What Types of Nudges Are Used in Quality Improvement Projects? A Review of the Grey Literature

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INTRODUCTION

While Malaysian healthcare quality improvement (QI) projects use **"nudges"** to modify choice architecture and influence behaviour while preserving autonomy [1,2], their systematic categorisation within QI remains underexplored.

OBJECTIVE

To systematically categorise QI project interventions in Malaysian health facilities into nudge-aligned and non nudge, adapted from the **Nuffield Intervention Ladder** (NIL) framework [1,3].

METHODOLOGY

STUDY PROFILE

Retrospective Grey Literature Review

37 QI projects published in the MOH Q Bulletin (2019-2025)

513 Interventions extracted and analysed

DATA COLLECTION / ANALYSIS

Document Review

Interventions were systematically extracted from the 'Strategies for Change' and 'Model of Good Care' sections.

Content Analysis

Independent dual-reviewers mapping of interventions against the adapted NIL framework. Third reviewer to resolve any discrepancies.

Results were analysed using Descriptive Statistics (Frequency and Percentage)

STUDY INSTRUMENT

ADAPTED FROM THE NUFFIELFD INTERVENTION LADDER [1,3]

Categories	8 Levels of Intervention	Operational Definition
Non Nudge	8 Do Nothing	Passive observation
Nudge-aligned	7 Provide info	Provide facts and education
Nudge-aligned	6 Enable Choice	Provide tools or resources
Nudge-aligned	5 Default Change	Pre-selection of default
Non Nudge	4 Guide (Incentives)	Incentivize through rewards and recognition.
Non Nudge	3 Guide (Disincentives)	Disincentivize through accountability and penalties
Non Nudge	2 Restrict Choice	Restricting options
Non Nudge	1 Eliminate Choice	Compulsory requirements that prohibit all other alternatives.

RESULTS

INTERVENTIONS DISTRIBUTION

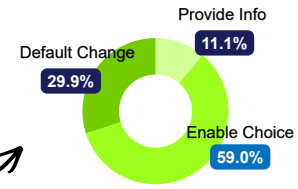
74.7% Nudge-aligned (*n* = 383) | **25.3%** Non Nudge (*n* = 130)

e.g. Meeting	Do Nothing 2.7%	NUDGE
e.g. CME, CNE	Provide info 21.3%	
e.g. New checklist	Enable Choice 26.9%	
e.g. Dedicated counter	Default Change 26.5%	
e.g. Reward system	Guide (Incentives) 1.8%	
e.g. Audits	Guide (Disincentives) 6.2%	
e.g. Withold prescription	Restrict Choice 6.0%	
e.g. Privileging	Eliminate Choice 8.6%	

STUDY CHARACTERISTICS

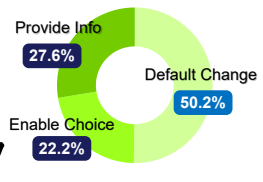
Patient Targeted Interventions

4.0% Non Nudge (*n* = 6) | 96.0% Nudge-aligned (*n* = 144)



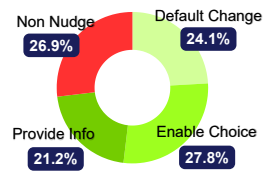
Healthcare Worker Targeted Interventions

34.2% Non Nudge (*n* = 121) | 65.8% Nudge-aligned (*n* = 239)



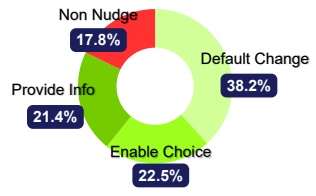
Standard Achieved

Nudge-aligned (*n* = 310) | Non Nudge (*n* = 114)



Standard Not Achieved

Nudge-aligned (*n* = 73) | Non Nudge (*n* = 16)



FACILITY TYPES

	Nudge-aligned	Non Nudge
Health Clinic	85.2%	14.8%
Hospital	70.9%	29.1%
Dental Clinic	72.7%	27.3%
Community-based	76.0%	24.0%

QUALITY DOMAINS

	Nudge-aligned	Non Nudge
People-centred	86.7%	13.3%
Effective	84.5%	15.5%
Safe	65.9%	34.1%

Nudge-aligned *Non Nudge*

DISCUSSION & CONCLUSION

High nudge dominance (74.7%): Malaysian QI projects heavily favor "soft" interventions, preserving autonomy than coercive mandates.

"Default change" predominated for HCWs (50.2%): Consistent with [4], "default change" are highly effective for clinicians as they leverage heuristics.

Strength: To our knowledge, this is the first study to systematically map Malaysian QI interventions using the Nuffield Intervention Ladder.

Limitation: Findings are limited by the retrospective nature of the grey literature review.

Recommendation: To conduct longitudinal research to see if nudges create lasting habits.

Conclusion: While Malaysian QI projects predominantly leverage nudges, their guiding framework remains unclear. Systematically integrating nudge principles into QI methodology could enhance the effectiveness and sustainability of future initiatives.

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