

# Achieving Sustainability of Quality Improvement Projects

Augustine Kumah<sup>1</sup>, Hillary Selassi Nutakor,<sup>2</sup> Abdul-Razak Issah,<sup>3</sup> Emmanuel Obot,<sup>4</sup> Lawrencina Antoinette Aidoo,<sup>5</sup> Jerry Selase Sifa,<sup>6</sup> Shelter Agbeko Bobie<sup>7</sup>

<sup>1</sup>Quality Directorate, Nyaho Medical Centre, Accra, Ghana

<sup>2</sup>Department of Addiction, Recovery and Rehabilitation, Accra Psychiatric Hospital, Accra, Ghana

<sup>3</sup>Department of Health Information Management, College of Health, Yamfo, Ghana

<sup>4</sup>Department of Anaesthesia, 37 Military Hospital, Accra, Ghana

<sup>5</sup>Department of Nursing, Ghana Health Service, Cape Coast, Ghana

<sup>6</sup>Department of Public Health, University of Ghana Hospital, Accra, Ghana

<sup>7</sup>Department of Community Health, Ensign College of Public Health, Kpong, Ghana

Address correspondence to Augustine Kumah (augustinekumah@gmail.com).

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## LEARNING OBJECTIVES

1. Introduce the concept of sustainability as a critical element of quality improvement (QI) projects.
2. Share Nyaho Medical Center's experience in sustaining the gains made from QI projects.
3. Describe key elements of sustaining improvement projects.

## INTRODUCTION

According to the Institute for Healthcare Improvement, sustainability is the act of locking in progress and continuously building upon it.<sup>[1]</sup> Sustaining improvement is not a project that has an endpoint.<sup>[2]</sup> Integrating a change into the fabric of daily work requires constant effort.

Continuing quality improvement (QI) interventions after a formal QI project ends is crucial. The improvement methodology encourages testing new ideas locally and on a small scale to establish their effectiveness. Testing should be the initial step in establishing high-impact change ideas across the broader system for ideas that demonstrate improvement. It is common for QIs to face the challenge of maintaining changes over time.<sup>[3,4]</sup>

## HOW SUSTAINABILITY CAN BE ACHIEVED

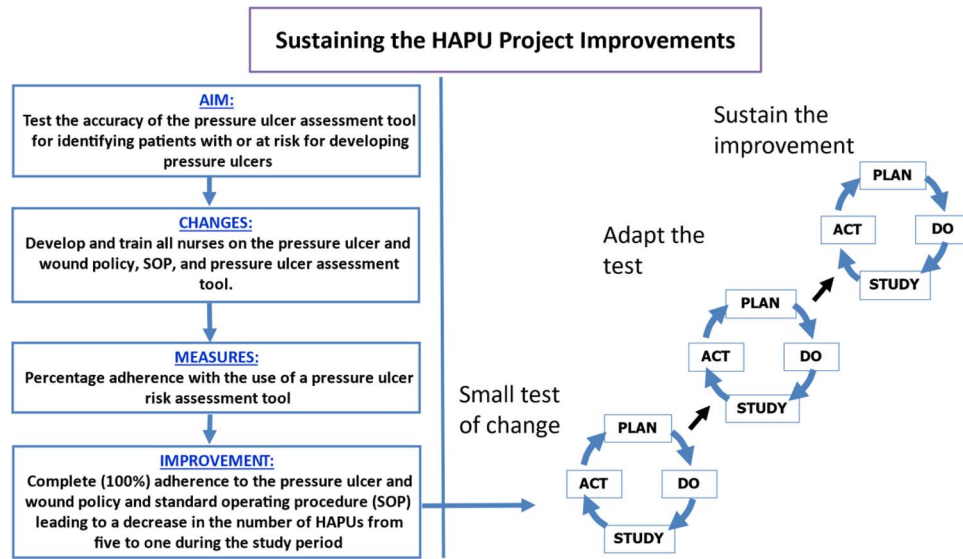
Improvement and change require effort.<sup>[5]</sup> After testing and implementing ideas contributing to improvement, it is demoralizing to see a return to old performance levels. To maintain the improvements, it is necessary

to take some simple but necessary steps to ensure that the system and performance do not return to old patterns.<sup>[1,4,6,7]</sup>

In May 2021, Nyaho Medical Center (NMC) recorded an incident regarding a hospital-acquired pressure ulcer (HAPU) of a patient. A facility-based assessment of the incident was conducted. A fishbone diagram was carried out to determine the factors contributing to the HAPU incident.<sup>[8,9]</sup> The plan-do-study-act (PDSA)<sup>[10]</sup> cycles (Fig. 1) were used to test the identified change ideas, and run charts were used to analyze and evaluate the improvements made over time. A total of 83 patients were assessed with the pressure ulcer assessment tool during the study period. There was a significant improvement in the number of HAPUs reported (decreased from five to one) during the study period. Complete (100%) adherence to pressure ulcer assessment and standard operating procedures (SOPs) was achieved for all patients, facilitating the improvement in HAPUs.<sup>[8]</sup>

We took the following practical steps to ensure that improvements were sustained.

1. **Celebrate staff:** NMC understands the importance of celebrating individuals to reinforce successful, positive behavior. When we celebrate staff, it makes us know that the change or the process we have now is better than what we had before; that's why we're celebrating.
2. **Remove the old systems:** To prevent people from resorting to the old system, we eliminated any possibility of using the previous one.



**Figure 1.** Sustaining the gains of the hospital-acquired pressure ulcer (HAPU) quality improvement project at Nyaho Medical Center.

- 3. Keep measuring:** We developed a metrics dashboard to track whether we still achieve our original aim (outcome measure). This helped us to investigate any deterioration in the system of performance immediately.
- 4. Put the approach into practice:** We embedded the measurement systems permanently and developed SOPs to reflect the changes in practice. This involved training staff on the new approaches, systems, and SOPs

**Table 1.** Key elements of sustainability

| Elements of Sustainability   | Description   |
|--|---|
| Supportive management  | <ul style="list-style-type: none"> <li>– Gives mandate to the QI team.</li> <li>– Creates an enabling environment for QI work to flourish.</li> <li>– Addresses bottlenecks that necessitate resource allocation, major re-designs, or buy-in from other departments.</li> <li>– Allows the QI team to regularly inform management about the team’s progress, successes, and challenges.</li> </ul>   |
| Robust and transparent feedback systems  | <ul style="list-style-type: none"> <li>– Provides access to data-driven development and testing of change ideas.</li> <li>– Enables the QI team to review data regularly for PDSA measures, observations, process, outcome, and balancing measures.</li> <li>– Facilitates multidisciplinary audits of poor performance (process and outcomes) and feedback on improvement without pointing fingers.</li> <li>– Enhances learning from both successes and failures.</li> </ul>  |
| Shared sense of systems  | <ul style="list-style-type: none"> <li>– The system will not run efficiently if each part of it is considered separately.</li> </ul>  |
| Building structures that incorporate successful changes into local systems and eliminate old processes from redesigned systems | <ul style="list-style-type: none"> <li>– Have a multidisciplinary team.</li> <li>– Have a leader with team-building skills and ear of management.</li> <li>– Have regular meetings (e.g., weekly or every other week).</li> <li>– Review data regularly and make decisions based on the data.</li> <li>– Document changes and learning so others can understand and sustain changes in your absence.</li> <li>– Disseminate results, celebrate and build will across the system.</li> <li>– Spread QI work to other parts of the system.</li> <li>– Engage management to support evidence-based policymaking, programming, and planning.</li> </ul> |
| Ongoing measurement  | <ul style="list-style-type: none"> <li>– Helps us to continue tracking whether we are achieving our original aim (outcome measure).</li> </ul>  |
| Culture of continuous improvement  | <ul style="list-style-type: none"> <li>– Helps to sustain change or improvement.</li> </ul>   |
| Formal capacity-building programs  | <ul style="list-style-type: none"> <li>– Such as QI training, seminars, or conferences on quality improvement.</li> </ul>   |

and onboarding newly appointed staff on these approaches.

5. **Create limitations within the system:** We created limitations to encourage employees to adhere to the new process.
6. **Continually strive for improvement:** At NMC, we understand that our work environment is constantly changing. It is easy for new processes to become outdated and not meet the expected level of performance. We, therefore, ensure a culture of continual improvement to ensure that the gains made are sustained.

## KEY ELEMENTS OF SUSTAINABILITY

QI improvement sustainability involves maintaining the gains of the implemented changes to become the new norm or process. Understanding how to ensure sustainability is of fundamental importance to prevent wasted effort. Table 1 describes key elements of sustainability that should be incorporated into the QI project design at the earliest stage of its development.

## SUMMARY

Maintaining the gains of an improvement project is considered sustainability, even when there is staff and organizational turnover. To prevent wasted effort, it is crucial to understand how to ensure sustainability and the factors that affect it. Including these in the QI project design at the onset of the project's development is essential.

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