The Utilization of Phone Communication with Patient Companions During a Pandemic

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Abstract
Involvement of companions is a critical aspect of patient-centered care. This retrospective cross-sectional study examined patients who were asked, by utilizing electronic medical record (EMR) preset questions (SmartPhrase template), if they wanted another individual called during the assessment and plan portion of an ophthalmology visit. Of 518 patients, 14.5% wanted another individual called. New patients as well as those who needed procedural or surgical intervention were more likely to want a companion called. Adoption of a SmartPhrase template within clinical workflow may be a feasible and effective method to increase communication with companions of physically unaccompanied patients and promote patient-centered care.

Keywords
clinician–patient relationship, communication, COVID-19, patient/relationship-centered skills, patient engagement, quality improvement, telehealth

Introduction
It is widely accepted that the physician–patient relationship can be strongly influenced by patients’ family members and companions. Family involvement has been shown to be key to patient-centered care and chronic care processes,(1) as well as to patients’ engagement in medical decision-making,(2) satisfaction with care received,(3) and treatment adherence.(4) Within ophthalmology, many patients have chronic conditions requiring long-term management. Nonadherence to treatment and follow-up is often identified as an important contribution to inferior treatment outcomes in clinical practice.(5) Thus, optimizing companion involvement during a medical visit may be an effective strategy for increasing adherence and improving care processes overall.(1)

A companion is a nonmedical person, usually a family member or a friend, whom a patient identifies as an individual involved in a particular aspect of care. Companion support might be even more critical during periods of crisis, such as a pandemic.(6) However, the measures to maintain physical distance during the COVID-19 pandemic resulted in limiting visitors in healthcare settings. These may have negative effects particularly those patients who rely on companions during the medical appointment.(7) Thus, an intervention was implemented in an outpatient ophthalmology retina clinic to continue engaging patient companions. A standard electronic medical record (EMR) preset questions template (SmartPhrase) was utilized during the initial intake process by an ophthalmic technician.

The purpose of this study is to describe the use of the SmartPhrase template and to characterize the patient population utilizing this option. These findings might contribute to the development and implementation of future interventions that promote patient-centered care in a streamlined manner.

Methods
This retrospective cross-sectional study was performed at Cole Eye Institute, Cleveland, OH, after receiving approval from the Cleveland Clinic Institutional Review Board (IRB). Informed consent was not required due to the retrospective nature of the study. All study-related procedures

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were performed in accordance with good clinical practice, the Declaration of Helsinki, and the Health and Insurance Portability and Accountability Act.

A comprehensive electronic chart review was performed of all ophthalmic appointments by adult patients seen by a retinal specialist from January 15 to March 16, 2021. During this study period, patients were asked by an ophthalmic technician during the initial workup whether there was an individual that they would like the physician to call and update during the assessment and plan portion of the encounter. A SmartPhrase containing preset questions was used to guide the technicians (Supplementary Figure 1). SmartPhrases are abbreviations or words used to pull long phrases or paragraphs into the note.\(^8\) If the answer to the initial question was yes, the technician was prompted to ask for the companion’s name, phone number, and the relationship to the patient. This information was then readily available and visible to the treating physician. Visits during which the SmartPhrase was not utilized were excluded. Patients with multiple visits during the study period were included once in the dataset, and included in the “yes” group if they responded yes during one or more visits.

The main outcome was the percentage of patients who did want a companion called (“yes” cohort). The secondary outcome was to compare patient and appointment characteristics between the “yes” and “no” cohorts and to identify significantly associated variables. Any outpatient procedures performed (intravitreal injections, laser treatment) and surgeries scheduled during a visit within the study period were noted. Snellen chart best-corrected visual acuity (BCVA) was recorded for each visit and converted to approximated Early Treatment Diabetic Retinopathy Study (ETDRS) letters for analysis.\(^9\) Categorical variables were described using frequency and percentages, while continuous variables were described as means with standard errors (SE). Relationships between categorical and continuous variables and the outcome were assessed with univariable and multivariable logistic regression models. All analyses were performed using JMP® Pro 14 software (SAS Institute).

### Table 1. Patient Demographics.

|                      | Yes (n = 75) | No (n = 443) | Y/N OR [95% CI] | P-value* |
|----------------------|-------------|--------------|----------------|----------|
| % Total              | 14%         | 86%          |                |          |
| Age [mean (±SE)]    | 71 (±1.65)  | 69 (±0.68)   | 0.40 [0.09, 1.67] | 0.2103   |
| Gender [Female, n (%)] | 48 (64%)    | 250 (56%)    | 1.37 [0.83, 2.28] | 0.2215   |
| Race [n (%)]        | 57 (76%)    | 321 (73%)    |                |          |
| Black                | 14 (19%)    | 103 (23%)    | 0.77 [0.41, 1.43] |          |
| Other                | 4 (5%)      | 19 (4%)      | 1.19 [0.39, 3.61] |          |
| Marital status [Married, n (%)] | 44 (59%)    | 237 (54%)    | 1.23 [0.75, 2.03] | 0.4067   |
| Primary language     | 68 (91%)    | 423 (95%)    | 0.46 [0.19, 1.13] | 0.0895   |
| Co-morbidities [n (%)] |            |              |                |          |
| Diabetes             | 29 (39%)    | 152 (34%)    | 1.21 [0.73, 1.99] | 0.4649   |
| Hypertension         | 47 (63%)    | 266 (60%)    | 1.12 [0.67, 1.85] | 0.6678   |
| Hyperlipidemia       | 36 (48%)    | 225 (51%)    | 0.89 [0.55, 1.46] | 0.6550   |
| CAD                  | 14 (19%)    | 67 (15%)     | 1.29 [0.68, 2.43] | 0.4357   |
| COPD                 | 6 (8%)      | 16 (4%)      | 2.32 [0.88, 6.13] | 0.0896   |
| CKD                  | 9 (12%)     | 40 (9%)      | 1.37 [0.64, 2.96] | 0.4179   |
| Insurance type       | 54 (72%)    | 274 (62%)    | 1.59 [0.92, 2.72] | 0.0937   |
| Location of visit    | 42 (56%)    | 276 (62%)    | 0.77 [0.47, 1.26] | 0.3007   |
| VA at visit [ETDRS letters, mean (±SE)] | 75.69 (±1.14) | 78.63 (±0.47) | 0.97 [0.95, 0.99] | 0.0264   |
| Procedure performed  | 35 (47%)    | 117 (26%)    | 2.44 [1.48, 4.02] | <.001    |
| Surgery scheduled    | 8 (11%)     | 20 (5%)      | 2.53 [1.07, 5.96] | 0.0346   |

*Wald test, unadjusted single variable logistic regression analysis is performed.

Abbreviations: CAD: coronary artery disease; CKD: chronic kidney disease; COPD: chronic obstructive pulmonary disease; ETDRS: Early Treatment Diabetic Retinopathy Study; SE: standard error; VA: visual acuity.

Results

Out of 854 visits within the study period, the SmartPhrase was correctly utilized during 604 (71%) of the visits completed by 518 patients. Patients were documented to be accompanied by a companion during 22 (4%) of the visits. Of the patients who were asked to utilize the SmartPhrase...
during the initial workup, 75 (14.5%) responded that they did want another individual called by the physician.

Compared to established patients, new patients were more likely to respond yes (OR [95% CI], 1.99 [1.07, 3.72], \( p = .0294 \)) (Table 1). With each increase in ETDRS letter for BCVA (or better vision), there was 3% (0.97 [0.95, 0.99]) lower odds of responding yes (\( p = .0264 \)). Patients who had an outpatient procedure performed at any visit (2.44 [1.48, 4.02], \( p < .001 \)) or had a surgery scheduled (2.53 [1.07, 5.96], \( p = .0346 \)) during the study period were more likely to respond yes. There were no significant differences in demographic characteristics or in the proportions of medical co-morbidities assessed in the study between the two cohorts (Table 1).

After performing multivariable logistic regression analysis, vision was no longer significantly associated with the outcome (Table 2). Patient status (new vs. established; 2.16 [1.13, 4.15], \( p = .0202 \)), whether there was a procedure performed (yes vs. no; 2.56 [1.51, 4.36], \( p < .001 \)), and whether there was a surgery scheduled (yes vs. no; 2.60 [1.06, 6.38], \( p = .0365 \)) remained significantly associated with wanting another individual called during the visit.

### Discussion

This study examined the utilization of an EMR SmartPhrase in an outpatient subspecialty clinic to assess whether patients wanted a companion called by the physician during the assessment and plan portion of the visit. Within a 2-month period, the SmartPhrase was correctly utilized during 71% of the visits, and 14.5% of all patients seen wanted another individual called.

While there were no significant differences in demographic characteristics between patients who wanted a companion called and patients who did not, patients who were new to the practice were more likely to want another individual involved in the medical discussion. They represent a particularly vulnerable population at higher risk of missing a subsequent visit or dropping out of care completely. The first visit is critical for shaping attitudes and behaviors that determine the patient–provider relationship.(10) In one qualitative study, Deng et al. conducted longitudinal interviews with new patients and identified actionable steps effective in mitigating anxiety and promoting a trusting, long-term relationship with the provider.(11) The actions centered around providing cognitive reassurance and clear communication that empowered patients to be proactive in managing their condition, which is also the goal behind involving family members and companions in patients’ medical care. Offering the option of calling a companion may contribute to a positive initial relationship by demonstrating the physician’s commitment to patient-centered care.

In this study, patients were also more likely to want another individual called during the visit if a procedure was performed or ophthalmic surgery was scheduled. Of note, the SmartPhrase was used at the beginning of the visit, before the physician had examined the patient and formulated a treatment plan. One potential explanation is that these individuals may represent a patient population with more severe or worsening ophthalmic diseases that requires procedural and surgical interventions. A meta-analysis of 17 studies by Wolff et al. found that patients with more extensive health needs were more likely to have another individual participating in the medical decision-making process.(1) While these studies were conducted in a range of settings, there is limited literature reporting the influence of companions on patient care within ophthalmological clinical settings specifically. In the same meta-analysis, 37% of adult patients were reported to be accompanied to routine medical visits by another individual compared to the 4% of visits documented in this study which highlights the effect of COVID-19 pandemic on patient care.

### Limitations

Limitations include the retrospective nature of the study and its potentially limited generalizability, although its findings could be applied across different subspecialties. This study also does not capture the patients who expressed a desire for family or a companion to be present by phone at the later stages of the encounter and does not examine intervention outcomes.

### Conclusion

This study found that 14.5% of patients within a single outpatient clinic wanted another individual, a companion, called during the visit when offered. In particular, patients who were new to the practice, had a procedure performed, or had surgery scheduled were more likely to want a companion involved in their care. Even after restrictions on visitation due to the COVID-19 pandemic are lifted, this intervention to increase phone communication with patients’ companions may be a feasible and effective method to promote family-centered care within high-volume subspecialty clinics. Using a standard SmartPhrase template allows technicians/medical assistants/nurses to efficiently gather all the pertinent

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**Table 2. Multivariable Logistic Regression Analysis of the Association Between Wanting a Companion Called and Visit Variables.**

| Variable                                | Odds Ratio (95% CI) | P-value |
|-----------------------------------------|---------------------|---------|
| Patient status (New vs. Established)    | 2.16 [1.13, 4.15]   | .0202   |
| BCVA at visit (ETDRS letters)           | 0.98 [0.96, 1.01]   | .1547   |
| Procedure performed (Yes vs. No)        | 2.56 [1.51, 4.36]   | <.001   |
| Surgery scheduled (Yes vs. No)          | 2.60 [1.06, 6.38]   | .0365   |

*Wald test, all variables included in multivariable model are listed in the table. Abbreviations: BCVA: best-corrected visual acuity; ETDRS: Early Treatment Diabetic Retinopathy Study
information and explain to the patient the rationale for doing so. It is a time-saving initiative for physicians that also provide documented evidence that the patient did or did not want a companion called. Future steps would be to analyze if this intervention resulted in the decreased number of phone calls and EMR messages after the visit as well as examination of the patients’ perspectives toward this intervention and its effect on patient–physician relationships.

Declaration of Conflicting Interests
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Supplemental Material
Supplemental material for this article is available online.

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