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The Use of Technology in the Ambulatory Setting: Nurse Triage

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SUMMARY

Clinical nurses in the centralized ambulatory call center **adopted changes to the telephone technology** used to process patient calls. This resulted in decreased hold times for patients with serious or life-threatening conditions while **decreasing the abandonment call rate**.

PROBLEM

Clinical nurses in UC San Diego Health’s centralized call center, the Care Navigation Hub, work alongside call center agents to manage incoming calls from established primary care patients. Calls to the Care Navigation Hub were answered by a non-clinical agent. In the original workflow, the call center agent referred to a pre-defined list of red flag symptoms to determine if the patient was high risk and needed to be handed off to a registered nurse for further assessment and care. The telephone system used by the team had no method to delineate which patients in the call queue were high risk, or

red flag patients. All patients went to the end of the queue, where they waited on hold, in the order of which the call was received, until a triage nurse answered. From chart review, physician discussion, and patient complaints it was determined that patients with potentially life-threatening symptoms such as chest pain, shortness of breath, or suicidal ideation could be waiting on hold for long periods of time, leading to delayed assessment and care. In addition, patients who were placed on hold for an extended period of time were more likely to abandon the call before having their needs met. Although the Care Navigation Hub’s call abandonment rate was far below the national benchmark for call centers, team members recognized that improving hold time might further improve this metric. Baseline call abandonment rate was 2.9%.

GOAL STATEMENT

The goal for this project was to prioritize and route red flag calls to nurses quickly. Success was measured by a reduction in the red flag call abandonment rate.



Heather Hansen, BSN, RN has been a Registered Nurse for eleven years and has worked at UC San Diego Health most of her nursing career. She is the Nurse Manger for the Centralized team of Registered Nurses for Primary Care and Pediatrics at UC San Diego Health. She obtained her Bachelors of Nursing degree at Grand Canyon University and is currently pursuing her Masters of Nursing in Health Informatics. She is a member of the American Academy of Ambulatory Nursing and takes an active role in Telehealth. She has always been passionate about ambulatory care and telephone triage. As a telephone triage nurse for eight years improving the experience for the patients and improving patient outcomes has always been a top priority.

PARTICIPANTS

Name	Discipline	Title	Department
Heather Hansen	Nursing	Clinical Nurse	Care Navigation Hub
Alexandra Goda-Kessler	Nursing	Nursing Supervisor	Care Navigation Hub
Cassandra Morn	Medicine	Physician, Chief of Clinical Services	Division of Family Medicine
Lori Brown	Medicine	Physician, Chief of Clinical Services	Division of General Internal Medicine
Kris Henderson	Nursing	Senior Director of Nursing	Ambulatory Care
Diana Trujillo	Call Center	Call Center Supervisor	Primary Care Call Center

DESCRIPTION OF THE INTERVENTION

The Care Navigation Hub Nurse Triage subgroup takes recommendations from triage nurses and call center agents to implement practice changes. Clinical nurse Heather Hansen and supervisor Dianna Trujillo discussed the issues around transferring of red flag calls with the group. Nurses recommended that a separate call line be developed so that call center agents could transfer red flag calls to a different, expedited queue. The group collaborated with Information Services to create an additional call line. The group developed a Call Escalation Matrix that defined processes for call center agents to use with symptomatic patients. If a patient indicated they had specific low acuity symptoms, the call center agents were able to schedule

appointments directly. Other low acuity symptoms were routed to the cold line to indicate that the symptoms were less urgent. Higher acuity, or red flag symptoms were transferred to the warm line and the call center agent would remain on the line with the patient and provide a warm handoff to the triage nurse. The process step of remaining on the line during red flag transfers was implemented to reduce the chances the patient would hang up the phone. During implementation, Heather assisted Care Navigation Hub Manager Alex Goda-Kessler in determining the staffing of two separate lines to adjust for volumes. Staffing was adjusted for a high influx of red flag calls and to ensure that all red flags were handled expeditiously. The additional line and new workflows were launched on June

16, 2019. The phone system user interface used by call center agents and triage nurses shows the status of available operators. This allows the call center agents to manage patient’s expectations regarding hold time. **OUTCOME** In the month prior to implementation, all calls averaged a speed to answer of 2 minutes, 26 seconds, with an abandonment rate of 2.9%. On June 16th, the one line was switched into two lines. In the four months after implementation of this technological solution, the average speed to answer “red flag” calls was reduced by 58%, and the red flag call abandonment rate dropped by 37% as a result of the ability to separate out the phone lines.

