

# Urgent Care Nurse Data Capture: Impact on Diabetes Outcomes

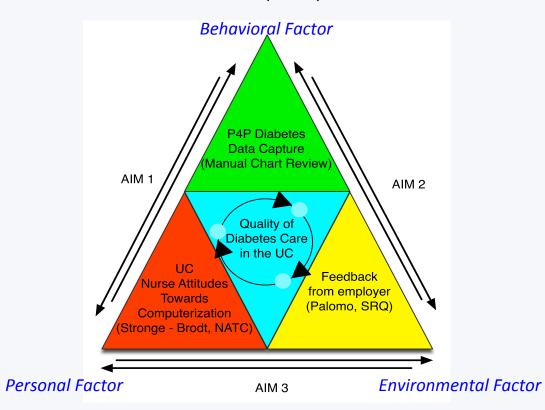
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#### **PURPOSE**

To examine reciprocal relationships between personal, behavioral & environmental factors related to Urgent Care (UC) nurse documentation of diabetes Pay for Performance (P4P) data in the Electronic Health Record (EHR).



#### **RESEARCH QUESTIONS**

What is the relationship between:

- 1) Attitudes towards the EHR & data capture compliance
- 2) Supervisory feedback & data capture compliance
- 3) Attitudes towards the EHR & supervisory feedback

What other factors influence an UC nurse's documentation?

#### **PROCEDURE**

### Surveys

Self-administered, structured

41 questions total

Researcher developed demographics (10)

Nurse's Attitudes Towards Computerization (NATC)

Formative Feedback Scale: Supervisory Relationship Questionnaire (SRQ) (11)

#### Chart Audits

(10 / nurse)

Seen in UC within the year Dx: diabetes & hypertension Exclude diagnosis codes:

- Polycystic ovary disease
- Steroid induced DM

- Gestational DM

- Triaged by nurse participants
- BP documented?Notified BP > 140/90
- Repeat manual BP documented?

#### **BACKGROUND & SIGNIFICANCE**

Diabetes mellitus (DM) affects 347M wordwide (WHO, 2012) DM: one of top 20 reasons for outpatient care (CDC, 2009) 67% type two diabetics have elevated BPs (Suh et al., 2009) UC visits slated to increase exponentially (UC Assoc., 2012) Nurses most important in documenting care (Langowski, 2005)

Positive attitudes facilitate innovation (Lacey, 1993)

More willing to use computers if charge & departmental climate

supportive (Shoham & Gonen, 2008)

Nurses work was depreciated when not acknowledged (Olofsson et al., 2003)

P4P created to improve quality & costs (Tanenbaum, 2009)
UC RNs pose a gap in current research literature

#### **MEANS**

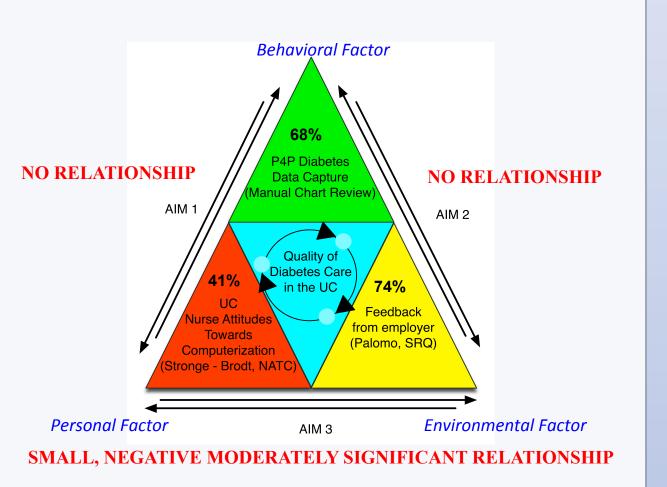
VARIABLE	RANGE (years)	MEAN (years)
AGE	27 - 63	42
UC EXPERIENCE	-99 - 28	2.9
COMPUTER EXP.	4 - 31	17.6
ANY EHR EXP.	1 - 23	9.3
UC EHR EXP.	1 - 23	4.2

## SAMPLE PROFILE

N=62

VARIABLE	CATEGORIES	RESULTS (%)
GENDER	Male Female	11 (17.7%) <b>51 (82.3%)</b>
EMPLOYMENT	Full Time Part Time Per Diem	<b>28 (45.2%)</b> 13 (21.0%) 21 (33.9%)
UC or SRN	UC SRN Missing	<b>49 (79%)</b> 12 (19.7%) 1 (1.6%)
EDUCATION	Diploma Associates Bachelors Masters	4 (6.5%) 20 (32.3%) <b>34 (54.8%)</b> 4 (6.5%)
CERTIFICATION	Yes No	22 (35.5%) <b>40 (64.5%)</b>

#### **QUANTITATIVE RESULTS**



#### **3 LIMITATIONS**

#### LIMITED GENERALIZABILITY

- Slightly underpowered
- Goal = 64; n = 62
- Conducted during flu / holidays
- Only UC RNs examined
- Single EHR used

#### **THEMATIC ANALYSIS**

- Very subjective
- Confirmatory analysis may be helpful

# ADV. STATISTICAL MEASURES

Could be more sensitive to reciprocality

## **QUALITATIVE QUESTION #1**"ADDITIONAL COMMENTS"

#### **NEGATIVE**

- Computer inefficiency
- System complexity

#### **NEUTRAL**

- User's technical variability
- Software comments

### **POSITIVE**

- User benefits
- Enhances communication
- Improves patient care

## **QUALITATIVE QUESTION #2**

"WHAT FACTORS AFFECT YOUR ABILITY TO ENTER PATIENT DATA INTO THE EHR"

#### TECHNICAL FACTORS

- Computer downtime
- Slow computers
- System glitches
- Data entry
- Switching users
- Accessibility of computers

## **USER FACTORS**

- Technical knowledge & skills
- Time management
- Patient care
- Employment status

#### **IMPLICATIONS**

#### NURSING EDUCATION

- Start at pre-licensure
- Minimum proficiency requirements
- HIT as electives

#### **NURSING PRACTICE**

- Measure IT proficiency annually
- Organizations offer more IT CEUs
- Inform EHR team of feedback
- Reassure staff
- Stress benefits, "every time"

#### **NURSING LEADERSHIP**

- Provide positive nurturing environment
- Plan to improve chart audit scores
- Investigate lower nurse attitude scores
- Assess computer competence & attitude prior to hire

#### NURSING RESEARCH

- Qualitative: assess chart audit KSAs
- Confirmatory analysis of responses
- Compare: EHR staff & outpatient nurses
- How to Improve current EHR?

#### **CONCLUSION**

#### ADDRESSED GAP:

- Perceptions of UC RNs towards an EHR
- Factors that affected their documentation

#### **INVERSE RELATIONSHIP**

 Supervisory feedback & Nurse's Attitudes Towards Computers

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