Adapt a CDS designed for physicians
RN confidence in their ability to evaluate
Demonstrate the feasibility
162 patient triage calls for sore throat
CDS use
RNs felt the tool decreased
Telephone triage protocol to determine if
2 RN
antibiotics or testing
Up to 50% of antibiotic prescriptions for
Chief complaint of sore throat triggers
RNs had 2 to 24 years of
contributing to antibiotic

RN self
45min in
Trials Number
strep throat
RNs completed risk calculator 99% (76/77)
patient education only
Implementation
Antibiotic and test ordering per

Objectives:
1. Adapt a CDS designed for physicians for use by Registered Nurses (RNs) to evaluate and treat patients with sore throat.
2. Demonstrate the feasibility of using the CDS during RN visits to evaluate and treat patients with sore throat.

Methods:
Study Design: 13-week, mixed methods, pilot study to assess the feasibility of patient evaluation and management during an RNs only visit with assistance from the CDS tool.

Participants: • 4 RNs at a family medicine clinic in a Midwest academic healthcare system • RNs had 2 to 24 years of experience

Outcomes: • Electronic health record data • Number of phone triage calls and nurse visits • CDS use • Antibiotic and test ordering per CDS recommendations

Self-administered survey • RN self-efficiency pre- and 8 weeks post-training

Theme from semi-structured face-to-face interviews

Figure 1. RN Sore Throat Triage and Visit Workflow

Figure 2. Strep Risk Calculator

Figure 3. Type of visit

Figure 4. RN confidence in evaluation and treatment

Findings:
• 162 patient triage calls for sore throat (Figure 3)
• 115 (71%) resulted in nurse visit or no clinic visit
• RNs completed risk calculator 99% (76/77) of visits.
• 2 RN-only visits (~3%) converted to provider visit due to patient complexity.
• RNs followed recommendations in all cases except ordering antibiotics in 1 high-risk patient with a negative rapid strip.
• RN confidence in their ability to evaluate and treat a patient with sore throat was high at baseline and increased 8 weeks after implementation. (Figure 4)

Figure 3. Type of visit

Figure 4. RN confidence in evaluation and treatment

Key Lessons:
• RNs were able to appropriately triage sore throat patients.
• RNs used the CDS consistently and appropriately treated patients.
• RNs were confident in their ability to evaluate and treat patients.
• Using the tool improved RN satisfaction.
• RNs felt the tool decreased provider clinic visits and over-testing while also improving patient satisfaction.

Implementation of an RN driven CDS tool shows promise to reduce inappropriate antibiotic prescribing and represents a potential model for expanding RN practice using CDS.

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