

# Avoid QI pitfalls

FIVE minutes into his lecture about healthcare quality improvement (QI) interventions, Dr Kaveh Shojaania flashed a [cartoon](#) of arguably the world's most complicated pencil sharpener.

In it, a window is opened, releasing a kite that pulls a string that releases moths that chew on a shirt, and so forth, until a cage is finally lifted, releasing a woodpecker that sharpens a pencil.

The point of showing the cartoon sketched by American cartoonist Rube Goldberg – who is known for depicting complicated gadgets that perform simple tasks in convoluted ways – was to illustrate the complexity of medication processes in hospitals.

Such “messy processes” make it even more important to have a theory that guides you through QI interventions, noted [Dr Shojaania, a visiting HMDP Expert on patient safety and quality](#), in a recent lecture at TTSH.

Yet this is often missing from QI projects, he noted, in his talk titled: “Common missteps in the design and execution of quality improvement interventions (even among experts)”.

“You need to articulate theory for your intervention. How is this intervention going to work? What is the mechanism?” said Dr Shojaania, who is also the director of the Centre for Quality Improvement and Patient Safety at the University of Toronto and the Editor-in Chief of [BMJ Quality & Safety](#).

“Sometimes articulating a theory makes you decide to abandon an idea – and that’s a good thing,” he said.

Instead, QI projects commonly assume a certain problem without

understanding it properly – and then jump to solutions.

Common interventions include increasing education (which assumes a knowledge problem), or doing an audit and compiling performance reports (which assumes the problem is largely under the control of the recipients of the report).

Another favourite intervention is a new policy. “We need a new policy like we need a hole in the head,” he quipped, to laughs from the audience.

Other common missteps include having poor measures, where interventions lack “fidelity measures” or leading indicators to accurately show if the intervention is playing out like the QI team hoped it would.

Dr Shojaania also singled out not doing [Plan-Do-Study-Act \(PDSA\) cycles](#)

authentically as another familiar problem for QI. Data collection is often too infrequent for PDSA.

“So many people say they do PDSA, but a year later they have the same idea they had at the beginning,” he said. “There’s no evidence they refined anything.”

At all times it is important to keep an eye on the big picture and not let interventions overcomplicate the process, Dr Shojaania cautioned.

Referring to the pencil sharpener cartoon, he said: “In QI, even if you’re a fairly thoughtful and experienced clinician, you might only know part of the process.

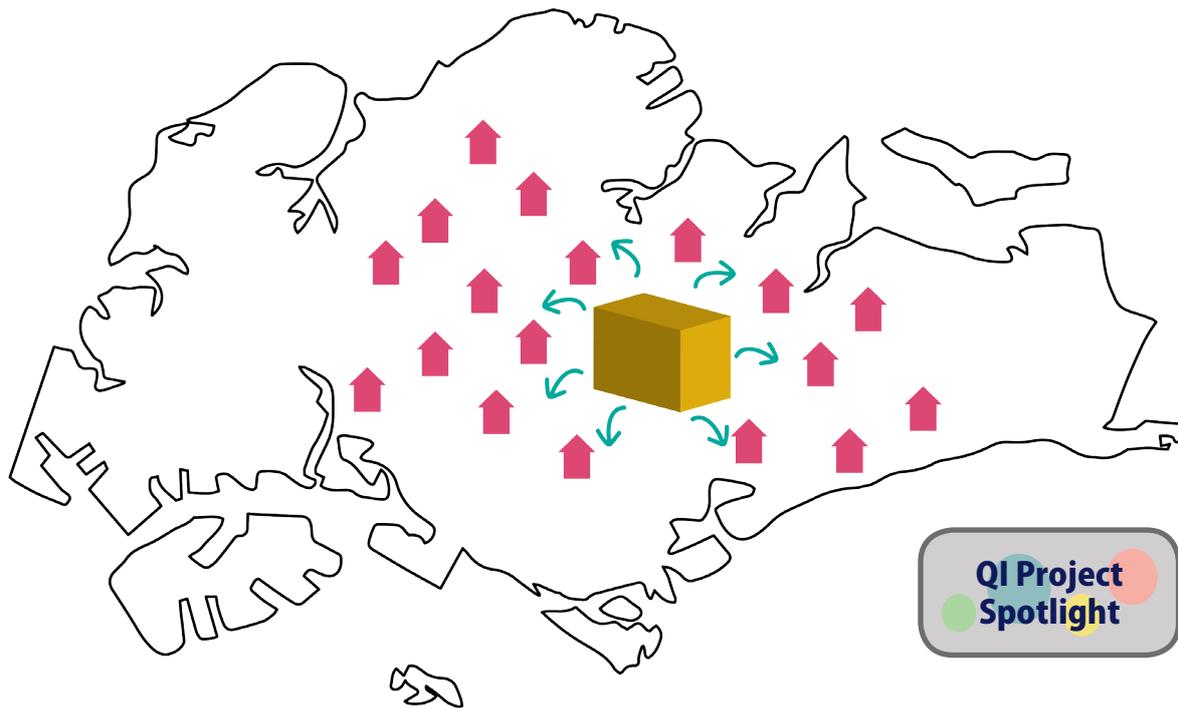
So it might seem reasonable to ‘add another woodpecker’... but sometimes when we make the process more complicated we may actually cause the next accident.”

## Common intervention missteps

- Jumping to a solution before understanding the problem
  - Not articulating a theory for the intervention
  - Not asking if the “active ingredients” of intervention address the causes of the target problem
- Poor measures, not using right “lead indicators”
- Not doing PDSA authentically
  - Infrequent data collection
  - Not knowing what to test
  - Not refining initial ideas



Photo: SHINe



WHEN the Ministry of Health launched the [Intermediate and Long-Term Care \(ILTC\) Drug Subsidy Scheme](#) in January 2015, NHG Pharmacy (NHGPh) was faced with a challenge.

The scheme allowed ILTC patients to get subsidised medications, without having to see doctors from polyclinics and public hospitals, if their condition can be managed by their ILTC doctor.

For NHGPh, that worked out to an additional 11,500 prescriptions, which had to be accommodated with existing resources.

tions, the ILTC workload was limited to about 50 prescriptions per week per nursing home. This allowed branch managers to balance their prescription load by allocating manpower to process prescriptions during lull periods.

But the implementation of this solution brought about other difficulties.

The team quickly realised, for instance, that many ILTC patients were on medications that were not available in the polyclinics. As such, these patients still had to travel to hospitals to get the medications.

management and input from ILTC providers – decided to transfer patients from 17 nursing homes to be served by NHGPh’s Pharmacy Services Centre (PSC), or central pharmacy.

The process of transfer took place from July 2015 to April 2016. It was done in phases, taking into account each nursing home’s workload and requirements.

Centralising the supply of medication through the PSC allowed NHGPh to ease the workload on the polyclinic pharmacies, expand the list of medications available to ILTC

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But keeping in mind the benefit to patients, NHGPh’s project team liaised with numerous parties to take on the extra workload, while continuously improving the process.

The first thing it did was to assign its outpatient pharmacies at their nine polyclinics to serve their ILTC partners, by working out with their clinic pharmacy managers and ILTCs a schedule of drug collections.

To manage the extra prescrip-

NHGPh also found out that some nursing homes increased the time between doctor consults, so as to spread out prescriptions and accommodate the drug collection schedule. This potentially compromised treatment for the patients.

Another concern for the project team was sustainability, with an already high workload in the polyclinics and more ILTC providers requesting for partnership.

To address the above challenges the team – with support from

partners, and remove limits on prescription numbers.

“The main challenge for this project was accommodating different requirements from different stakeholders,” said Ms Siti Mukarramah Talib, one of the project’s team leaders. “We had to get buy-in from our staff and ILTC partners.”

NHGPh’s project team efforts were recognised with a Gold Award in the team category at the 4P7R Reward and Recognition Scheme held in November 2016. 🐾



The partnership between the Families for Life (FFL) council and TTSH's Families for Care (FFC) was launched by (from left) FFL council chairman Ching Wei Hong, FFC chairman Mark Chan, Senior Minister of State for Health and the Environment and Water Resources Amy Khor, NHG board member Anita Fam, NHG GCEO Philip Choo and TTSH CEO Eugene Soh. (Photos courtesy of SPC 2016)

## Activating patients in healthcare

WHEN his mother was first diagnosed with dementia, Mr Chua Joo Ee felt lost. Without knowing how to cope with her condition, he likened himself to a “headless fly”.

But today, not only is he a [full-time caregiver](#) to both his mother and father – who suffers from kidney failure – he is helping other caregivers in their journey with dementia.

“There are many who could be at a loss when their loved ones are diagnosed with dementia,” said Mr Chua, 43, who actively participates in the Alzheimer’s Disease Association caregiver support group. “We should step forward and share their burden.”

For his efforts, he was named as one of the winners of the [Singapore Patient Caregiver Award](#), handed out by Dr Amy Khor, Senior Minister of State for Health and the Environment and Water Resources.

The awards were part of the [Singapore Patient Conference](#) (SPC) held last October (2016) at TTSH. The fourth and largest SPC so far attracted close to 1,400 participants over numerous exhibitions and conferences spanning several days.

Through the conversations and stories shared by patients, caregivers and experts, the SPC aims to show how patients and their families can be [more engaged, empowered and activated](#). A relationship with the healthcare team can then be built based on trust.

Research has shown that engaged individuals and families actively working with their healthcare teams have better outcomes, noted Dr Khor in her [SPC address](#).

Their level of engagement can be gauged through the Patient Activation Measure (PAM) scores – a scale that indicates the knowledge,



skills and confidence essential to managing one’s own health (see next page).

SPC 2016 also brought numerous learning lessons from the panel of speakers, many of whom



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related their experiences running programmes, surviving difficult medical conditions or taking care of patients.

Relating to her own experience as a caregiver, NHG Board member [Anita Fam stressed that caregivers – who are often overlooked – should not feel alone in their journey](#). The best antidote to a burnout, she suggested, is to build a caregiver team with one's family, rather than handling everything alone.

Former stroke patient Au Yong Haw Yee shared the power of [re-framing a negative situation into a positive, life-defining one](#). He recalled his experience of recovering from a stroke to set up a fund – administered by TTSH – that provides assistance to low-income families

for stroke rehabilitation therapy.

The conference also recognised volunteer initiatives such as [As-sisi Hospice's No One Dies Alone \(NODA\)](#), a programme that provides companionship to dying patients who have no family or close friends to accompany them in the final hours.

Under NODA, caring for a dying patient means just being present, listening deeply and not trying to have a pre-determined outcome, said programme coordinator Jacqueline Fisher.

"We all want to do something: What can I do? How can I make it better?" she said. "But a lot of our work is just being with someone and accompanying them on their final journey." ☺

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The Singapore Patient Action Awards winners were all smiles at the Singapore Patient Conference.