Quality MATTERS
by NHG Group Quality Resource Management
Issue 7, Apr - Jun 2017

What matters to patients

THE Ministry of Health will be conducting the Patient Experience Survey to measure patient experience in public healthcare institutions.

Replacing the Patient Satisfaction Survey, the new study will canvass views from patients in various settings such as inpatient, polyclinic and specialist outpatient settings.

Let's examine the changes.

Why is this important to us as health care providers?

Improving patient experience is one of three dimensions needed to improve a healthcare system under the "Triple Aim". The other two are improving the health of populations and reducing per capita costs of healthcare.

Measuring patient experience can surface system problems and gaps in communication which gives us the opportunity to improve clinical quality, safety and efficiency.

The National Patient Experience Survey in Ireland, for example, uses patients' feedback as the base to drive quality improvement across the healthcare system.

In other countries, where patient experience surveys are conducted, positive patient experiences have been linked to better staff motivation and morale.

Understanding patient experience is a key step in moving towards patient-centred care.

By looking at patient experience, one can assess if patients are receiving care that is respectful of their needs, preferences and values.

Patient Satisfaction	VS	Patient Experience
This examines whether patient expectations about a health encounter were met. Two patients who receive the same care but have different expectations about delivery may give different satisfaction ratings. **Example: It is easy for me to get medical care in an emergency. How strongly do you agree or disagree?**		Assessing this involves finding out whether something that should have happened in a healthcare setting actually happened, or how often it happened. **Example: During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?**

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Where do we start or what should we do?

To improve patient experience, there should be a patient-centric focus in building processes and programmes.

We can start by doing the following:

Engage patients

Health literacy – the degree to which individuals understand and act on health information – is a key component of patient satisfaction and safety, according to the Cleveland Clinic in the United States.

To improve patient understanding, we can apply the "teach-back" technique that involves asking the patient what was just told to him.

Health materials should also be accessible and written simply for easy understanding.

Care for the caregivers

If healthcare organisations want to be patient-centred, they must have an environment in which staff are valued and cared for through a supportive work environment.

Engage staff

One way to develop staff commitment to patient-centred care is to get them involved in coming up with patient-centred processes.

They should have opportunities to give feedback on what needs to be changed in order to deliver the best service to patients.

Act on patients' feedback

Information from surveys and feedback forms can help to spot loopholes in the system. The feedback will help healthcare organisations to make improvements and track outcomes.

Additional sources:
RAND Cooperation, Canadian Institute for Health Information

THIS year's theme for Quality Day - Collaborative Relationships, Co-Creating Value in Communities - was chosen to highlight the importance of effective collaboration between NHG, its patients and partners.

NHG, as the central RHS, works closely internally and with its social providers and community partners to deliver good health outcomes for those living in the area.

The orange, blue and green sections represent patients; healthcare practitioners and providers; and the community respectively.

All three groups work together to serve a common goal with the pinwheel motif symbolising continual movement and evolvement.

NHG institutions have submitted 82 nominations for the Excellence in Action Awards and 98 nominations for the Quality Improvement Awards.

National Healthcare Group · Tan Tock Seng Hospital · Institute of Mental Health · Khoo Teck Puat Hospital · Yishun Community Hospital · Woodlands Health Campus · National Healthcare Group Polyclinics · National Skin Centre · National Healthcare Group Diagnostics · National Healthcare Group Pharmacy

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The project team (above) worked with SHINe in 2014 to improve the process for managing diabetes in IMH wards.

Spreading sweet success

WHILE IMH is known as a tertiary centre for psychiatry care, physical and mental care need to go hand-in-hand to produce the best outcome for patients.

It identified managing diabetes as an area for improvement, and began working with the Singapore Healthcare Improvement Network (SHINe) in 2014 to better its processes.

Background

Diabetic patients pose a unique challenge for IMH.

Maintaining optimum blood glucose levels is challenging for hospitalised psychiatric patients because they may have their meals or diabetic medications at irregular times due to their impaired mental state, or they may consume food brought by their visitors.

This leads to blood glucose level fluctuations despite being on diabetes medication regimes.

Furthermore, blood glucose level changes may be hard to detect as patients may not report symptoms until there are extreme changes, which is when they become symptomatic.

QI Project Spotlight

Before the improvement project began, the institution found that one-third of its diabetic inpatients had experienced blood glucose levels outside of the protocol range of 4.0mmol/L to 20mmol/L which is potentially dangerous as these patients might already be experiencing symptomatic hyperglycaemia or hypoglycaemia.

IMH also did not have a standardised protocol to manage diabetic patients.

These episodes resulted in less effective care and were also costly as they may involve additional treatment and transfers to other acute care hospitals.

The project

IMH formed a 10-member project group which aimed to reduce the episodes of diabetic inpatients experiencing out-of-range blood glucose levels by 30 per cent.

The team developed two key protocols after an extensive review of online literature and diabetes care policies from local and international hospitals.

The first was a routine diabetes care plan, which included a checklist for ward staff to use upon the admission of a diabetic

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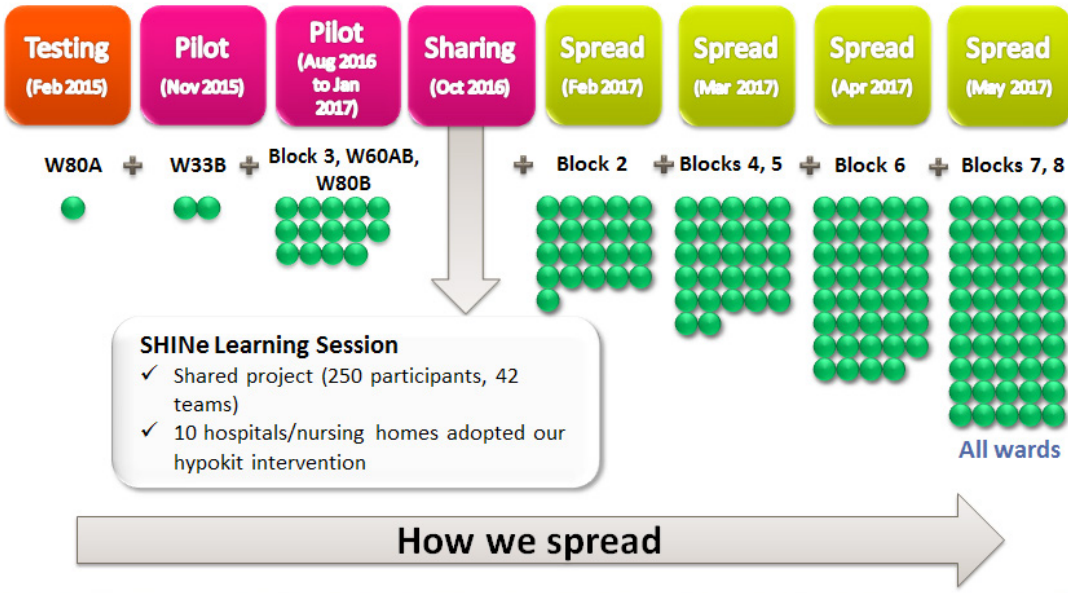


A graphic (left) showing how the project was spread to other wards. The project was tested in Feb 2015 before undergoing two pilot rounds. It was then spread to 50 wards in May this year.

patient. It also provided guidelines on titration of insulin and an education brochure for patients.

The second was a rescue protocol, to help staff manage patients whose blood glucose levels fall outside of the protocol range between 4.0mmol/L and 20mmol/L.

The protocols made it easier for ward staff to manage their diabetic patients, and allowed them to deliver better care, said Ms Irene Lim from IMH's department of Clinical Governance and Quality, who was the programme manager for this project.

"The protocols provided standardisation and consistency," she said.

As with many improvement projects, however, refining the protocols took months of Plan-Do-Study-Act (PDSA) cycles.

Ms Lim said one of the most important changes they made along the way was to track the percentage of patients who received their hypoglycaemic agent – or medication– 30 minutes before or after meal times.

Research shows that diabetic patients who take their diabetic medication and meals too far apart were more likely to experience hypoglycaemia or hyperglycaemia. So tracking this data helped the team determine which patients were not getting their meals in a timely manner – and why.

They could then work with ward staff to come up with a process that can be consistently carried out.

The team also analysed incidents where a patient's blood glucose level readings fell out of the protocol's range. One of the conclusions was that the 1,800kcal diet given to diabetic patients in other hospitals was more appropriate than the 1,500kcal diet given at IMH.

With the help of KTPH dietitians, IMH nurses and F&B colleagues, IMH changed their default diabetic diet to 1,800kcal as well.

Results

These efforts eventually helped them to lower the median of patients experiencing out-of-range blood glucose levels from 33.3 per cent to 16.5 per cent – a 50 per cent reduction – over two years.

The hypokit they developed– that makes it easier for staff to quickly treat patients with hypoglycaemia as part of their rescue protocol – was adopted by 10 other institutions as well.

Furthermore, inpatient transfers to other acute care hospitals due to hypoglycaemic or hyperglycaemic episodes dropped by more than 60 per cent, resulting in savings of around $11,355 annually. Because it treats fewer out-of-range hypocount incidents, IMH also saves another $5,000 annually.

Separately, IMH staff have indicated in surveys that they were more confident in handling patients who experienced out-of-range blood glucose levels.

Spreading success

From one ward, IMH spread the protocol to 50 wards in their hospital over two years.

How did they do it? Positive results from their pilot ward, which validated the project, motivated the new teams to join in.

The core team also invited at least one staff from the piloting

ward to participate in the progress meeting.

When they were spreading the project, the team conducted ward briefings and presentations to new teams, and actively gathered feedback to get buy-in. Project member names and contacts were given out so staff could freely contact them for clarifications.

The team also upped the visibility of the protocols, by pasting posters in wards and stickers on nurses' iPads. They sent out reminder emails, and made the protocol and other relevant materials readily available for staff on the Intranet.

Management's support for spread was sought through platforms such as Improvement and Innovation chaired by the CEO.

In addition, monthly data was sent to the wards so that staff will know if the protocols were working.

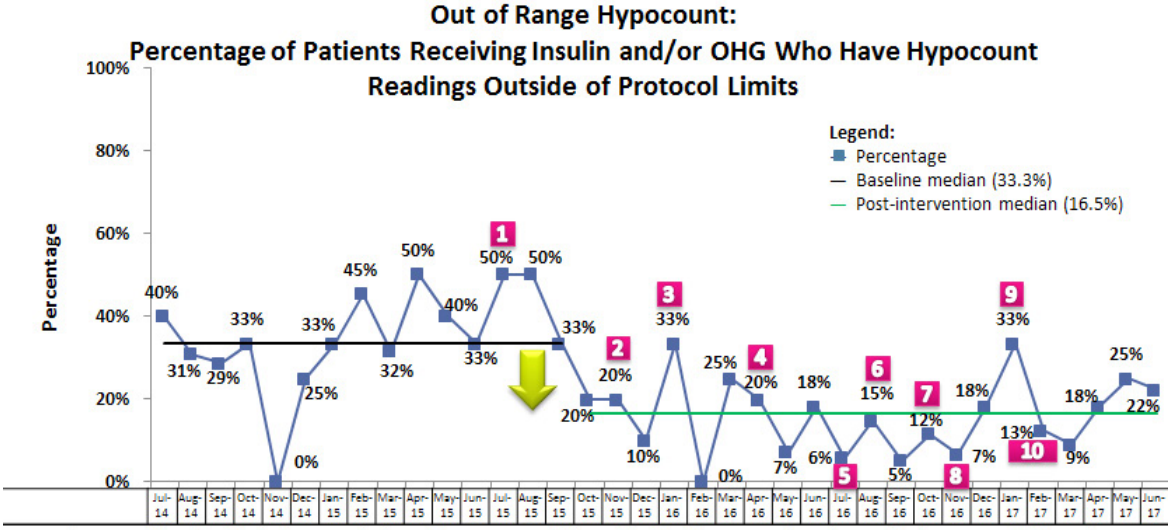
Tips

Ms Lim advised other groups doing improvement work not to give up even when initial data does not show improvement.

She pointed out that one should look to literature or evidence-based practices for help, or seek advice from experts. Because IMH did not have endocrinologists or staff specialising in diabetes care, the project team requested help from TTSH endocrinologists, A/Prof Michelle Jong and Adj A/Prof Daniel Chew, as well as TTSH Programme manager for the Medication Safety Project, Ms Brenda Zhuang. They also received invaluable advice from SHINe's faculty members.

It is also important for the team to go down to the ground to observe project implementation.

"Staff on the ground can tell you a lot about your project," Ms Lim said. "Their input is invaluable."



1: New form to collect data for indicators; Placing of glucometer and data collection form on trolley when taking hypocount (Jul 2015)
2: Revised Rescue Protocol and new Diabetes Care Plan; Ward 33B piloted the protocols (Nov 2015)
3: Revised administration indicator (meals & meds within 30 mins) (Jan 2016)
4: Revised Routine Protocol and Diabetes educational brochure for patients (Apr 2016)
5: Merging of project form with existing hypocount monitoring form (July 2016)
6: Spread to block 3 acute wards; Junior Doctors' Meeting briefing (Aug 2016)
7: Reminder sticker label on med serving device and Diabetes Management poster; Changing diabetic diet from 1500kcal to 1800kcal (Oct'16)
8: Spread to block 3 long-stay wards (Nov 2016)
9: Spread to Wards 80B and 60AB (Jan 2017)
10: Roll-out to the hospital; Junior Doctors' Meeting briefing (Feb 2017)

The green arrow in the chart (left) shows that the median percentage of patients with out of range hypocount readings fell to 16.5 per cent after interventions.

Bundle of interventions found to be effective

- Ward staff used a care plan upon admission of diabetic patients
- Staff used a rescue protocol to manage patients whose glucose fell outside acceptable range
- Default diet of patients was changed to 1,800kcal instead of 1,500kcal
- Project team went on the ground to observe how the project was implemented
- At least one staff from the piloting ward joined the core project team in the initial phase
- Regular communication and feedback sessions were held with ward staff

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Preventing harm

NHG is conducting its fourth Adverse Events Study to establish the prevalence of harm to patients. This is what the study entails.

WHAT is the study's aim?

The study aims to estimate the frequency and nature of harm to patients caused by healthcare management rather than the disease process. It also aims to estimate the impact of adverse events on hospitalisation and costs, as well as identify new threats and weaknesses in the system.

HOW is it conducted?

There will be a retrospective review of medical records, using validated triggers to identify possible adverse events. The adverse event will later be reviewed for causation, preventability and severity.

WHO is involved?

The study will involve NHG institutions. It will not affect the daily work of healthcare staff as most of the medical records review are in electronic format.

WHY is this important?

The type of patients seen by our institutions has become more complex due to the ageing population. The study will help to ascertain if patient safety and improvement efforts have been effective in reducing patient safety incidents in hospitals. It will also help to establish a baseline for adverse events in outpatient settings for NHG institutions.

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