

Oncology Nurses' Experience with Cerner Clairvia™: A Case Study from Qatar

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Abstract:

Background: Implementation of the clinical information system is driving significant changes in Qatar's healthcare system. Nursing workforce optimization initiatives help nurse managers to enhance the staffing efficiency and consequently improve the quality of patient care and reduce manpower costs.

Purpose: The purpose of this study was to evaluate oncology nurses' experience with the provided training before, during, and after Clairvia™ implementation in a tertiary cancer center in Qatar.

Methods: A 15-item online survey was shared with nurses working in inpatient and ambulatory care units at the National Center for Cancer Care & Research (NCCCR).

Findings: The survey was shared with 150 nurses, 72 of them responded (RR 48%). Most respondents were female, registered nurses, and working in inpatient units. Overall, implementation of Clairvia™ has positively improved nursing scheduling (90%) (n=63). Vast majority of nurses in NCCCR were satisfied with the provided training pre (90%), during (91%), and post (91%) Clairvia™ implementation.

Conclusion: The nurses' perception and level of satisfaction with Clairvia™ were excellent after almost one year of partial implementation. Clairvia™ appears to improve staffing efficiency and scheduling process and therefore improve patients' safety and quality of care.

Introduction:

Implementation of the clinical information system is driving significant changes in Qatar's healthcare system. Nursing workforce optimization initiatives help nurse managers to enhance the staffing efficiency and consequently improve the quality of patient care and reduce manpower costs.

The primary goals of implementing Electronic Workforce Management System (e.g., Clairvia™ are; to improve the efficiency and effectiveness of scheduling activities, promoting participation, choice and fairness among staff, enabling evidenced based decision Making and standardizing the collection of data for monitoring, managing and improving staffing practices.

Clairvia™ is designed to optimize every moment of the care cycle by empowering nurses and nursing managers to deliver the right resources to every patient and facilitates the assignment of the best qualified caregiver based on the patient's needs and continuity of care. As a part of Clairvia™ project, more than 200 nurses were trained in NCCCR, nursing informatics coordinators were available on the go-live period to provide hands-on support, and after going live; the support continued by conducting several refreshing sessions to achieve the best use of the solution.

Purpose:

The purpose of this study was to evaluate oncology nurses' experience with the provided training before, during, and after Clairvia™ implementation in a tertiary cancer center in Qatar.

Methodology:

A cross-sectional study was conducted in 2016 utilizing a 15-item, anonymous, piloted, self-administered online survey was shared with nurses working in inpatient and ambulatory care units at the National Center for Cancer Care & Research (NCCCR). The survey was distributed to a convenience sample of 150 nurses over two weeks using SurveyMonkey®.

Findings:

The survey was shared with 150 oncology nurses working at the NCCCR (total number of nurses is 200+), 72 of them responded (RR 48%). Most respondents were female, registered nurses, and working in inpatient units.

Gender	Female	75%
	Male	25%
Job Role	RNs	54%
	CNs	33%
	HNs	13%
Area of Practice	In-patient	52%
	Ambulatory	43%

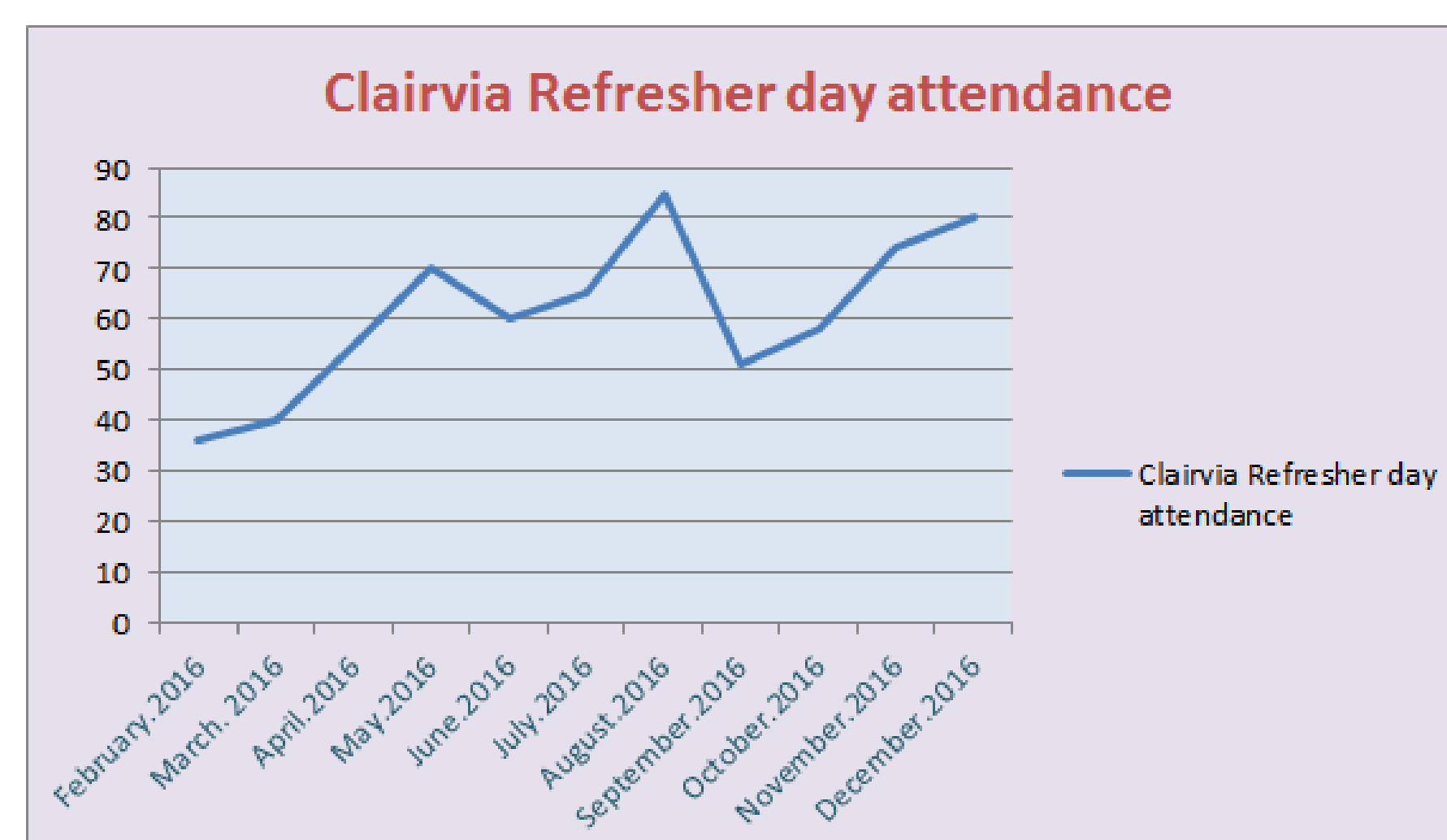
Table 1. Participants Demographic Data

I was trained to use Clairvia by	Cerner	Nursing Informatics	No Training	مؤسسة حمد الطبية Hamad Medical Corporation HEALTH • EDUCATION • RESEARCH • بحوث • تعليم • تربية		
	37%	60%	3%	إدارة المعلومات التمريضية Nursing Informatics Department		
The overall quality of Clairvia training I received was high.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
	46%	36%	11%	1%	6%	
Your level of satisfaction with Clairvia training provided by Cerner.	Highly Satisfied	Satisfied	Neutral	dissatisfied	Highly dissatisfied	NA
	19%	43%	16%	1%	1%	20%
Your level of satisfaction with the training provided by Nursing Informatics department before implementation	Highly Satisfied	Satisfied	Neutral	dissatisfied	Highly dissatisfied	
	39%	51%	16%	1%	1%	
Your level of satisfaction with the support provided by Nursing Informatics department (during go-live)	Highly Satisfied	Satisfied	Neutral	dissatisfied	Highly dissatisfied	
	56%	35%	7%	1%	1%	
Your level of satisfaction with the training provided by Nursing Informatics department (Refresher courses after implementation)	Highly Satisfied	Satisfied	Neutral	dissatisfied	Highly dissatisfied	NA
	49%	42%	4%	1%	1%	3%
Your level of satisfaction with the support provided by your direct manager/supervisor	Highly Satisfied	Satisfied	Neutral	dissatisfied	Highly dissatisfied	
	42%	46%	10%	1%	1%	
Online Materials (Video and brochures) were appropriate and useful for Clairvia implementation	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
	38%	51%	6%	1%	4%	
Implementation of Clairvia has positively improved my work schedule.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
	51%	38%	6%	1%	4%	

Table 2. Survey results

Conclusion:

The nurses' perception and level of satisfaction with Clairvia™ were excellent after almost one year of partial implementation. Clairvia™ appears to improve staffing efficiency and scheduling process and therefore improve patients' safety and quality of care.



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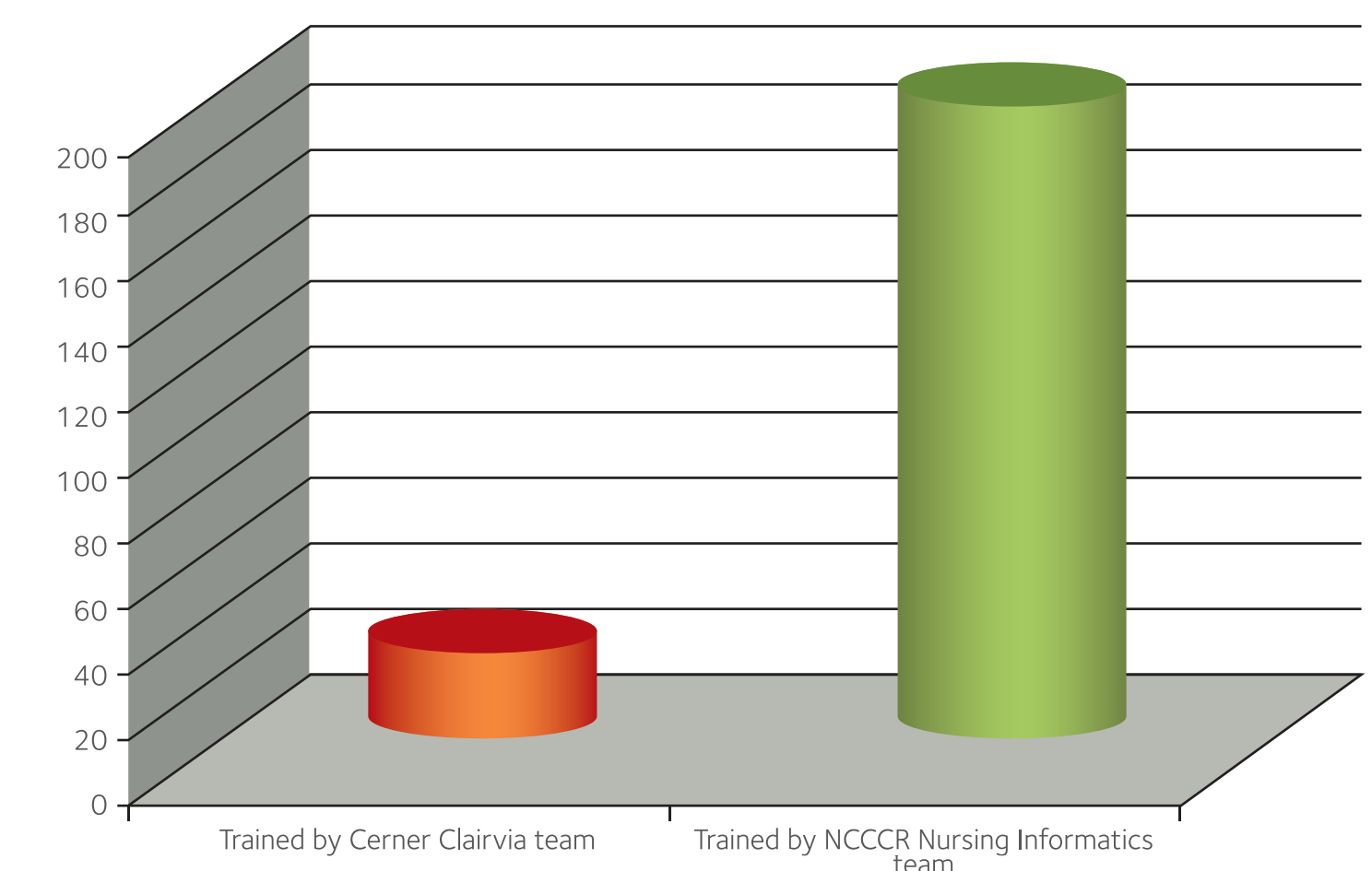


Fig. 2: Clairvia training providers

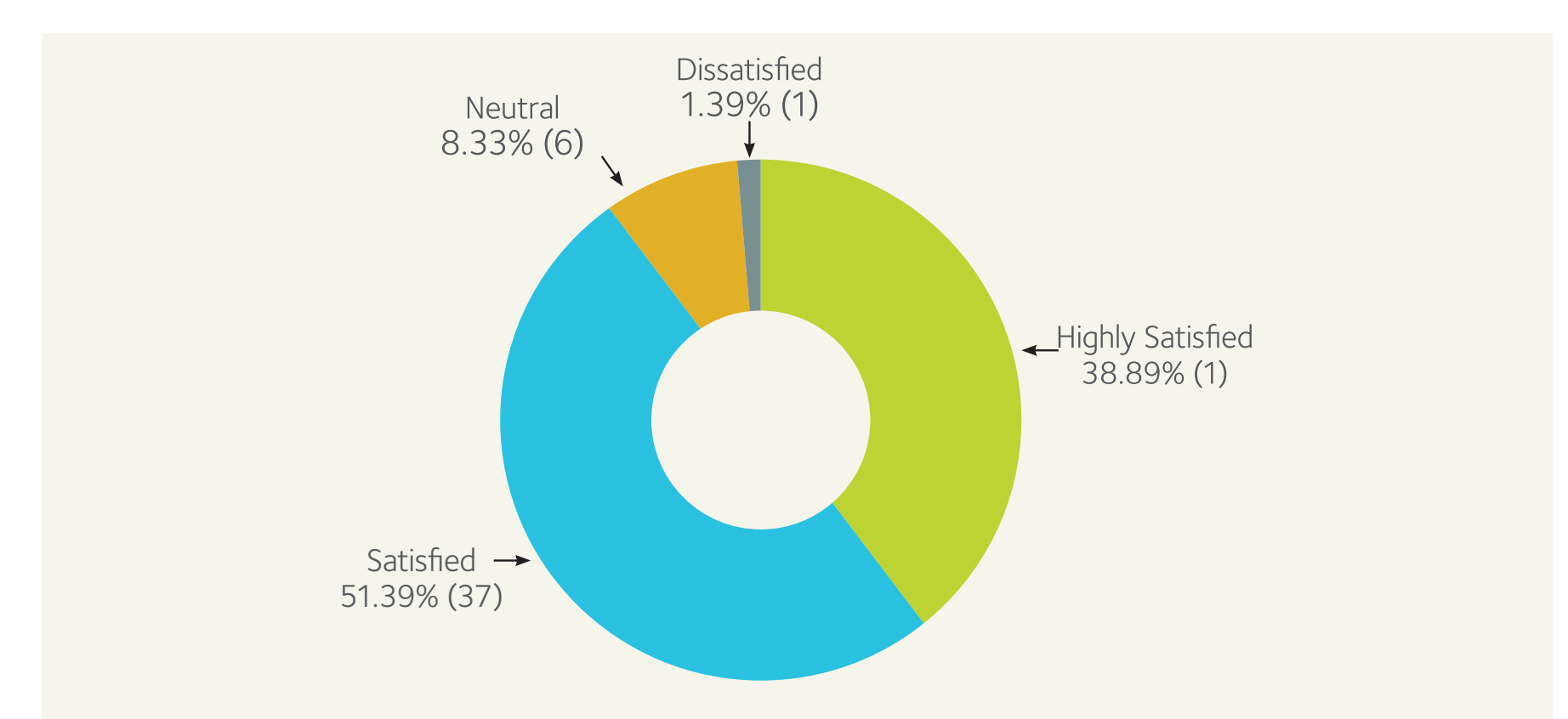


Fig. 3: Level of satisfaction with Clairvia (pre-implementation)

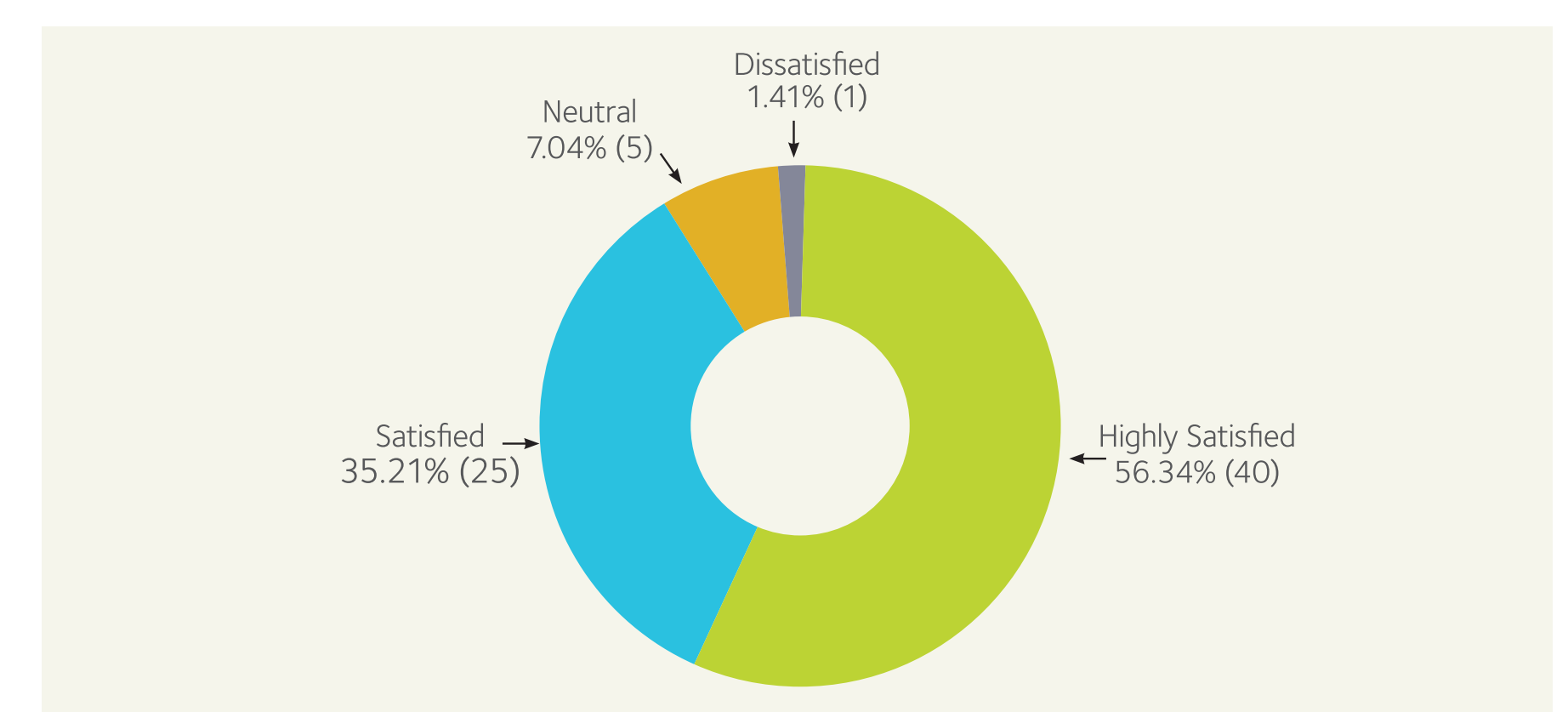


Fig. 4: Level of satisfaction with Clairvia (Go-Live)

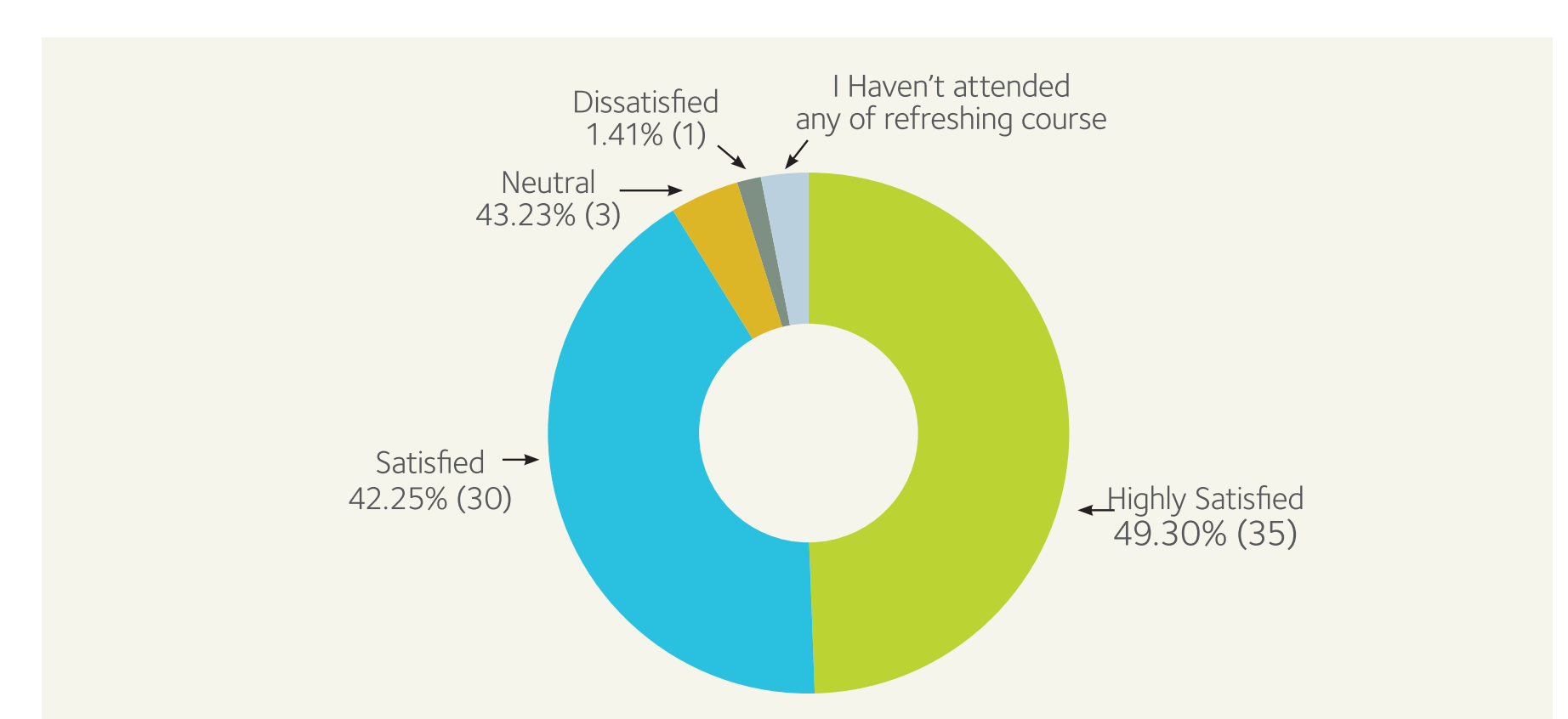


Fig. 5: Level of satisfaction with Clairvia (post-implementation)

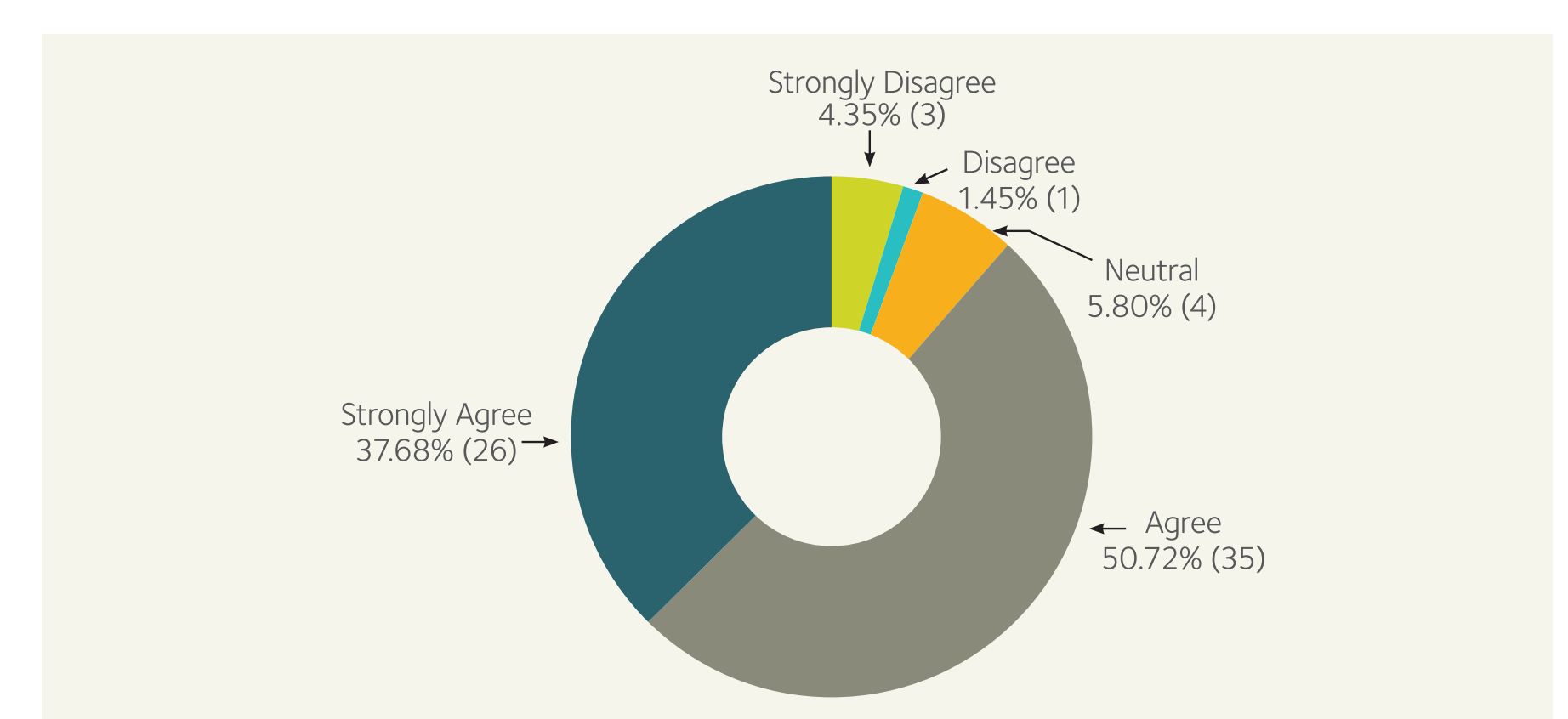


Fig. 6: Appropriateness and usefulness of online education materials

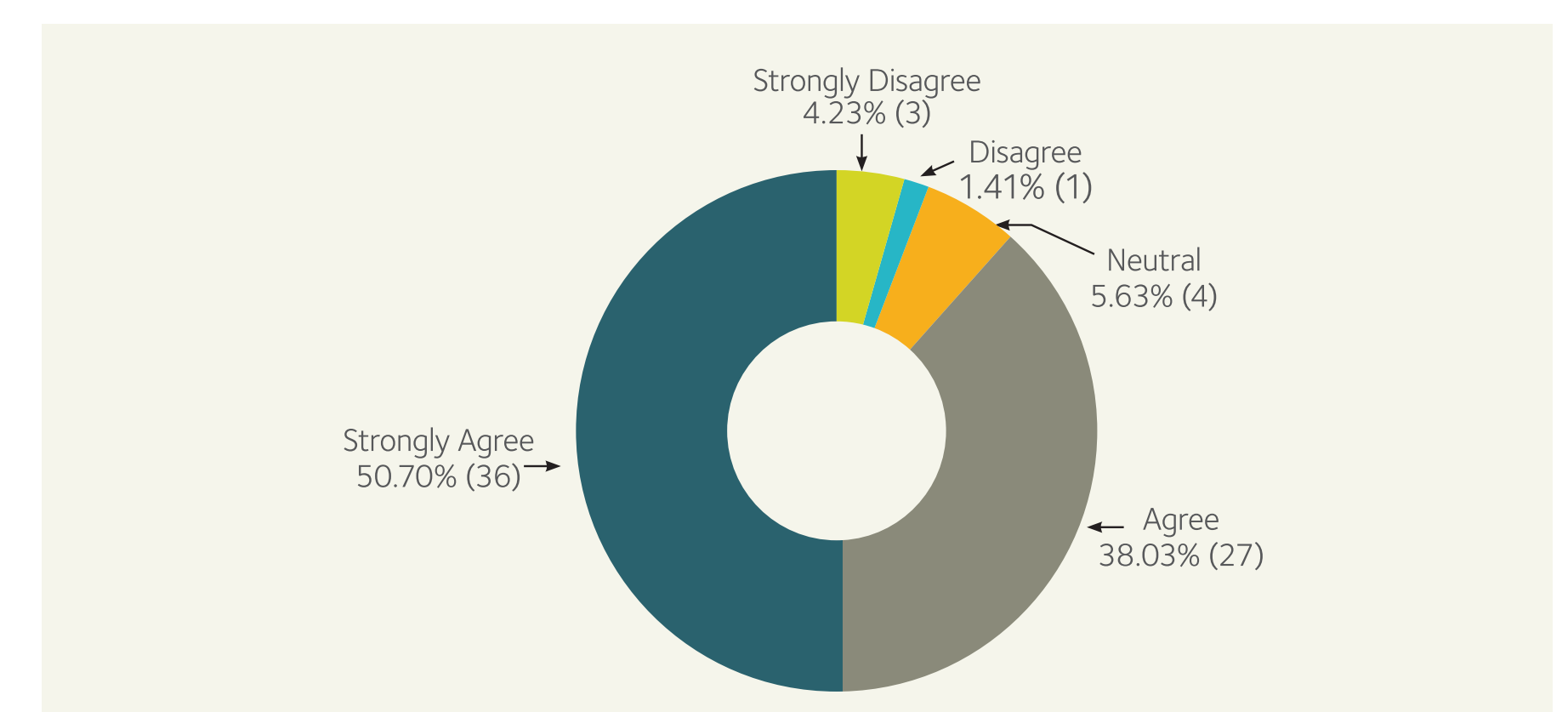


Fig. 7: Overall nurse experience with Clairvia