Introduction

Assessment of performance change resulting from CE is traditionally too expensive, subjective, and time delayed. To circumvent this, Vindico collaborated with American Family Care (AFC) to create a simple EHR query before and after closed-network education. This was coupled with case-based follow-up CE designed to garner a deeper, objective measure of performance change.

About AFC

At the start of the educational activities (Fall 2019), AFC had over 200 facilities across 26 states, treating nearly 300 million patients per year. The number of practices continues to expand.

Study Design & Metrics

Pre-activity AFC EHR query

Reflective of data Nov 2018-Mar 2019

Educational activities

Series of live webinars for AFC providers
Web archive for AFC providers and Healio.com users

Post-activity AFC EHR query

Reflective of data Nov 2019-Mar 2020

Decision-based case built on concepts related to the initial CE

- Designed to reinforce learning and measure learners’ implementation of practice changes
- Sent 45 days post-education to completers of webinar (N=154) or web archive (N=701)

Overall Demographics

Degree

- MD/DO: 48% (N=821)
- NP: 32% (N=821)
- PA: 14% (N=821)
- Other HCP: 2%
- Other: 2%

Specialty

- Urgent Care: 17% (N=821)
- Pediatrics: 13% (N=821)
- Nurse Practitioner: 13% (N=821)
- Other: 48%

- 94% were physicians or APPs
- 78% specialize in primary care, pediatrics, or urgent care

Impact of Education as Evidenced by EHR Query and Case-based Follow-up CE

Case-based follow-up CE findings

Case details: A 47 y/o woman during influenza season

- Symptoms for 12 hrs: Sudden-onset fever, chills, General body aches, Fatigue, Cough with burning sensation
- Comorbidities: Mild episodic asthma, T2DM, Morbid obesity
- Exam findings: 102.3 °F, Pulse 120 bpm, SpO2 = 99%, BP 110/80 mm Hg
- Finger stick glucose 165 mg/dL
- HEENT exam unremarkable
- Minimal bilateral wheezing

Impact on knowledge retention and practice

- 91% reported CE follow-up promoted knowledge retention (N=34)
- 81% could appropriately recognize influenza symptoms from related infections (N=34)
- 91% have implemented practice changes (N=24)
- 100% of those who were not using antivirals within 12 hrs of symptom onset (n=25), 100% would now do so

41% Confirmed influenza cases within AFC centers in 2018-2019 vs 2019-2020 flu seasons

50% 40% 30% 20% 10% 0%

Nov 2018-Mar 2019 (178,632 tests run)
Nov 2019-Mar 2020 (175,270 tests run)

5 Conclusions & Opportunities

EHR Query in a Closed Network

- Allows for objective measure of educational impact, without exorbitant increase in cost
- Is limited to few predetermined data and should be supplemented with additional measures of impact

Case-based Follow-up Education

- Reinforces learning
- Encourages follow-up participation
- Assesses subjectively and objectively the implementation of practice improvements

Opportunities

- EHR query, coupled with case-based follow-up, provides a deeper understanding of CE impact
- This model can be adapted across specialties should a closed-network partner be identified

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