

Macros: A Tool To Decrease Nursing Documentation Burden

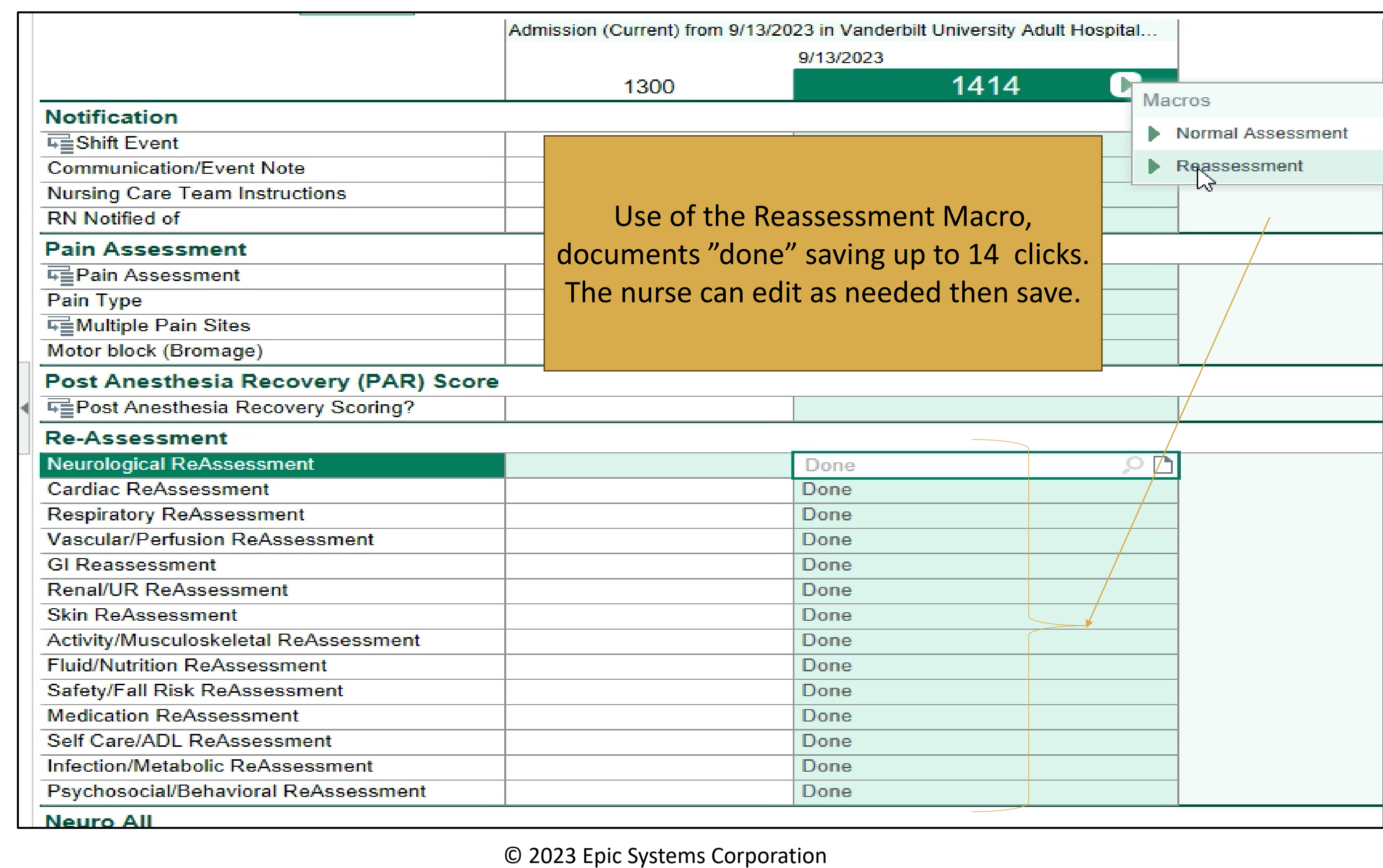


The Problem & Intervention

In the literature, nurses cite documentation burden as one of the most significant barriers to the patient and family experience, efficacy, and nurse well-being. This finding was echoed by participants of the Vanderbilt Nursing Informatics Committees (VNIC), a shared governance committee comprised of front-line nurses. The vendor offered Macro functionality that was projected to reduce documentation time and VNIC approved proceeding with efforts to customize the build. The new functionality was launched during one of two planned semi-annual vendor upgrades in August 2023.

What is a Macro?

Macros allow nurses to complete common documentation tasks more quickly by giving them a pre-defined set of values to apply to a flowsheet in just a few clicks.

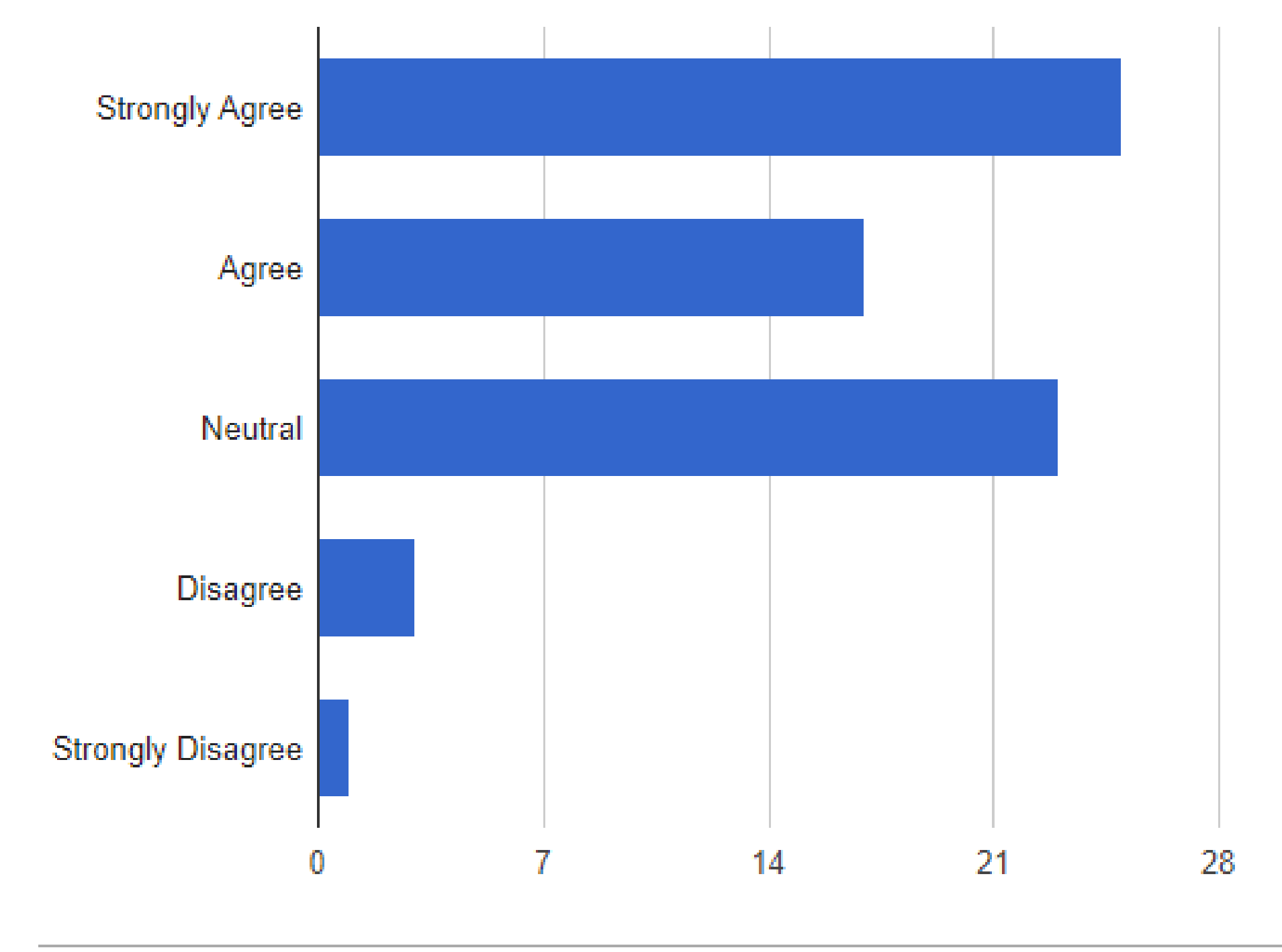


Results: Satisfaction

Macros reduce documentation burden and save time [\(reduce\)](#) [Refresh Plot](#)

Total Count (N)	Missing*	Unique
69	1 (1.4%)	5

Counts/frequency: Strongly Agree (25, 36.2%), Agree (17, 24.6%), Neutral (23, 33.3%), Disagree (3, 4.3%), Strongly Disagree (1, 1.4%)



Results: Highest Usage

Macro Record Name	Macro Display Name	App Team Owner	# of Times Used
ADL & Functional Status	No concerns	Ambulatory	15634
VUMC Assessment - Reassessment	Reassessment	Clin Doc	10097
Personal Safety	No Concerns	Ambulatory	9217
VUMC LDA PERIPHERAL IV Normal Assess	Normal Assessment	Clin Doc	8899
VUMC I/O - Reassessment	Reassessment	Clin Doc	5992
VUMC IP Children's I/O - Reassessment	Reassessment	Clin Doc	4746
VUMC All Doc - Normal	Normal Assessment	Clin Doc	3831
VUMC IP Childrens Vitals Site Check - IV	Site Check - IV	Clin Doc	2948
PHQ-9 Depression screen	No concerns	Ambulatory	2601
PACU - Normal	PACU - Normal	OpTime	1707

Results: Clicks Saved

August – September 2023	620,260
Daily Average	20,675

Implications

Monitor and validate the use of the Macros and the overall impact on documentation burden as well as quality/quantity. The potential exists for use of the Macros when not appropriate – i.e.. applying a Macro and not editing abnormal assessment findings. Investigate opportunities to expand Macros into nursing areas not currently using them or areas beyond nursing. Explore the use of personalized Macros and develop guidelines.

Methods

EMR Analyst teams from across the enterprise and a member of the nursing informatics team, assisted by a project manager, collaborated with subject matter experts (SME) to develop Macro content. Phase one resulted in the creation of 225 system Macros across multiple disciplines. Application of a Macro can save many clicks for users. For example, applying a Macro for documentation of a normal IV assessment saves 3 clicks, and documentation of a nursing head to toe assessment can save as many as 15 clicks. Education of the new functionality took many forms to reach the wide audience. The eStar training team developed a quick hit 5 min training video and other tip sheets were incorporated into the Upgrade training materials. Super users for each area were tasked with sharing new of macros for their areas.

Results: Time

For a nurse caring for an ICU patient with assessments and/or reassessments required every 1 hour, applying Macros can save the nurse 221 clicks per patient. If the nurse has a 2-patient assignment, while using the current Macros, that savings is now equaling as many as 442 clicks per shift. In a 3-shift week, that can equal as many as 1,326 clicks saved. This number is now an astounding 5,304 clicks per month potentially saved. This savings equates to **88.5 minutes** per nurse per month for per ICU nurse.

