key opportunity areas:

A key, **overarching issue** observed during this research is the lack of consistent tracking throughout the care journey. It is essential to get this right in order to empower healthcare professionals to make decisions around removal of catheters in a timely way.

Imagine if catheters were consistently tracked throughout the whole patient journey (spanning both acute and community care). Imagine how easy removal of catheters would be if the reasons for catheter insertion were readily available in every case; if there were clear lines of responsibility linked to the removal of each catheter; and if there was an active system to prompt staff and check this had been done in a reasonable time frame.

Related to the issue of tracking, we saw three key problems – linked to **different levels of myths and lack of knowledge** in healthcare settings, **non-prioritisation and awareness** of catheters in the healthcare environment and **lack of responsibility** among healthcare professionals.

There are specific opportunities to tackle each problem, which include training and information to boost staff confidence and awareness, modifications in the environment to keep catheters top-of-mind and to boost trackability, and clearer lines of responsibility and accountability around catheter related incidents.

Where do our findings come from?

The insight in this report has been informed by several research streams developed during the 'explore' phase, including:

- Desk research and a literature review of existing data on catheters and CAUTIs, as well as reviewing the success of previous catheter interventions
- We interviewed five healthcare experts about catheters, asking about the most prominent issues relating to catheter care and their ideas for where these problems stem from
- We ran workshops with healthcare staff to develop a base understanding of the main issues with catheter care
- We visited five hospitals, across the country, for a half day each. We interviewed staff, visited various wards and observed how staff dealt with catheters
- We conducted deep-dive visits at two hospitals. This involved a team spending time in a number of wards on consecutive days. There, we spoke to staff, attended ward meetings, and observed how staff interacted with catheters. This allowed us to build patient stories relating to catheter care, and observe where difficulties occurred
- We also visited a number of different community sites affiliated to the hospitals we visited. These included nursing homes, continence clinics and continence training. This allowed us to understand how care is administered in the community setting, and gain a broader understanding of the 'CAUTI problem'

What are catheters?

Urinary catheters are medical devices used to help people pass urine by draining it from the urinary bladder. They are made up of a small, flexible tube which drains urine out of the body into an external drainage bag.

Catheter are predominantly used to drain the bladder of urine, and can be used in cases such as urinary retention, blocked urethras; or allowing bed-bound people to relieve themselves (such as after surgery, around childbirth, or people who are unconscious.) They are occasionally used to deliver medicine directly into the bladder.

There are different types of catheters . Firstly, catheters may be inserted through the urethra ('indwelling') or through the lower abdomen ('subrapubic'). There are also two main types of catheter depending on how they will be used:

- **Indwelling catheter** – remain in place for days or weeks
- **Intermittent catheter** – used and removed once urine has drained from the bladder

Catheters may also be referred to as short-term (used for less than 28 days) or long-term (inserted for more than 28 days) . They are generally inserted by nurses, doctors in wards or continence clinics. After insertion, many people are responsible for administering and looking after catheters, including patients and carers themselves.

What are CAUTIs?

Catheters should be removed or changed at regular intervals. If they are not changed, cleaned or well looked after on a regular basis, they can cause Catheter-associated Urinary Tract Infections (CAUTIs). Infections caused by catheters are one of the most common types of healthcare-associated infections, accounting for 17.2% of all HCAIs, with between 43% and 56% of UTIs associated with an indwelling urethral catheter (EPIC 3, 2014).

Untreated, CAUTIs can be serious: they can lead to bloodstream infections, pain, and in some cases, death. Aside from being costly to patients, there is a literal cost here too, with different trusts spending different amounts to treat patients recovering from CAUTIs. Healthcare-associated infections in general are estimated to cost the NHS approximately £1 billion a year.

In addition to this, the use of anti-biotics to treat CAUTIs is another factor contributing to anti-microbial resistance (AMR), which ultimately threatens the lives of future generations.

What is the healthcare context around catheters?

While procedures, routines and databases vary from ward to ward and from trust to trust, there are a few commonalities.

In acute care (hospitals), wards will hold meetings to discuss patient care. Most hold daily board rounds – a short session where staff run through the needs of each patient on that day. Most also hold daily ward rounds, where doctors and consultants will examine each patient individually and assess their care. The times, structures and staff attending these vary from site to site.

In terms of communicating information, most wards have a 'board', which may be a physical white board, an electronic board or a printout that assembles information about each patient and the care they need that day. Again, the information included on the board will change from ward to ward. Sites also rely on online databases such as Rio or iCare, as well as written and printed notes transferred between staff.

Patients may receive care in the community setting from GPs, nurses, district nurses and carers. They may receive this care at home, in continence clinics, or in nursing or care homes.

Glossary

This report contains some specific language and acronyms relating to catheters. These may have different uses in different setting, but for the purpose of this report we have outlined our intended meanings below:

CAUTI Catheter associated urinary tract infection: urinary tract infections caused by the presence of a catheter – often developed as a result of bacteria or yeast growing on the surface of catheters.

TWOC Trial without catheter: when removing a catheter, it is expected that the patient will undergo a 'trial' to check they are able to pass urine without one. This is typically expected to be around two hours.

HCAI Health care associated infection: an infection acquired as a result of care received (a CAUTI is an example of a HCAI).

Acute care Acute care relates to care given to patients for urgent conditions (rather than long term, chronic conditions). In this report we use the term to cover hospital settings.

Community care In this report, we use community care to refer to care delivered in patient homes, care homes or outpatient services (such as continence clinics).

HCAs Health care assistants report to qualified medical practitioners (often nurses) in hospitals, often helping with washing, feeding, and monitoring patients.

A&E Accident and emergency departments in hospitals admit people for emergency treatment and care.

PROBLEM 1:
MYTHS AND LACK
OF KNOWLEDGE

KNOWLEDGE, MYTHS AND 'THE WITCHING HOUR'

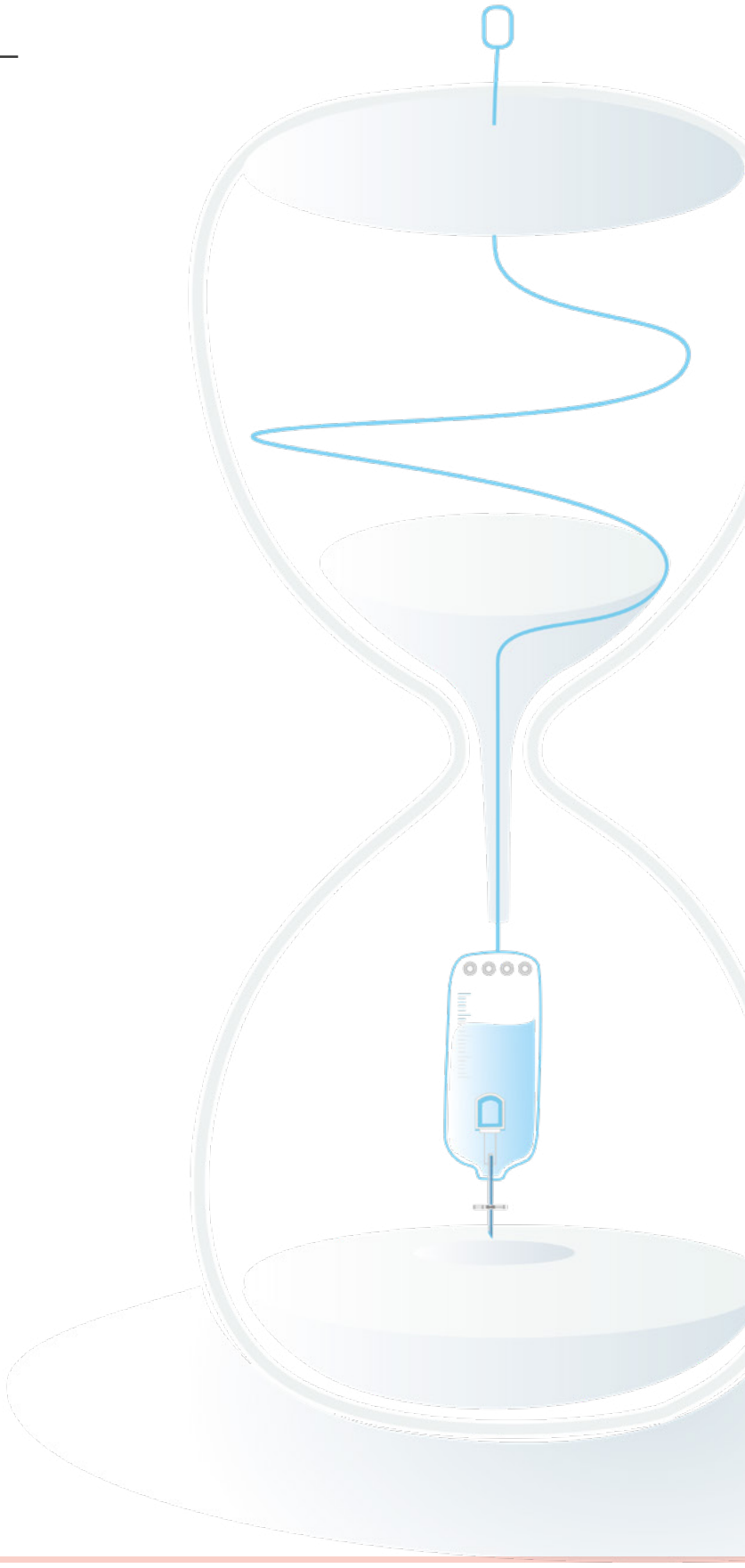
Introduction

For some healthcare professionals, a lack of knowledge means catheters are not dealt with quickly or correctly

Many healthcare professionals receive relatively little training on catheters, which can lead to a lack of theoretical and practical knowledge about how to deal with them. This feeds a lack of confidence, and sometimes even fear, in caring for catheterised patients, which in turn encourages staff to procrastinate or avoid good catheter care.

On the other hand, many members of staff aren't aware of the risks of catheters – CAUTIs, discomfort, dependence or shame – and often see them as convenient solutions to other problems patients may face, such as incontinence or frailty.

The vacuum left by this lack of solid catheter knowledge gets filled with myths and harmful perceptions that spread around healthcare sites.



Key challenges

Relating to the problem of myths and lack of knowledge, there were five key challenges observed:

- **Staff lack training around catheters** – meaning they do not gain the practical or theoretical grounding needed to manage the catheterisation process effectively
- **Staff lacked confidence around catheters** – and so avoided dealing with them
- **Staff were not sufficiently informed of risks surrounding catheterisation** – including knowledge of the risks associated with CAUTIs
- **Catheters are misperceived as being convenient** – leading staff to assume they could be used as a viable long-term solution
- **Myths spread across healthcare sites** about how and when catheters should be removed

Key opportunities

The challenges outlined here could be addressed in many ways. Here we have provided a starting list of opportunities based on the research, which we hope readers will take and build upon in their own work.

- Improve the frequency, content and tone of training given around catheters
- Offer opportunities for staff to practice and revise knowledge around catheters, to boost confidence
- Raise awareness of the negative consequences of catheterisation, and normalise the idea that catheters should be removed as soon as possible
- Reframe language about catheters to be more emotive and urgent, so staff do not assume they are the 'easy' option
- Develop new norms around catheters, and encourage staff to call out inaccurate myths where these arise

CHALLENGE 1:
STAFF LACK TRAINING AROUND CATHETERS

Across all levels, in both acute and community settings, staff are given little training about continence and catheters. What training does take place is often brief, lasting anywhere between half a day and a whole day. In this time, staff are expected to take on complex technical information around both the theory of catheters – why people use catheters, which types are appropriate – and the practice: how they are applied, removed and TWOCed.

It also appears that the training sessions themselves are not always 'hands on'. This means that some attendees left feeling that they did not have the practical expertise to manage catheters in the real world. Both through our own observations and from staff interviews, it was clear that those attending training sessions were often overloaded with information and struggled to retain what they were subsequently told. During training sessions we attended, some trainees were also not taking the training seriously, and some were not paying attention or taking notes during the sessions. Catheter refreshers were offered, but they relied on staff choosing to sign up to them, which wasn't always taken up during busy training and working schedules.

This meant that staff were not gaining the foundational knowledge needed – either practically or in theoretical terms – to effectively manage the process of catheterisation. Some staff explained that they were unsure on even the seemingly basic details: why to catheterise, how long a catheter should stay in, and whether a long-term catheter should be TWOCed. They also reported difficulties recalling and performing practical processes such as insertion, checking or changing catheters, or TWOCing patients, with some nurses in acute and community care reporting they would avoid doing these tasks themselves for fear of making mistakes. This was further confused when dealing with different types of catheter, which could lead staff to question themselves or their initial assessments.

CASE STUDY

Training among hospital staff was patchy, and difficult to track owing to reliance on bank staff

Training reported from hospital staff during the research was inconsistent, varying between different members of the same job role or grade. For example, one healthcare assistant working in a hospital described her frustration at the fact she was trained in catheter insertion/removal but wasn't allowed to do them in this particular trust. She felt it was waste of her knowledge and a waste of resources.

Staff turnover and the use of bank staff also made it difficult to keep track of which staff were trained, and who might need more up to date training. Researchers were told of an incident in which an outpatient continence clinic had tried to give training to hospital staff on managing catheters. However, staff changed so often they felt the training wasn't making a difference – as those who had been trained would quickly change roles and be replaced by others who hadn't received the training.

CHALLENGE 2:
STAFF LACKED CONFIDENCE IN DEALING WITH CATHETERS, AND SO AVOIDED THEM

This lack of training has repercussions for catheter care – staff lack confidence and, as a result, avoid or delay essential tasks. This is compounded by the fact that many staff only deal with catheters on an infrequent basis, and so are unable to practice catheterisation and grow their confidence.

A common way in which low confidence finds expression is through aversion among staff – juniors in particular – towards the intrusive and intimate nature of the catheterisation process. For instance, every nurse and HCA at a care home we visited said they would be much too scared to remove or insert a catheter, even if they knew the procedure in theory. They worried they would hurt the patient or make an error that led to the patient contracting an infection. This contrasted sharply with staff we met who had received sound practical training and did not exhibit that fear.

Staff referred to "horror stories" in which catheters got stuck at insertion or removal or caused trauma to the patient's genital area. When combined with a lack of training or positive communication around catheters, these stories contributed to the general atmosphere of unease surrounding catheters. For nurses in a care home, it was so acute that they sent patients to A&E to have their catheter changed rather than do this themselves.

An added complication comes with an issue that, for staff doing the catheter rounds, is unavoidable: exposure to genitalia. Some staff for whom it was not a regular part of their care reported feeling uncomfortable around genitals and avoided dealing with them, finding them to be overly private. Patients sometimes got uncomfortable with their catheters being checked, which provided another reason for reluctance among staff to deal with them. Many nurses managed this discomfort by checking the catheter at the same time they conducted routine checks for other things, which could cause delays to catheter checks.

CASE STUDY

One care home sent patients to A&E in order to get their catheters changed, because they were worried about doing this themselves.

One care home we visited was home to multiple residents living with long-term catheters. When the catheters needed changing – which was approximately every three months – the nurses in charge of care sent the residents to A&E for them to be changed. The residents would return two-to-three hours later with a new catheter inserted.

This practice formed as the nurses at the care home were worried about carrying out the procedure themselves. They were concerned they might hurt the patient, or something might go wrong – such as the catheter getting stuck, the patient bleeding or experiencing pain. Sending the patient to A&E reassured the nurses, and meant they had no need to develop their catheterisation skills.

CHALLENGE 3:
STAFF WERE NOT SUFFICIENTLY INFORMED OF RISKS SURROUNDING CATHETERISATION

It is therefore of little surprise that knowledge around the risks of catheterisation is lacking. Staff weren't always aware that catheterisation could result in trauma to the genital area from friction, stretching or chafing, nor did they always see the range of non-physical impacts: that catheters encourage patients to remain bed-bound, that they can cause shame and embarrassment, and that they can hinder the independence – and sexual activity – of patients. These risks were rarely mentioned in the training we observed.

A major concern for staff should be CAUTIs, yet staff we observed struggled to explain how CAUTIs develop, and how serious they can be. Many did not explicitly link CAUTIs to catheters, instead blaming a patient's lack of drinking, bad insertion and the presence of contaminants in the catheter pre-insertion phase. In addition, staff were sometimes unsure how best to deal with a CAUTI, and we heard conflicting views across healthcare sites on how best to treat or respond to a CAUTI, which ranged from leaving the catheter in, removing the catheter, treating the patient with antibiotics or getting them to drink more.

This meant that staff were likely to underestimate the importance of regular checking and removal of catheters at the earliest possibility. During observation, some staff – particularly junior members of staff – showed low awareness of the fact that catheters should be removed promptly. This meant that many staff mistakenly believed catheters could be left in long-term with few consequences.

CASE STUDY

Accounts from healthcare professionals showed a varying awareness of CAUTIs

Throughout our interviews with staff, we heard varying accounts of CAUTIs. Some, particularly senior or longstanding staff, had come across many CAUTIs and were aware of the risks, as well as the best course of action regarding treatment. However, several junior members of staff felt they were uncommon, and some said they had never come across a CAUTI.

In some cases, they spoke of catheterised patients developing UTIs, but did not make the link between the catheter and the UTI, instead suggesting this was due to the patient not drinking enough water.

CHALLENGE 4: CATHETERS ARE MISPERCEIVED AS BEING CONVENIENT

Without having the risks surrounding catheterisation top-of-mind, many staff saw catheters as a convenient solution to other day-to-day problems – for example, they make it easy for staff to monitor fluid output while preventing frail patients from leaving their bed to visit the bathroom and risking a fall in the process. They also, on the whole, stop patients from sitting in their own urine and irritating bed sores. For staff, these problems seem more pressing and important than the risks associated with catheterisation. Even those who are aware of the risk of CAUTIs rarely observe the long-term impact of a CAUTI on a patient, which means that CAUTIs don't feel like such a significant issue to staff.

On the flipside, in a time-pressured environment, with many competing priorities, staff are unlikely to dwell on the benefits of not having a catheter – namely that this will enable greater mobility, independence and dignity; that patients will stand no risk of contracting a CAUTI, and more.

To many healthcare professionals, catheters appear as a viable solution to pressures arising in the care environment, which makes it unlikely that staff will want to remove them. For example, some staff we spoke to reported that the orthopaedic team "were in favour of catheters" as they prevent patients from being mobile and reduce the risks to patients' health. This has a further effect when the majority of staff assume that most catheters under their charge are long-term and fail to check patient records for confirmation either way. The end result is a culture, pervasive in acute and community care, in which staff do not regularly question the presence of catheters, and take only sporadic action to determine whether the patient is at risk of a catheter-related condition, rather than this sitting within a formalised monitoring process.

CASE STUDY

Using catheters for monitoring sepsis

Following the guidelines in the Sepsis 6 bundle (a set of six diagnostic and therapeutic steps designed to enable professionals to monitor and reduce the risk of sepsis in care environments), hospital staff must monitor certain patients' urine hourly for signs of sepsis. In many cases, healthcare assistants and nurses assume it will be easier and more convenient to us a catheter bag to do this. However, there are other ways of monitoring urine that do not include catheterisation (such as use of a convene) – which staff often overlook, without questioning their assumptions that catheters are the best method.

CHALLENGE 5:
MYTHS SPREAD ACROSS HEALTHCARE SITES

In this environment, harmful myths can spread. Across the different sites we visited, there were variations in 'catheter theory': different healthcare professionals reported different views about why catheters should be inserted, how long they should stay and how to deal with CAUTIs.

This can lead to the development of falsehoods or myths at each site and ward – which are repeated to new staff members and can become embedded in working culture. Longstanding myths in particular can be hard for newer staff to call out or challenge and end up becoming built into informal protocol and altering medical practice.

Most myths observed during this research surround the TWOCing process. Some staff believed, mistakenly, that a patient could only be TWOCed a certain number of times – usually two or three – before a catheter must be kept in on a longer-term basis. This meant they felt a pressure to ensure the TWOC was successful, lest the patient be catheterised for life. This meant they were likely to leave a catheter in for longer, waiting of the 'right' circumstances, time and staff to give the TWOC best chance of success.

There were also examples of myths surrounding the time TWOCs could occur. For example, different sites and members of staff had various beliefs around which were the best hours of the day or night where TWOCS should be carried out, with people commonly reporting midnight or 6am as opportune times. These beliefs often had a degree of logic and practicality – for instance, some reported that if a patient was TWOCed early in the morning, they were likely to go into retention while doctors were still around so they could be re-catheterised.

In a busy environment, and even with an agreed time in place, other priorities or emergencies regularly interfered with the plan to TWOC within a specific time window. And, when the slot was missed, staff were regularly observed to wait until it next came around again 24 hours later – which often involved delegating the task onto someone else picking up the next shift. It was also observed that poor communication could lead to the day team delaying TWOCs for the night team to carry out, and the night team doing the same.

In this report, we have labelled these 'witching hours' owing to the fact that during the research observation TWOCs planned to happen at a certain time of day, rarely, if ever, were observed to happen. This caused patients to sit with catheters in for much longer than necessary, and actually increased the risk that patients may fail a TWOC since their bladders were untrained. This could lead to a recurring cycle in which the catheter remained in an unnecessarily long time. Waiting for the 'witching hour' also delayed discharge or led to patients being discharged with catheters they may not need, sometimes without a catheter care plan.

CASE STUDY

A patient was delayed in being discharged by a full day owing to beliefs about the 'right' time to remove a catheter

A patient needed to have his catheter removed before he could be discharged. Staff were waiting for him to move his bowels before he could be TWOCed that evening and had assumed his TWOC would happen during the 12am 'witching hour' slot that night. However, by the time this had happened, the 12am slot was over. The night shift staff decided they should wait for the next 12am witching hour to TWOC him, which delayed his discharge until the following day entirely.

Summarising the challenges and opportunities

There were a number of opportunities linked to the challenges outlined above. The table comprises a starting point to develop further ideas for tackling the wider problems around myths and knowledge in catheter care. We hope readers will be able to build on the opportunity areas outlined in their own work around catheter care.

Challenges	There are opportunities to....
→ **Staff lack training around catheters –** meaning they do not gain the practical or theoretical grounding needed to manage the catheterisation process effectively	→ Provide more practical, ongoing and long-term training → Present training around catheters as exciting and interesting, so that people want to find out more → Raise awareness more broadly that catheters lead CAUTIs outside of formalised training programmes
→ **Staff lacked confidence around catheters –** and so avoided dealing with them	→ Improving staff confidence through shadowing catheter procedures as and when they are done by others → Refresher training opportunities for staff who have received training a while ago → Develop alternative sources for staff to consult/ brush up on specific details – such as video training, infographics or leaflets

Challenges

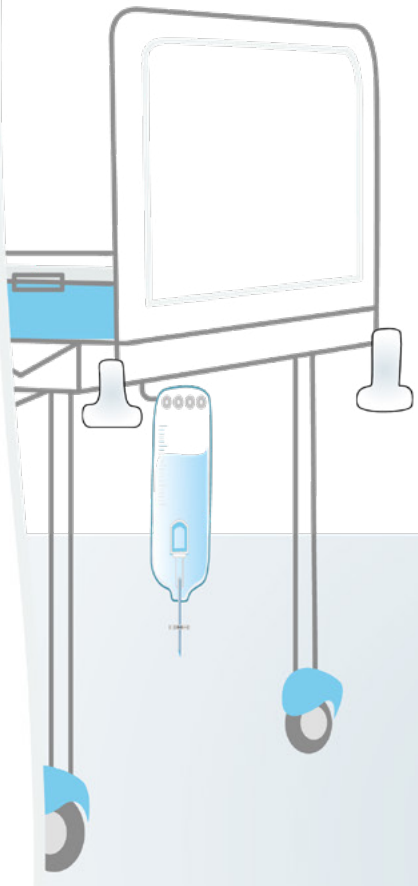
- **Catheters are misperceived as being convenient** – leading staff to assume they could be used a viable long-term solution
- **Staff were not sufficiently informed of risks surrounding catheterisation –** including knowledge of the risks associated with CAUTIs
- **Myths spread** across healthcare sites about how and when catheters should be removed

There are opportunities to....

- Raise awareness of the negative consequences of catheters, through training and communication – both formal and informal
- 'normalise' the idea that catheters should be *rare* in healthcare systems, and that when in, staff should be consistently looking for opportunities to take them out
- Recognise the importance of catheter removal as part of healthcare, such as by implementing a 'zero catheter' attitude amongst staff who are consistently trying to get their patients to be 'catheter-free'
- Publicise the consequences of catheters in an emotive/visceral way to incite greater reactions – e.g. by using visual cues, developing empathy
- Reframe language around catheters and TWOCs to increase the sense of urgency or emotion around the actions
- Develop new norms and rules of thumb for catheters to counteract pervasive myths that may be inaccurate or contributing to infrequent checking of catheters
- Make the trust protocol for catheters more 'sticky' so that it translates to practice easily
- Encouraging/empowering staff of all levels to call out myths and poor practice where they see this, including junior staff challenging senior staff where appropriate
- Engendering an environment where staff are encouraged to question the presence of catheters, and idea

PROBLEM 2:
NON-PRIORITISATION

OUT OF SIGHT, OUT OF MIND

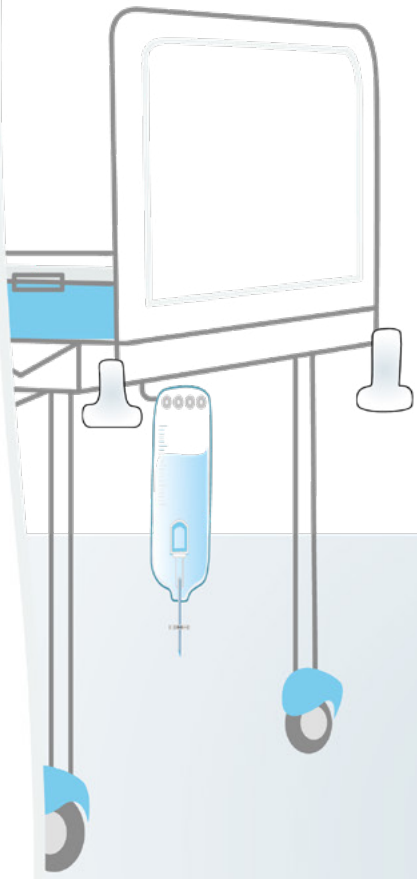


Introduction

Catheters are often forgotten by members of staff because they don't appear as a priority in a busy work environment.

The healthcare environments are extremely busy, with a vast amount of information conveyed verbally, visually and in sound signals. Busy healthcare professionals can struggle to keep track of ever-shifting circumstances as patients' health evolves, and the flow of patients and staff between wards or care settings is managed.

It is not surprising that in this environment catheters are not top-of-mind for many healthcare professionals. In addition to the lack of signs and signals raising the profile of catheters, staff also have the perception that catheters are time consuming, and difficult to track in patients. This means that tasks relating to catheters are deprioritised – and often forgotten.



Key challenges

Relating to the problem of non-prioritisation, there were three key challenges observed:

A lack of prompts means catheters are not top of mind – medical settings do not remind staff to check catheters regularly

Catheters are assumed to be time-consuming, so staff put off dealing with them – staff tend to avoid the catheters themselves (including TWOCs) but also the associated paperwork

Staff aren't aware of the catheters under their charge – incomplete documentation means that staff are often not clear on the amount of catheters in any given ward, or why catheters were inserted in the first place

Key opportunities

The challenges outlined here could be addressed in many ways. Here we have provided a starting list of opportunities based on the research, which we hope readers will take and build upon in their own work.

- **Introduce reminders of catheters into the environment,** including **time-sensitive cues** to encourage people to check catheters more frequently
- Find ways to ensure **catheters are signalled as important to staff at all levels** – whilst simultaneously looking to **streamline the bureaucratic processes** around them
- **Create centralised databases and formalised moments to keep track of catheters** – such as integrating them into ward and board rounds to update the wider team

CHALLENGE 1: A LACK OF PROMPTS MEANS CATHETERS ARE NOT TOP-OF-MIND

In most medical settings, there are very few prompts or visual reminders that bring catheters to attention. While there are often posters up on walls to remind staff of training and protocols – and in hospital settings, patient boards listing relevant medical information for their care – rarely are catheters indicated in these spaces. This means that there are few things to prompt people to check a catheter, and no clear visual displays showing up-to-date catheter information – for example, how many catheters there are on any given ward.

Additionally, the catheter bags themselves do not have indication on them of when they need to be changed. Instead, staff often develop informal techniques, such as checking the bag for urine stains to assess when it should be changed.

In these environments, there are also rarely specified catheter 'moments' – set times or occasions to discuss catheters – that allow people to deliberate their usage or remind staff about them. They are only sporadically mentioned when staff discuss general care and are rarely discussed during handover, board rounds or in multi-disciplinary meetings.

This means that staff working in busy environments in which lots of visual and aural cues are competing for attention require a great deal of effort to keep catheters top of mind. Among many distractions and competing priorities, it is easy to forget or deprioritise checking a catheter – especially, as we have seen in the previous chapter, if staff are under the impression that there is relatively low risk involved in catheterisation.

CASE STUDY

Catheters were rarely mentioned in staff meetings in hospitals

Across the different wards we visited, we attended a variety of meetings, including staff handovers, multi-disciplinary meetings, and ward and board rounds. These took place between a variety of different staff roles, and each type of meeting had a different focus and amount of time pressure associated with it.

In all of these meetings, catheters were rarely mentioned, and they were not covered consistently. If at all, catheters were mentioned in passing, generally with the aim of driving discharge. Furthermore, during these meetings the reason for catheterisation was unlikely to be given or questioned; and plans for removal were only discussed if in conjunction with a planned discharge.

CHALLENGE 2:
CATHETERS ARE ASSUMED TO BE TIME-CONSUMING, SO STAFF PUT OFF DEALING WITH THEM

In the world of healthcare, staff are often stretched by emergencies and staff shortages. Keeping to strict schedules is difficult, if not impossible, and staff need to work flexibly and prioritise the care they deliver. We have seen already that catheters are perceived by many staff to be low-risk, which means dealing with catheters is regularly deprioritised in favour of dealing with more pressing needs. Unfortunately, in reality, this means they usually get deprioritised to the point of being completely forgotten.

Catheters are also perceived to be time consuming, both in managing the physical object and filling out the associated paperwork. Paperwork around catheters is seen to be lengthy, and the forms are not always streamlined. Even if the time required is not actually that great, the perception among staff that it takes a while is enough to deter them from checking catheters or filling in the requisite forms. Different settings have different systems for documentation about catheters, such as catheter passports, care bundles and insertion documents, all of which are perceived by staff to take a long time to source and fill in. This perception is fuelled by the fact that there is often not one clearly defined space for catheter-related information across various IT systems and paper documentation, with 'catheters' instead appearing as a category on several different types of documentation.

When forms require input from professionals, there are often blank boxes, which mean staff are not nudged or incentivised to include specific types of information (e.g. type of catheter, dates). This means staff can skip over or omit certain details when filling in forms, which contributes to loss of information about catheters throughout the whole system.

TWOCing is another element of the process that is perceived to take a long time. Healthcare professionals are aware that after removing a catheter, it is important to monitor the patients for multiple hours to ensure they are able to pass urine and that the TWOC has been successful. Staff on busy wards or visiting patients in home are reluctant to commit much time of their care to monitoring and are likely to put TWOCs off as a result. This is especially the case when removing a catheter is seen as less important than meeting other care needs.

CASE STUDY

"I only have time to focus on acute care, I can't deal with catheters"

The statement above was made by a geriatrics consultant who said she would send patients needing catheter care to the outpatient continence clinic. She felt that finding out why a catheter was in place was time consuming owing to a lack of documentations, and the time spent finding this information out was time she taken from when she would otherwise be providing 'life saving' care to a patient.

For other members of staff (mainly consultants and doctors), catheter care was seen as a 'nice extra' compared to more immediate or perceptible threats to patients. For example, we saw a case in which a nurse on an elderly ward was due to catheterise a patient before taking lunch. She was late to take her break and on her return an hour later, she was immediately asked to do an ECG scan and hand out medication. She admitted that she was unlikely to do the insertion until 4:30 that afternoon as it was not seen as a priority.

CHALLENGE 3: STAFF AREN'T AWARE OF THE CATHETERS UNDER THEIR CHARGE.

As previously mentioned, the presence of catheters in a hospital ward is poorly documented and communicated, despite guidance. Details about catheters – time of insertion, time of last check, reason for insertion – are rarely featured on boards or other ward documentation and are rarely mentioned in handovers. There are few designated places within patient records where catheter detail is recorded. Where it does exist it tends to be buried among other information and easily missed.

The absence of reliable recording processes means that staff generally revert to physical checks in order to gather basic information. In order to determine which patients have a catheter, most staff during research walked around wards, checking the sides of beds or under bedcovers. This is a high effort task that was otherwise easily forgotten in a busy ward environment and means that catheters risk being left unchecked for long periods of time.

The problem worsens in community care settings where people are given short appointments and specialist support for specific issues, as opposed to more general care that might include continence. To receive adequate care, patients often need to raise catheter issues themselves and request continence referrals. In these settings, catheter care is usually brushed over and ignored in favour of other health considerations that are perceived to be more pressing or serious.

Staff in both acute and community settings are even more unlikely to know why patients have a catheter in the first place. Unless staff happen to be particularly familiar with a patient's care, it is difficult and time consuming to find out the reason for insertion. Patients regularly arrive onto wards with catheters and without the documentation to tell staff why or when it was originally inserted. This leaves staff unsure what the risks are around removal and requires someone calling around previous wards or places of care to try to piece together the patient's catheter history. Without this information, it is harder to push for removal of the catheter, as staff feel like they are not apprised of all the relevant information to make an informed choice.

CASE STUDY

Geriatric ward with missing information in their documentation system

In one geriatrics ward we visited; handover sheets included a column which specifically dealt with catheters. However, the sheets were not up to date. Whilst they only indicated two patients as having catheters, on a tour of the ward we noticed many more catheters that weren't signalled on the sheets. In addition, one of the two patients who were marked as having a catheter did not – as these details pertaining to TWOCs had not been updated.

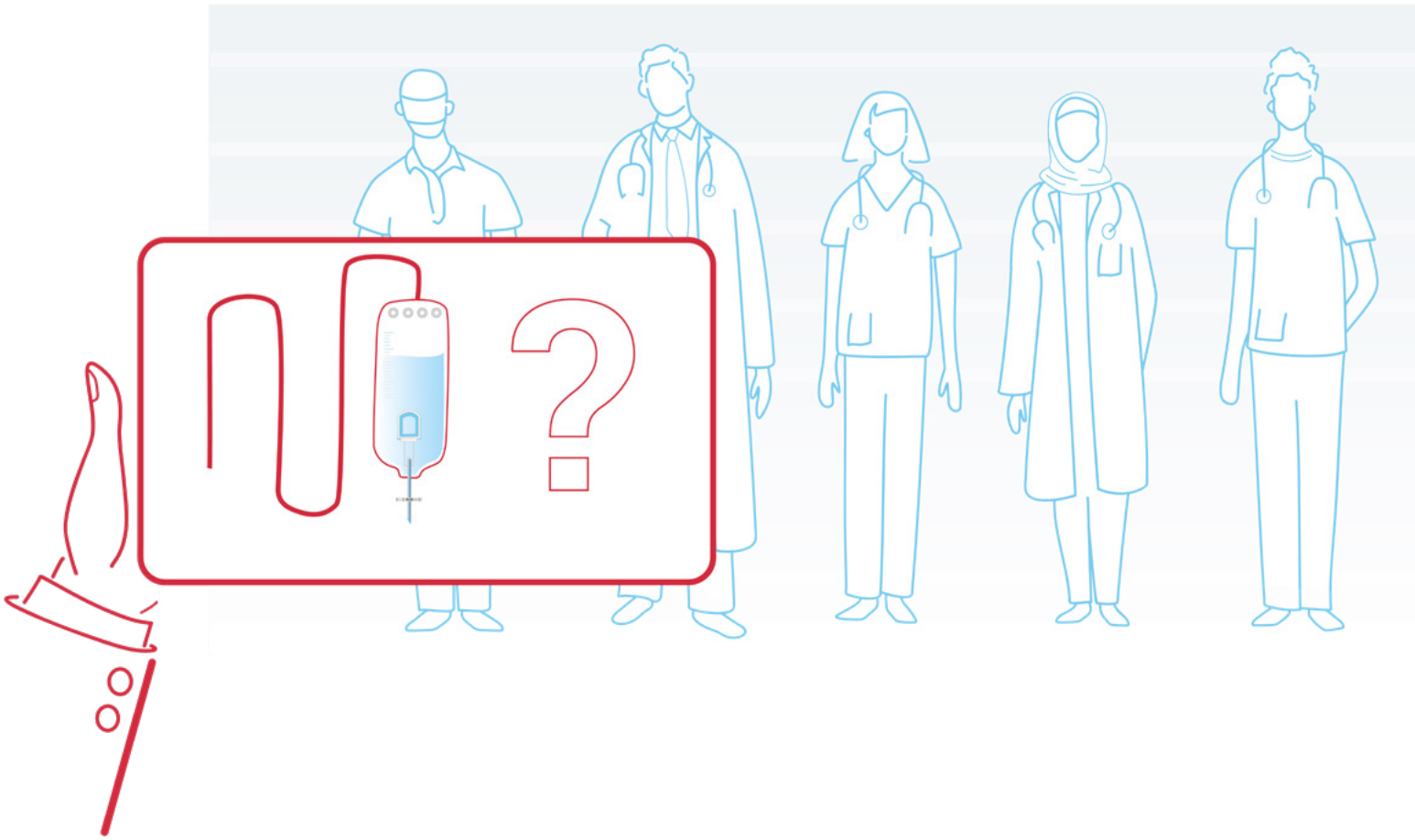
Summarising the challenges and opportunities

There were a number of opportunities linked to the challenges outlined above. The table comprises a starting point to develop further ideas for tackling the wider problems around myths and knowledge in catheter care. We hope readers will be able to build on the opportunity areas outlined in their own work around catheter care.

Challenges	There are opportunities to....
→ **A lack of prompts means catheters are not top of mind –** medical settings do not remind staff to check catheters regularly	→ Introduce prompts or reminders to deal with catheters in the healthcare environment → Include elements of time-sensitivity in prompts – e.g. countdowns, flashing lights or alarms → Add elements that draw attention to the catheters themselves – e.g. lights or sounds that will notify when the catheter needs changing → Integrate catheters into agendas for ward and board rounds, to ensure they are given space and time to be considered by the wider team on a regular basis
→ **Catheters are assumed to be time-consuming, so staff put off dealing with them –** staff tend to avoid the catheters themselves (including TWOCs) but also the associated paperwork	→ Make catheters seem more important in the way they are talked about and handled by senior staff, or the way they are referred to in documentation or disciplinary/ training procedures → Create safeguards that mean catheters are checked at certain times/ points, such as regular checks, spot checks or working group meetings → Introduce grade systems and ward thermometers to indicate how well monitored incidents around catheters are, and create goals for people to aspire to around catheter care → Make catheters data seem like less of a burden by streamlining paperwork, or developing a clearer way of transferring necessary information to the right people
→ **Staff aren't aware of the catheters under their charge** – incomplete documentation means that staff are often not clear on the amount of catheters in any given ward, or why catheters were inserted in the first place	→ Create centralised databases about catheters (dashboards, boards) that can be shared between wards or different healthcare settings → Include catheters in a formalised way in other regular staff meetings (e.g. ward and board rounds) to ensure they are not forgotten and are discussed regularly by all staff involved in the patients care → Find ways to make the presence of catheters more 'visible' in healthcare spaces

PROBLEM 3:
UNCLEAR LINES
OF RESPONSIBILITY

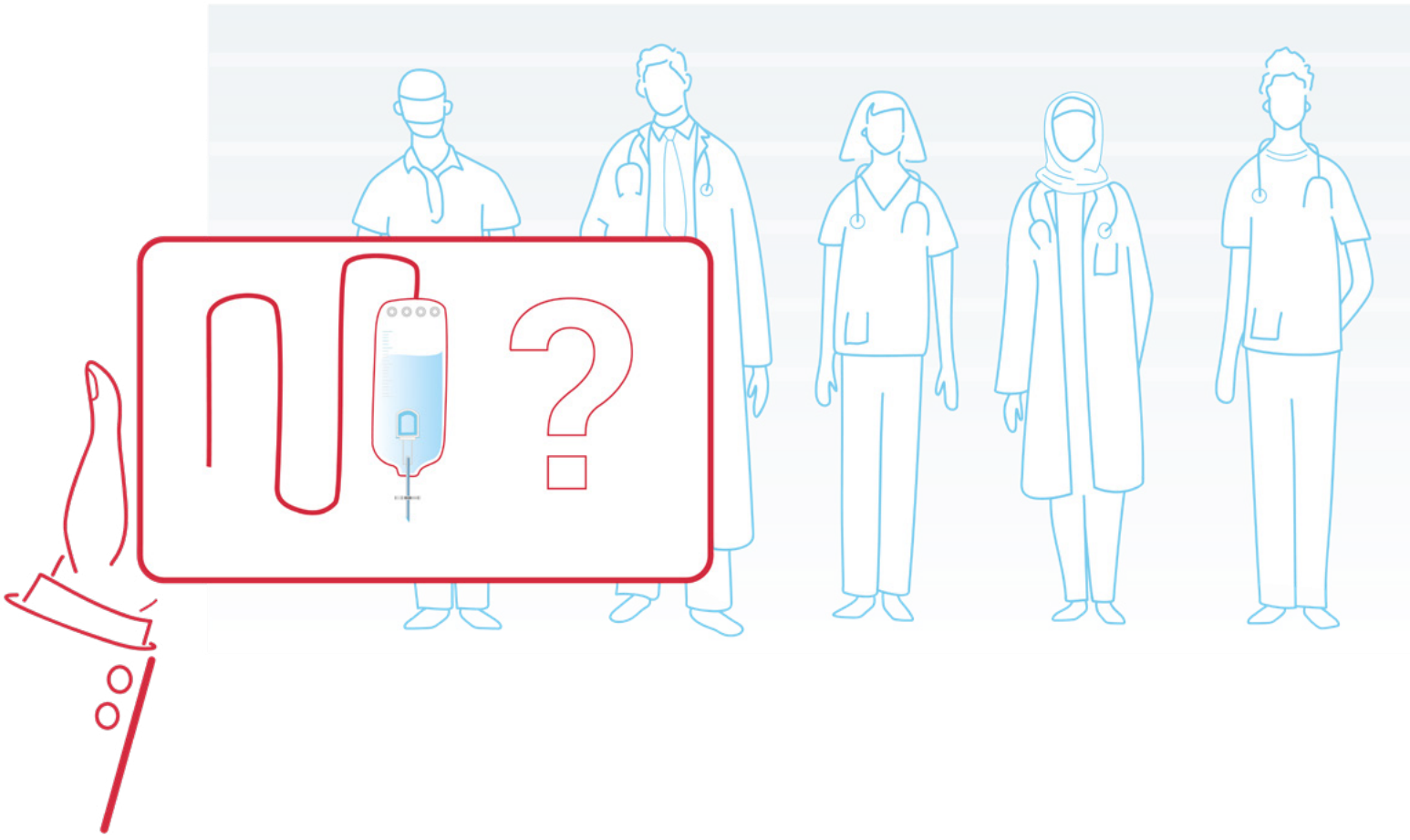
"WHO, ME?"



Introduction

There is no clear line of responsibility for catheter care

Systems and rules around catheter care are ill-defined, which makes it easy for people to avoid catheters. As staff often feel underconfident around catheters, or have the perception that they are time-intensive and unimportant; there is a tendency to avoid dealing with catheters, or to expect another member of staff or another team to step in and take over.



Key challenges

Relating to the problem of unclear lines of responsibility, there were three key challenges observed:

- **The system makes it easy to do nothing, and to blame others when things go wrong –** which means catheter care falls between the gaps and gets overlooked
- **It is unclear who should resolve issues of information erosion –** so delays occur when there is doubt about why a catheter was put in in the first place
- **Lack of accountability around catheter care and incidents –** which meant that these were treated with low urgency and not as seriously as other medical issues

Key opportunities

The challenges outlined here could be addressed in many ways. Here we have provided a starting list of opportunities based on the research, which we hope readers will take and build upon in their own work.

- **Clarify lines of responsibility** around catheter care, and provide **incentives for delivering care** to a high standard
- Create **better channels of communication** around delegation and a sense of teamwork and **shared ownership of catheters across different teams**
- **Improve awareness of the poor outcomes** related to catheterisation and ensure these are **well-documented**

CHALLENGE 1: THE SYSTEM MAKES IT EASY TO DO NOTHING, AND TO BLAME OTHERS WHEN THINGS GO WRONG

Whether in hospital wards or community sites, there is often no clearly assigned role for catheter care, which means it falls between many people, and often gets overlooked. Staff often assume that someone else will pick up catheter care, either at another time or in another setting. Information about catheter care is therefore often transferred on an ad-hoc basis, sometimes face-to-face and at the last minute, rather than following a set system. This means decisions around catheter care are often poorly documented – which means that essential actions, such as changing or emptying catheters, may be forgotten, leading to a greater risk of CAUTIs.

In this environment, it is difficult for anyone to take responsibility for ensuring care is well delivered. When certain members of staff did want to encourage others to check catheters or push for removal, they struggled to do so as the system around them was not supportive of this. If they were not vested with any particular authority, finding out which catheters needed checking or removing was challenging.

The line of responsibility is further confused as the rules and responsibilities around catheters vary from trust to trust, and even within teams. In hospital settings, we observed more junior staff concerned about 'acting out of rank' and making decisions without running these past more senior members of the team. This is of course a valid concern, but there were instances where unnecessary delays were caused. For example, junior nurses explained they would never remove a catheter without written confirmation from a doctor, even if the doctor had asked them to do so face-to-face. In contrast, more senior nurses at the same hospital said they felt confident to decide for themselves when a TWOC was appropriate and would inform the doctor after the fact rather than needing to run the decision past them.

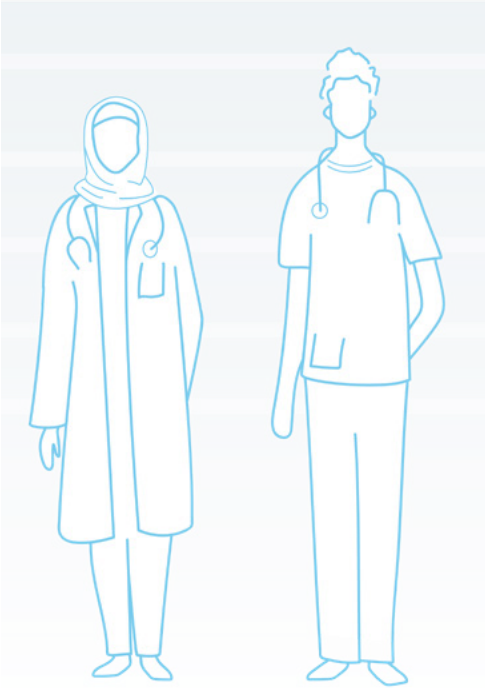
A further complication arises when patients request care from specific members of staff. This is particularly the case in community care, where patients often build relationships with particular health care professionals. In these situations, catheter care becomes the remit of a small number of professionals. As a result, other health care professionals treating the same patient assume favoured carers will check catheters, and so ignore them.

Given that the people responsible for different aspects of catheter care are difficult to identify, and that the process is poorly documented, it becomes very easy for staff to shift blame onto other people. Throughout our fieldwork, hospital staff blamed issues occurring in the community for improper catheter care, while community staff blamed hospital environments. In some cases, the blame for bad catheter care and CAUTIs was placed on the patient themselves, with some staff citing a lack of drinking as the main cause of CAUTIs, and not recognising the role played by regular checking and removal.

CASE STUDY

At a continence clinic, patients refused to let their catheter be changed by anyone other than their favoured nurse

The research team shadowed a continence nurse in a clinic, whilst she received patience to assess continence and change long term catheters. During the course of the morning, patients arrived specifically to see whether she was there. She explained that as she had known these patients for years, she was familiar with the specifics of their care and they trusted her. She said if she wasn't there they were known to refuse care from other nurses, which meant delaying their catheter change and risking a CAUTI. She said this was frustrating as her wider team was highly capable, but they struggled to share the care load equally.



CHALLENGE 2:
IT IS UNCLEAR WHO SHOULD RESOLVE ISSUES OF INFORMATION EROSION

There are significant issues with information erosion as catheters move through the system, meaning that healthcare professionals can't immediately identify why a catheter was inserted in the first place, or when it should be removed. These breakdowns in information notably occur when patients get discharged or checked into hospital, but also when patients move through wards, or even in the community setting, where some staff send patients with catheters to A&E for changes.

Whilst there are generally protocols for each of these transfers, in practice, the information shared about catheters is often minimal, if shared at all. For example, at discharge, best practice advises that unless patients need a catheter long-term and there are no better options available, they should be discharged without catheters. This means a TWOC should be arranged prior to discharge. However, owing to time pressure on beds, this is rarely the case, and many patients due to be TWOCCed prior to discharge leave with a catheter. For patients leaving with catheters, staff should fill out discharge forms and organise referrals to ensure the catheter is cared for and that future HCPs are given complete information regarding the catheter. Staff pointed out, though, that there were regular information breakdowns at this stage owing to time pressure and lack of formalised systems, which meant that future care was compromised.

Where there were information breakdowns, it was seen as time-consuming and onerous to track down information. It was unclear whose responsibility it was to work out why or when a catheter was inserted – which meant that finding out relied on the inherent motivation of individual staff, and was not supported systemically. During fieldwork, only one or two staff were observed to invest time from their working day into tracking back to find out more information about their patients' catheters. In some cases, this helped them resolve issues, but in others, it was too difficult to track down the answers within the given time frame – meaning this job was not always rewarding.

When staff are not sure about the backstory of a catheter, the easiest thing to do is to leave it in place. For many, this seems to be the 'safest' option, as they are concerned with making a decision that goes against one made for appropriate medical reasons earlier on in a patient's journey. This means that, for the most part, catheters without adequate paper-trails are left in place.

CASE STUDY

Patients were sometimes discharged from hospital without all the relevant details for caring for or removing their catheter

Patients discharged from hospital at a particular site were supposed to get referrals to a continence clinic if they needed support with their catheter. Staff at the clinic said they weren't sure exactly what the referral process looked like from the hospital, but knew they didn't always happen correctly, and that some are only referred to part of the care they really need.

At this site, patients were supposed to receive catheter care leaflets if being discharged with a catheter, but some claimed not to have received these, and went home without the information they needed. This led to patients improvising ad hoc solutions to keeping their catheter in, like taping bags to their legs or avoiding showering for weeks. Worryingly, some patients also didn't understand that their catheter needed changing or removing and could end up having it in for months.

CHALLENGE 3:
LACK OF ACCOUNTABILITY AROUND CATHETER CARE AND INCIDENTS

Incidents relating to catheters are not treated with the same gravitas as other medical incidents. During our visits to wards, we observed non-catheter related incidents, such as infected cannulas or untreated bed-sores. When these incidents were noticed, staff treated them with concern and followed certain procedures to manage and report them. This was not necessarily the case for catheter incidents or patients developing CAUTIs, and staff did not cite formalised procedures for reporting catheter incidents. Across all levels of staff, CAUTIs were treated with low urgency. In many cases, this was due to the fact that catheters are not perceived as medication in the same way other medical equipment might be. According to this logic, inserting the wrong catheter, leaving a catheter in too long or letting a CAUTI develop were not 'medical incidents' and were seen as trivial, inconsequential, and usually inevitable.

When issues arise, there is often no formal system for documenting or raising these issues up the line of command. Staff are unsure who is in charge of catheter-related issues and how/when to raise problems to senior staff, particularly in a busy environment. There is no procedure and no given moments or documentation to reflect on such issues. This means that issues get forgotten or brushed under the carpet instead of being resolved, which could lead to patients developing CAUTIs, genital/urethral trauma or other catheter-related complications later down the line.

The lack of apparent responsibility for catheters and accountability when things go wrong encourages staff to continue seeing catheters as risk-free, convenient, long-term solutions. It also disincentivises them from prioritising catheters or putting extra effort into avoiding CAUTIs and removing catheters as soon as possible. It also makes it more difficult to raise catheters up the chain of command – both for specific catheter incidents and for raising awareness of more general catheter challenges. Junior staff may be more nervous to raise catheters with more senior staff if they are seen as less important.

Since there is little accountability and no culture of reporting catheter incidents, staff blame other people when things go wrong. Typically, staff in acute care blame the community for CAUTIs, whilst community staff blame hospitals.

CASE STUDY

In hospitals, we saw doctors, nurses and healthcare assistants walking past instances of poor catheter care without intervening

We observed multiple examples of catheters getting tangled around patients' legs or lying on the floor. In these instances, many staff walked past these without taking action. This could be because they didn't notice, didn't have time, or didn't see these issues as their responsibility – but for the patients the result was poor catheter care with increased risks of CAUTIs.

Summarising the challenges and opportunities

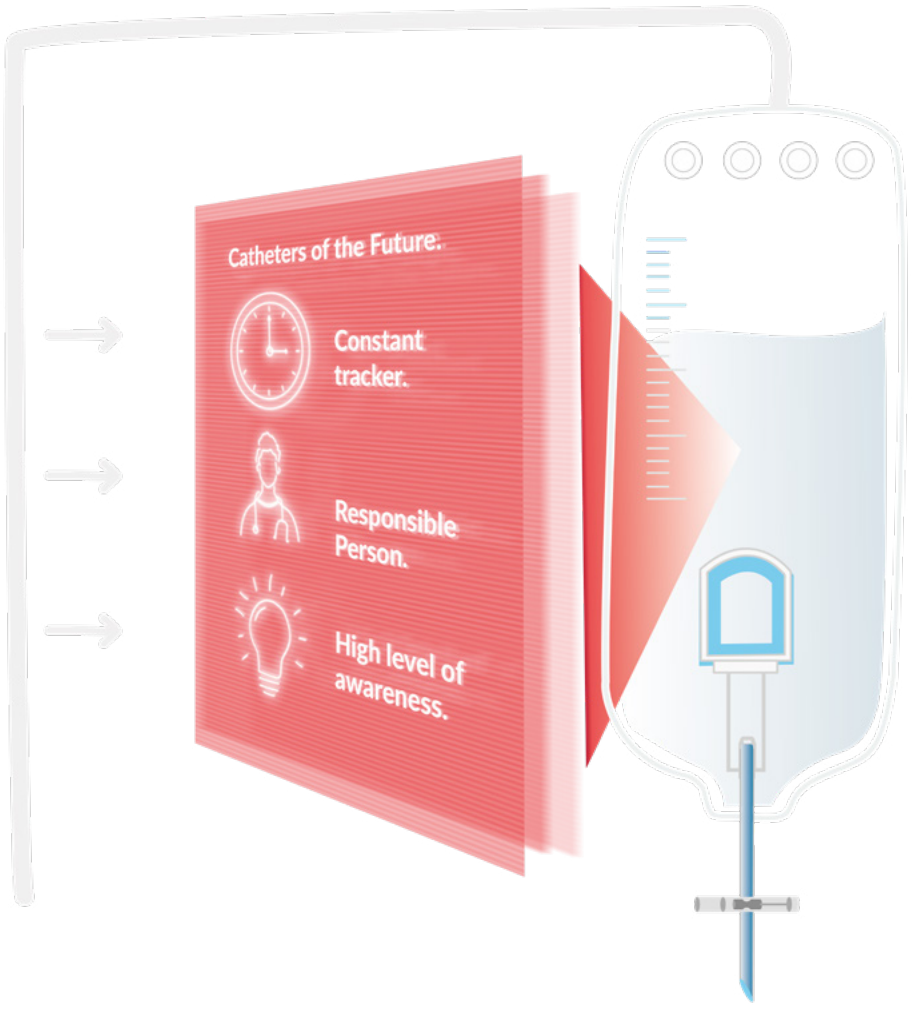
There were a number of opportunities linked to the challenges outlined above. The table comprises a starting point to develop further ideas for tackling the wider problems around myths and knowledge in catheter care. We hope readers will be able to build on the opportunity areas outlined in their own work around catheter care.

Challenges	There are opportunities to....
→ **The system makes it easy to do nothing, and to blame others when things go wrong –** which means catheter care falls between the gaps and gets overlooked	→ Clarify who is responsible for different aspects of catheter care throughout the care journey – even if multiple people are involved → Incentivise staff to deal with catheters through performance reviews or other forms of reward or status (checking, TWOCing, removing) → Assign specific roles to specific elements of the catheter journey so if these are not completed it is clear who should be responsible
→ **It is unclear who should resolve issues of information erosion –** so delays occur when there is doubt about why a catheter was put in in the first place	→ Boost the status around good catheter care and offer rewards for wards/staff for good catheter care → Create better channels of communication around catheter delegation, and systems for holding people accountable when it isn't done properly → Encourage better troubleshooting of information erosion between teams (e.g. community teams and hospital teams) so each side knows what types of information the other commonly needs → Streamline information gathering processes so the most important pieces of information are easily transferred
→ **Lack of accountability around catheter care and incidents –** which meant that these were treated with low urgency and not as seriously as other medical issues	→ Improve systems and documentation to keep staff accountable, clearly signifying who should take control in the event of a bad outcome → Generate better awareness of the consequences of bad catheter care/catheter incidents → Instantiate consequences for staff when they are found not to be dealing with catheters appropriately, such as reminders, refresher training or disciplinary measures

Conclusion

This report aims to inspire action. We hope that the ideas outlined here will be taken forward to improve catheter care. There are multiple angles into the issues, and many more opportunities than are listed here. Going forward, our next phase of work will involve testing a specific bundle of interventions. However, there are many possible ideas here, some of which may work better in different environments. We encourage readers to use the ideas listed in this report as a starting point and find solutions to reduce CAUTI rates the settings appropriate to them.

Our recommendations are that each trust review its processes around catheter care in order to prevent the development of CAUTIs. This may include reviewing training and staff knowledge; environmental cues such as magnets or timers; information transfer and storage systems – including how catheters are spoken about in board or ward rounds; as well as how catheters themselves are stored, tracked and talked about.



The recommendations in our report are summarised here:

*There is **no consistent system** for tracking catheters throughout the care journey, and notifying staff and patients when they need to be removed.*

PROBLEM 1

Myths and lack of knowledge

Knowledge, myths and the witching hour

RECOMMENDATIONS

- **Improve training** given around catheters
- Offer opportunities for staff to **practice catheter-related skills to boost confidence**
- Raise **awareness of the negative consequences of catheterisation**
- **Combat the idea that catheters are an 'easy option'**
- **Develop new norms around catheters** – such as that they should be removed as soon as possible

PROBLEM 2

Non-prioritisation

Out of sight, out of mind

- Introduce **reminders of catheters into the environment**, including **'time sensitive'** cues like alarms or countdowns
- **Raise the profile of catheters as 'important'** amongst staff – whilst **streamlining bureaucratic processes**
- Create **centralised databases** and **formalised moments to keep track of catheters** – such as in agendas in ward or board rounds

PROBLEM 3

Unclear lines of responsibility

Who, me?

- Clarify **lines of responsibility** around catheter care, and provide **incentives for delivering care** to a high standard
- Create **better channels of communication** and a **sense of shared ownership of catheters across different teams**
- **Improve awareness of the poor outcomes** related to catheterisation and **consequences for staff** where these arise