DEVELOPING AND TESTING AN INSTRUMENT MEASURING THE IMPACT OF EHR USE ON QUALITY OF CARE

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TAKE AWAY

Given the accelerating adoption and use of electronic health records, it is more than ever possible to assess and explain the impact on the quality of care, particularly for nurses.

INTRODUCTION
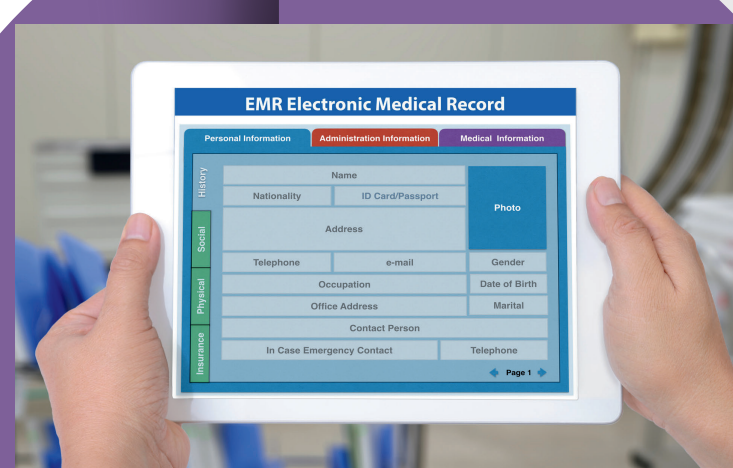
- There is an increased adoption of electronic health records (EHR) motivated by benefits:
  1) to make better decisions and take action [1; 2];
  2) to improve care, allow clinicians to maximize their time to care for patients, and improve communication [3].
- EHR use has also introduced new issues: as care coordinators, nurses act as a safety net when unintended consequences occur [2].
- Few studies have focused on nurses' perceptions of the impact of EHRs on the quality of patient care [4; 5].
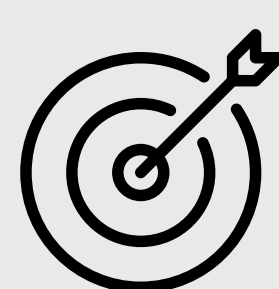
Aim of the poster
To report on the development and testing of a multidimensional measure of quality of care in relation to EHR use [6].

METHODS

- Data collected as part of a cross-sectional study examining nurses' perceptions of the quality of care associated with the use of a stage 7 EHR [6].
- A multidimensional measure of quality of care was developed based on prior research [4; 7]. The instrument proposed 4 subdimensions:
  1) impact on nursing practice (documentation, care coordination nursing care, scope of practice),
  2) patient safety culture,
  3) overall quality, and
  4) impact on burnout.

RESULTS

N = 234 questionnaires eligible for statistical analyses (32.5% response rate).
α = 0.92 for the quality of care construct: no items removed to increase internal consistency.
The Principal Component Analysis and factor analysis extracted 4 dimensions for the quality of care construct. The subdimensions were renamed based on the results of the Varimax rotation:
  1) **technology impact on nursing practice** (11 items, α=0.93),
  2) **learning and improvement capability** (4 items, α=0.74),
  3) **transition accountability** (4 items, α=0.70), and
  4) **fault responsibility** (1 item).

CONCLUSIONS

The development and testing of this novel multidimensional instrument can help to advance our understanding of the impact of the actual EHR use on quality of care, and nursing practice.

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