

A Multidisciplinary QI Project to Implement Criteria Led Discharge to the Acute Medical Admission Unit in Children's Health Ireland at Crumlin

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Introduction

- Criteria led discharge (CLD) of patients can improve patient flow, reduce length-of-stay (LOS) and improve patient experience (1, 2).
- CLD was launched for gastroenteritis, viral-induced wheeze (VIW), bronchiolitis and minor head injury at two sites in Children's Health Ireland (CHI) in June 2024, including Starling Acute Medical Admission Unit (AMAU).
- Though previously piloted, CLD has not yet been incorporated into practice in Irish paediatric hospitals.
- The aim of this project is to use QI methodology to support and assess the implementation of CLD of a short-stay, high-turnover paediatric admission unit.

SMART Aim

- 90% of children who are eligible for CLD on Starling AMAU will be commenced on the CLD pathway, with 90% of children who are commenced on the CLD pathway successfully being discharged by the MDT team within 12 months of the launch of CLD.
- There will be no increase in readmissions within 48 hours during the study period. There may be an increase in early-in-the-day discharges and reduction in length-of-stay.

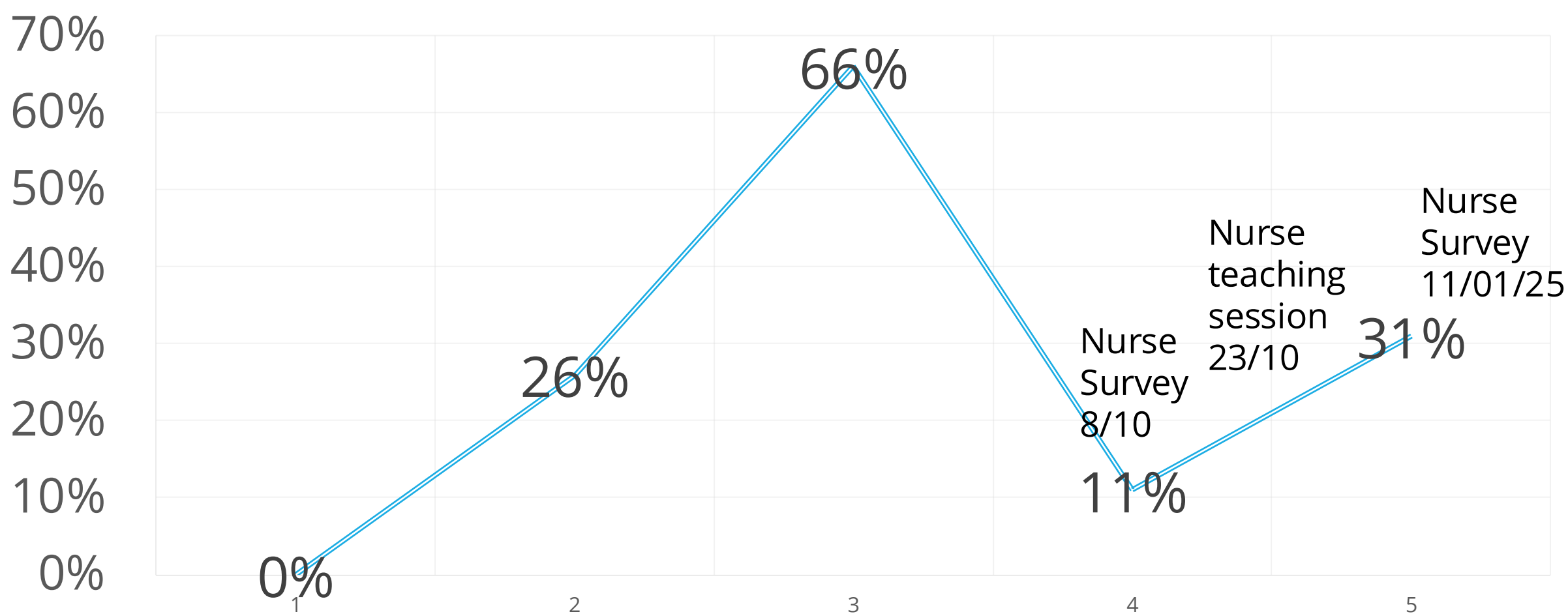
Methods

- Project approved by the CHI clinical Audit Committee.
- Four Plan-Do-Study-Act (PDSA) cycles during study period June 2024 - Jan 2025.
- Retrospective data on admissions to AMAU was collected on suitability of patients for CLD, with rate of uptake and completion of CLD recorded by IPMS and a ward diary. Excel was used to collate the anonymized data.
- Discharge diagnosis was confirmed using G2 Speech software, and IPMS to identify readmissions.
- Feedback about attitudes to CLD from nursing staff was gathered using an anonymous E-questionnaire (SurveyMonkey) between PDSA cycles, followed by an education session to address concerns and increase staff confidence.

Interventions between PDSA Cycles

- Assembly of MDT team - Consultants, CNM 2/1, CEF, Clinical Fellow, SHOx2
- QI training for project team.
- Supportive culture-training and supervision of senior nursing staff (CNM1/2 and CEF) by clinical fellow, followed by training of staff nurses by nurse managers.
- Posters in ward office; CLD packs with templates & patients information leaflets.
- Presentation by Clinical Fellow & CNM2 to general paediatric consultant/NCHDs.
- Survey of nursing attitudes, followed by targeted nursing education delivered by SHOs/CNM2/CEF.

CLD INITIATED IN SUITABLE CASES RUN CHART



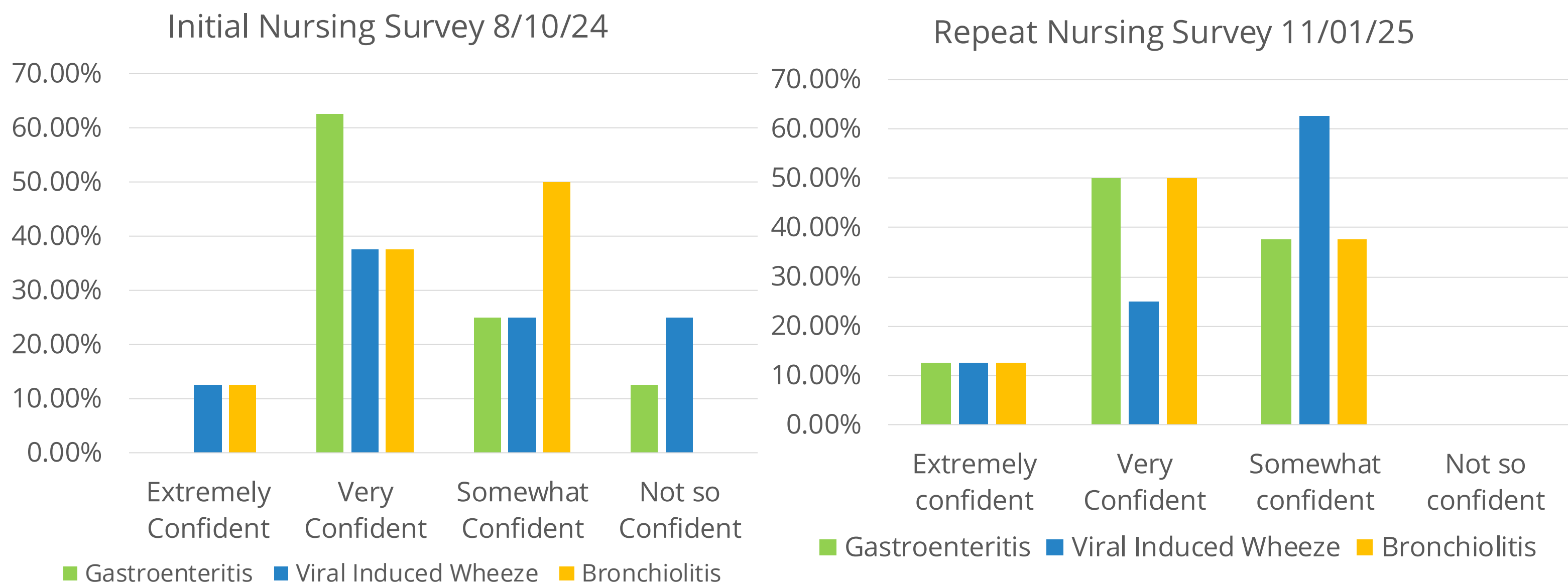
Baseline (1 month)	Cycle 1 (3 weeks)	Cycle 2 (2 weeks)	Cycle 3 (2 weeks)	Cycle 4 (3 weeks)
May-24	03/06/24 – 20/06/24	05/08/24 – 18/08/24	02/09/2024 – 15/9/2024	25/11/2024 – 15/12/2024
8 CLD appropriate	24 CLD appropriate	6 CLD appropriate	9 CLD appropriate	29 CLD Appropriate

BASELINE DATA AND 4X PDSA CYCLES

	Baseline (1 month)	Cycle 1 (3 weeks)	Cycle 2 (2 weeks)	Cycle 3 (2 weeks)	Cycle 4 (3 weeks)
	03/06/24 - 20/06/24	05/08/24 - 18/08/24	02/09/2024 - 15/9/2024	25/11/2024 - 15/12/2024	
	May-24				
	N (%)	N (%)	N (%)	N (%)	N (%)
Total Starling Admissions	51	74	24	38	85
Transfers Out	2%	7 (9%)	4 (17%)	5 (13%)	2 (2%)
Total Starling Discharges	50 (98%)	67 (91%)	20 (83%)	33 (87%)	83 (98%)
Patients Suitable for CLD	8/50 (16%)	24/67 (36%)	6/20 (30%)	9/33 (27%)	29/83 (35%)
Conditions:					
- Gastroenteritis	3/8 (38%)	13/24 (54%)	1/6 (17%)	0/9 (0%)	5/29 (17%)
- Bronchiolitis	3/8 (38%)	3/24 (13%)	1/6 (17%)	0/9 (0%)	18/29 (62%)
- Head Injury	0/8 (0%)	1/24 (4%)	0/6 (0%)	0/9 (0%)	0/29 (0%)
- VIW	2/8 (25%)	7/24 (29%)	4/6 (67%)	8/9 (89%)	3/29 (10%)
CLD initiated	0/8 (0%)	6/24 (25%)	4/6 (67%)	1/9 (11%)	9/29 (31%)
CLD completed in those initiated	0	6/6 (100%)	4/4 (100%)	1/1 (100%)	9/9 (100%)
- Gastroenteritis	0	4/6 (67%)	1/4 (25%)	0/1 (0%)	0/9 (0%)
- Bronchiolitis	0	1/6 (17%)	0/4 (0%)	0/1 (0%)	7/9 (78%)
- Head Injury	0	0/6 (0%)	0/4 (0%)	0/1 (0%)	0/0 (0%)
- VIW	0	1/6 (17%)	3/4 (75%)	1/1 (100%)	2/9 (22%)
Readmissions < 48 hours	0	0	0	0	0

Results

NURSING CONFIDENCE SURVEY



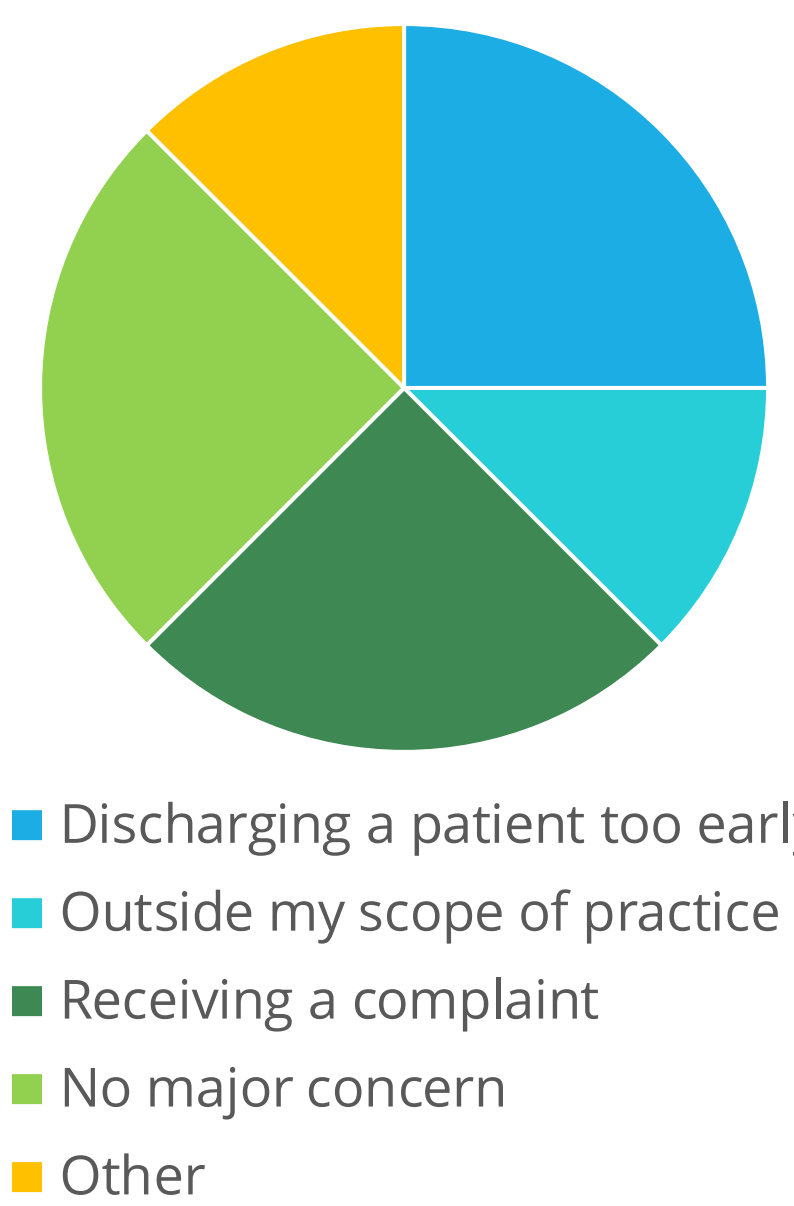
	Extremely confident	Very Confident	Somewhat confident	Not so confident
n=8 Gastroenteritis	0/8 (0%)	5/8 (63%)	2/8 (25%)	1/8 (13%)
VIW	1/8 (13%)	3/8 (38%)	2/8 (25%)	2/8 (25%)
Bronchiolitis	1/8 (13%)	3/8 (38%)	4/8 (50%)	0/8 (0%)

	Extremely confident	Very Confident	Somewhat confident	Not so confident
n=8 Gastroenteritis	1/8 (13%)	4/8 (50%)	3/8 (38%)	0
VIW	1/8 (13%)	2/8 (25%)	5/8 (63%)	0
Bronchiolitis	1/8 (13%)	4/8 (50%)	3/8 (38%)	0

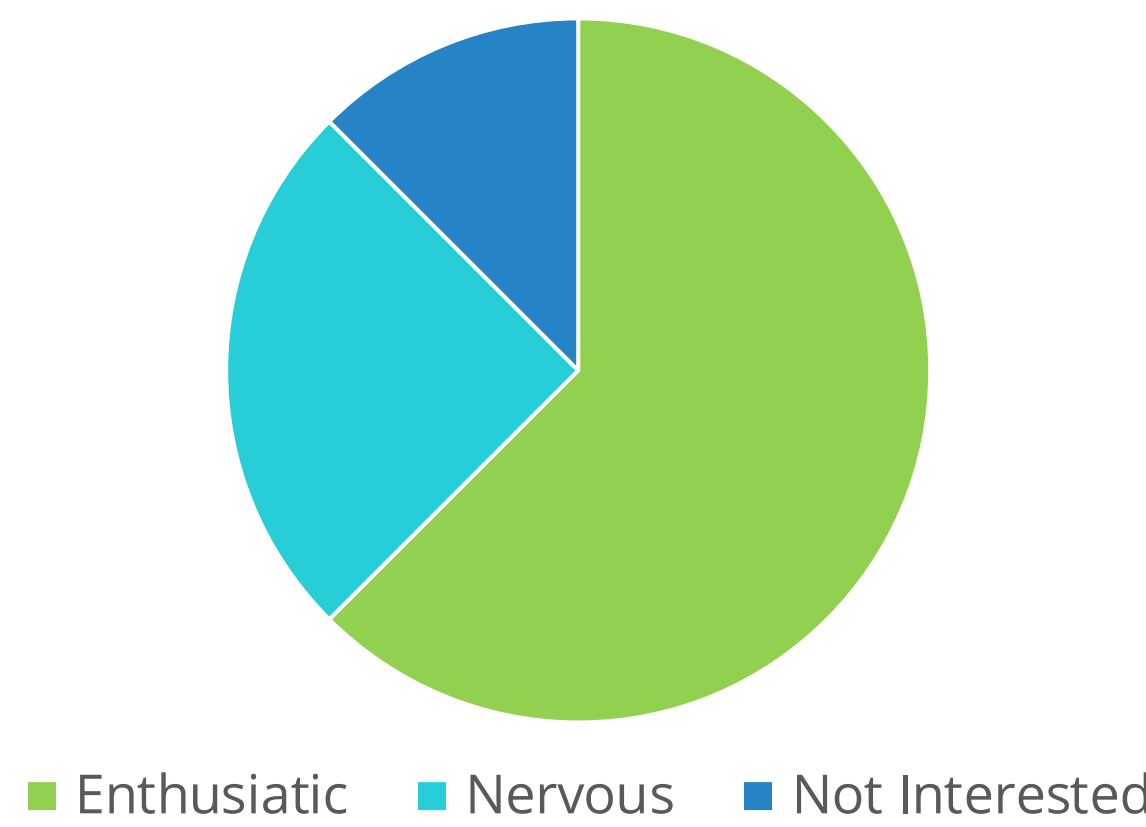
Main Points

- We noted variation in nursing confidence with each conditions.
- There was a decrease in compliance with CLD with increasing patients in winter months and changeover in PDSA cycle 3
- There was an increase at PDSA cycle 4 after nurse teaching and surveys.
- There were no readmissions.

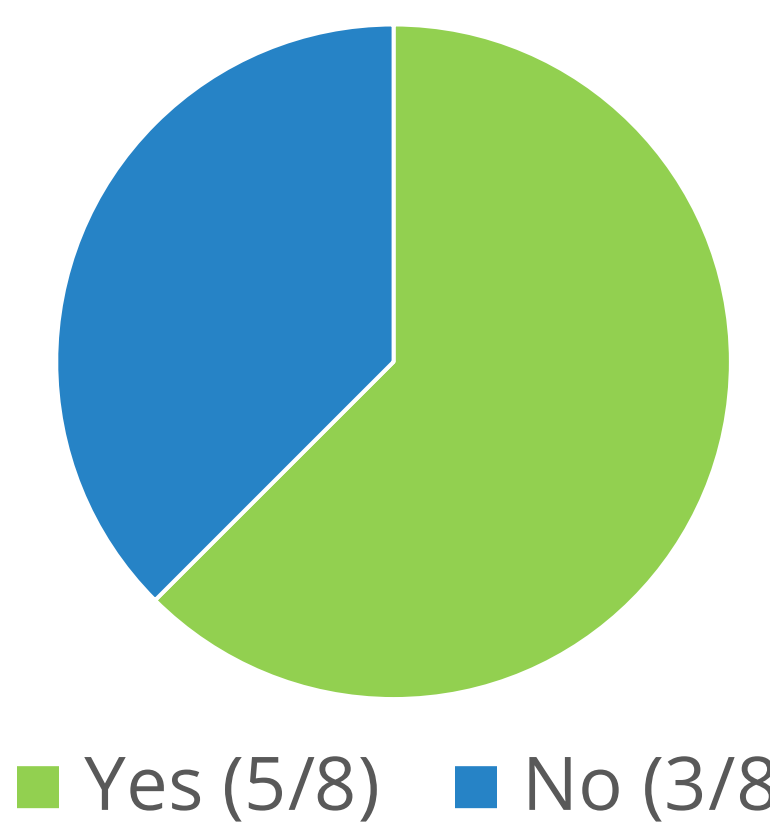
Main Nursing Concern About CLD



Overall feeling towards the introduction of CLD



Did you feel you have sufficient training?



Nursing Survey 11/01/25 n=8

Conclusions

- There are many cases where CLD is appropriate in our setting.
- There is reduction in compliance with CLD noted at staff changeover and with increased quantity of patients.
- Nursing staff are overall enthusiastic about the implementation of CLD, but there are areas where confidence could be improved with further support and training.
- CLD appears safe and feasible in our setting given low readmission rates and high rates of completion once initiated.

Challenges/ Goals

- Inspiring confidence among staff who are apprehensive with further training.
- Sustaining use of CLD with changing staff.
- Continuing to implement change when service becomes busier.
- Collaborating with other wards and sites to extend the use of CLD.

References:

- Lees L, Solihull A. Implementing nurse-led discharge. *Nurs Times* 2011; **107**(39): 18-20
- National Health Service. Criteria-Led Discharge. 2024. Available at: <https://www.england.nhs.uk/urgent-emergency-care/improving-hospital-discharge/criteria-led-discharge>