

Improving Effectiveness and Efficiency in Measuring and Reporting Training Evaluation

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INTRODUCTION

With the increasing take up rate of nursing courses conducted in the Nurse Development Unit (NDU) the team had to look into streamlining the post training evaluation processes. The process includes manual sorting, data entry and report generation which is tedious and time consuming; the process is also prone to mistakes due to human errors. The project is initiated to enhance both participants and administrators' user experience with an improved streamlined process.

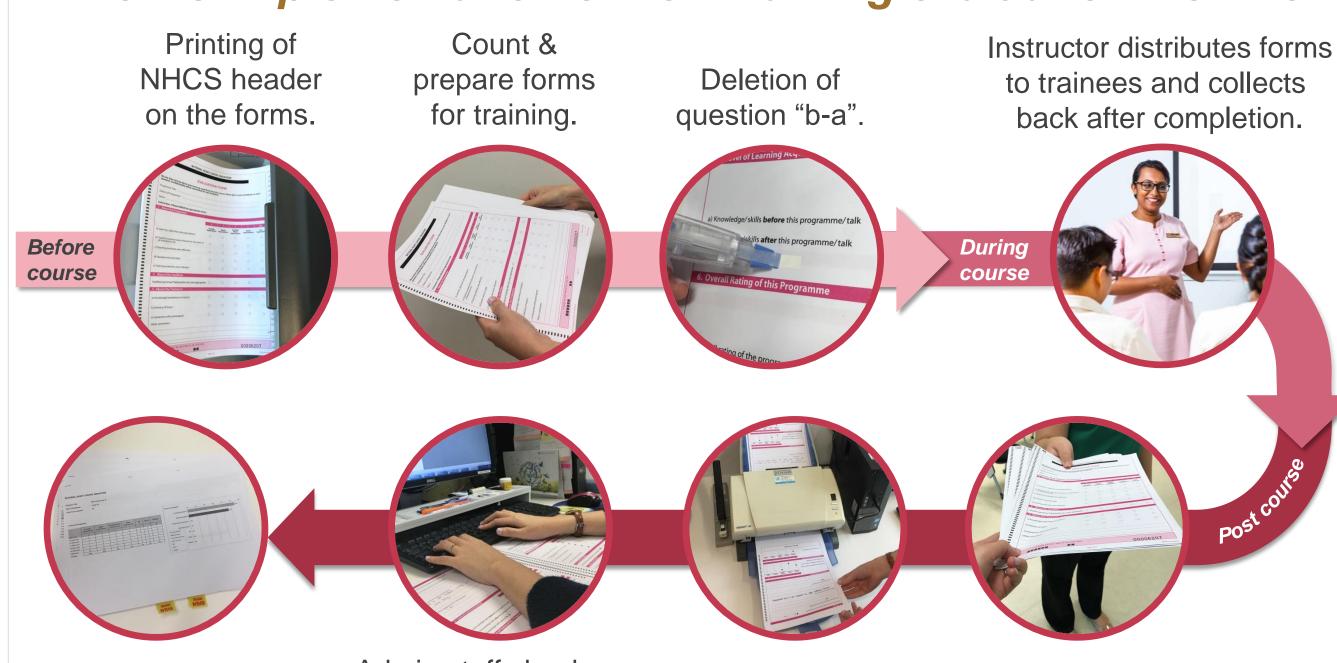


Project Aims

- To reduce the process time for reports by 50%.
- To achieve 100% on-time report submission from 6 weeks to 3 weeks.

PROBLEM

Prior to implementation of new training evaluation workflow:



Admin staff prints the report and submit to the **HOD** for signature.

Admin staff checks the raw data to ensure results were captured accurately before manually keying in the feedback.

Warms up OMR machine and scan the forms to generate report.

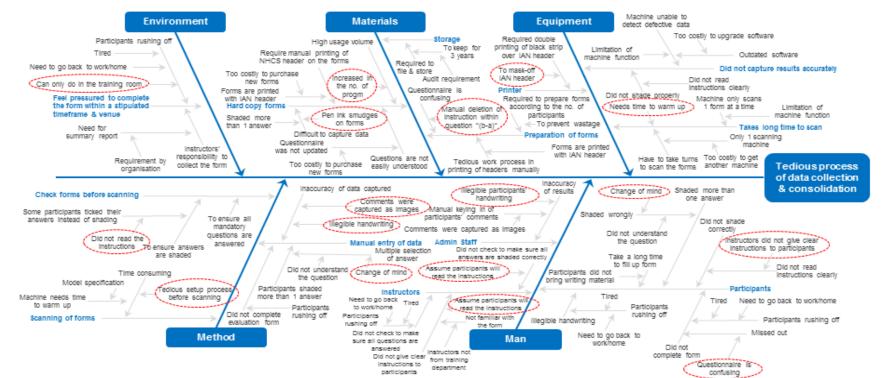
Admin staff collects forms from trainers and ensure that answers were shaded properly.

Current Challenges

- High scanner maintenance and upgrading cost
- Depleting forms due for bulk purchase
- Increase in operating & manpower costs

METHODOLOGY





PDCA Cycle

Cause and Effect Analysis Diagram

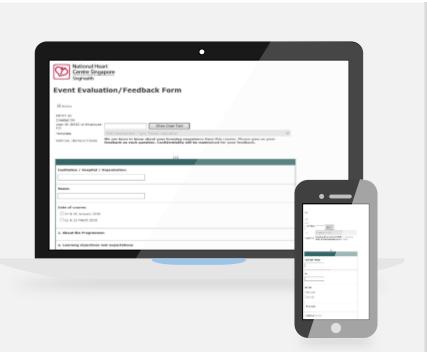
- The PDCA problem solving methodology was used for the continuous improvement effort.
- The Cause and Effect Analysis was used to identify the possible root causes.
- A decision matrix was used to verify and validate the final root causes.
- The team brainstormed and assessed the feasibility of various new evaluation platforms to address the root causes.

Final Root Causes

- Illegible handwriting
- Participants did not read instructions
- Pen ink smudges on forms
- Manual deletion of misleading instructions
- Printing of NHCS header

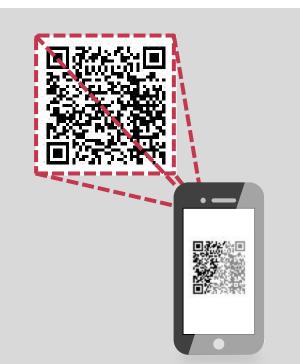
SOLUTIONS

Innovative Solutions



Digitized Platform

- Online forms
- Customized to NDU's needs
- Questions can be customized



QR code/URL **Enabled**

- Trainees follow QR code or URL to perform evaluation online.
- Online feedback is easily accessible via mobile phones



Digital Report Generation

 Training report can be downloaded online to ease analysis of data

New improved workflow process



Admin staff create the QR code and URL and laminate the instructions for the trainer.

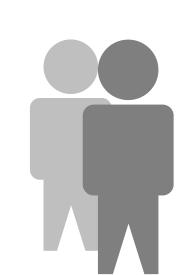
Trainees scan the QR code or enter the URL using their mobile phones to submit their evaluation.

Admin staff download the data from the system and generate the report.

Admin staff submit the report to the management for review within 3 weeks.

RESULTS

Tangible Results



Manpower cost avoidance per year:

\$4275 -



Materials & hardware cost savings per year:

\$8654 -



70% -

reduction of time spent on generating the report.



52%

increase in qualitative feedbacks received.



100% on-time report submission from 6 weeks to 3 weeks.

Intangible Results

- Positive feedbacks from trainers and trainees
- Admin staff satisfaction with less time spent on documentation
- Met organisation's goal to be "paperless"
- Increase efficiency in workflow
- Frees up physical storage space
- Prevents erroneous data and reduce input errors

CONCLUSION

Through digitization of the evaluation system, the project has moved in tandem with NHCS' vision of becoming a Digital Hospital. Utilizing technology resulted in reduction of cost, environmentally friendly and improved the efficiency of workflow.