

# Patients' preferences regarding the delivery of health care in a hand surgical practice

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#### Abstract

Background The Patient Protection and Affordable Care Act of 2010 includes patient satisfaction scores in the calculation of reimbursement for services provided. The Medicare and Medicaid Electronic Health Care Record Incentive Program mandate that physicians provide electronic communication with patients. Little data exists regarding patient preferences that might guide the physician adhering to these guidelines. We performed a survey study to examine patients' attitudes regarding the delivery of their health care.

Methods We provided an anonymous survey to all outpatient hand surgery patients within a 1-month period at our level I academic center. The survey was structured to ascertain patients' attitudes toward outpatient wait times as well as delivery of patient-specific healthcare-related information. Onehundred and ninety-six surveys were available for review. Results Of the 196 patients surveyed, 106 (54 %) were between the ages of 45 and 64. Patients aged 25 to 44 were the least willing to wait for an initial outpatient appointment. The majority of patients in all age groups demonstrated unwillingness to wait more than 1 week for evaluation of a new problem. One hundred and forty patients (71 %) were willing to wait longer for an appointment with an upper extremity specialist rather than have an earlier appointment with a nonupper extremity specialist. Wait times of 30 min after arrival in the office were acceptable to 174 patients (89 %) while 40 patients (20 %) were willing to wait an hour or more. Patients preferred a typed handout detailing their specific problem as opposed to referral to a website or an e-mail containing information.

Conclusions The results of our study indicate that patients prefer typed information as opposed to e-mail or websites regarding their health care. Our study also suggests that patients are willing to endure longer wait times if they can be given a sooner appointment, and most prefer a specialist for their problems. These results will provide some guidance to the physician regarding what patients find most appealing.

**Keywords** Patient preferences · Affordable Care Act · Meaningful use · Electronic health records · Wait times · Practice management

#### Introduction

In 2006, the Centers for Medicare & Medicaid Services (CMS) implemented the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey as a standardized, publicly reportable method of collecting patients' perceptions of their hospital experience [1]. The Patient Protection and Affordable Care Act of 2010 (PPACA) specifically included performance on the HCAHPS survey in the calculation of hospital reimbursement for services provided [2]. The PPACA therefore directly links reimbursement to patient satisfaction.

The Medicare and Medicaid Electronic Health Care Record Incentive Program currently provides incentives for physicians and providers to implement electronic healthcare records (EHR) in their practice. In 2015, the government will begin imposing penalties upon physicians who do not meet their definition of a "meaningful user." One of the core



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786 HAND (2015) 10:785–788

requirements of meaningful use states that providers must provide patients with an electronic copy of their health information. Additionally, stage 2 of the meaningful use requirements, beginning in 2014, mandates that physicians "use secure electronic messaging to communicate with patients on relevant health information." Those physicians who fail to communicate with more than 5 % of unique patients via their electronic health record system will not meet the core requirements for meaningful use and will thus be penalized with decreased Medicare and Medicaid reimbursements.

Clearly, the Centers for Medicare and Medicaid Services (CMS) place a high value on patient satisfaction and electronic communication formats between physician and patient. However, little data exits concerning patients' attitudes toward the delivery of their health care. To be successful not only in communication with patients but also in recovering fair market reimbursement for services rendered, the physician must understand which aspects of healthcare patients' value highly and which they do not as well as current trends in patient wishes. In order to establish a baseline of patient attitudes toward the delivery of health care, we conducted a survey study of all patients seen in the senior author's hand surgery practice. We present our results below to help guide future research and hopefully influence future legislation regarding the interaction between patients and their physician.

## **Materials and Methods**

After approval and exemption by our institutional review board, we provided an anonymous survey to all outpatient hand surgery patients within a 1-month period at our level I academic center. The survey was structured to ascertain patients' attitudes toward outpatient wait times as well as delivery of patient-specific healthcare-related information (Table 1). Surveys were excluded for respondent age less than 18, incomplete answers, inability to read or write English, or having completed the survey previously. One-hundred and ninety-six surveys were available for review.

## **Results**

Of the 196 patients surveyed, the majority (106 patients, 54%) were between the ages of 45 and 64 (Table 2). Patients aged 25 to 44 were the least willing to wait for an initial outpatient appointment (Table 3). The majority of patients in all age groups demonstrated unwillingness to wait more than 1 week for evaluation of a new problem. One hundred and forty patients (71%) were willing to wait longer for an appointment with an upper extremity specialist rather than have an earlier appointment with a non-upper extremity specialist. Wait times of 30 min after arrival in the office were acceptable

#### Table 1 Survey questions

Please Answer Each Question Below

- 1. Please indicate your age:
  - 18-24
  - 25-44
  - 45–64
  - 65 and above
- 2. What is the longest you are willing to wait for an office appointment for a new problem?
  - 1-3 Days
  - 4-7 days
  - 2 weeks
  - 1 month
  - 2 months
- 3. Once you arrive at the office, what is the longest you are willing to wait if the doctor is running late?
  - 15 min
  - 30 min
  - 45 min
  - 60 min
  - Over 1 hour
- 4. If you have a specific hand, wrist, or elbow problem would you rather...
  - · Have an earlier appointment with any physician
  - · Wait longer for an appointment with an upper extremity specialist
- 5. Would you like to receive information about your problem as a typed handout when you leave?
  - Yes
  - No
- 6. Would you like to receive information about your problem as an e-mail when you leave?
  - Yes
  - No
- 7. Would you like to view a website at home for information about your problem?
  - Yes
  - No
- 8. I would MOST prefer to get my information about my problem via... (choose 1)
  - Print-out
  - E-mail
  - Website
- 9. Would you like to view a sample video of your operation before your day of surgery?
  - Yes
  - No
  - 10. Would you like to receive a copy of your office note for your visit before you leave the office?
  - Yes
  - No

to 89 patients (40 %) while 40 patients (20 %) were willing to wait an hour or more. After obtaining a diagnosis, patients



HAND (2015) 10:785–788

**Table 2** Age distribution of respondents

Age	Count	
18–24	14 (7 %)	
25-44	33 (17 %)	
45–64	104 (53 %)	
Over 64	45 (23 %)	

preferred a typed handout detailing their specific problem upon leaving as opposed to referral to a specific societal or informational website or an e-mail containing relevant healthcare information (Table 4). The majority of patients in all age groups preferred to receive a copy of their completed office note and plan or care prior to leaving the office.

## **Discussion**

This survey study was designed help to outline patient preferences toward the delivery of their health care. With the explosion of medical information and the electronic age, people often find information through the Internet about problems or upcoming surgeries. With society becoming more "paperless," routine tasks, such as boarding a plane or train, are becoming electronic without the need for paper tickets. The medical offices and hospitals are also switching to electronic health records to document visits and treatment plans. New applications on computers, tablets, and smart phones are transforming the way in which information can be explained

to patients or sent to their e-mail accounts. With these changes, the preferences of patients toward this new electronic age are yet unknown regarding the basic physician-patient relationship and their desires when it comes to obtaining healthcare information.

The survey examined both outpatient wait times as well as the format for communicating healthcare-related information. With regard to initial evaluation, the majority of all age groups expect initial evaluation of their problem within 1 week from time of office contact. However, once patients arrive in the outpatient office, greater than 40 % of patients are willing to accept waiting room times of 30 min, and nearly 25 % of all patients would accept wait times of 45 min. Thus, a successful strategy for satisfying patients may include "double booking" more appointment times in order to secure earlier appointment dates at the cost of longer waiting room times. However, it is important to note that most patients are willing to wait longer for an appointment with a subspecialist rather than evaluation by the "soonest-available" physician.

While the latest legislation from the CMS suggests that there is value in providing electronic notes to patients, our study suggests that hard-copy printouts detailing patient-specific injuries are preferred to electronic distribution via website or e-mail. Eighty-eight percent of respondents indicated that they would like a printed handout providing information about their specific problem. While 59 % of patients stated that they would like to view a website about their problem, 74 % preferred typed hardcopies to online content when comparing the two. Sixty-one percent of patients did not care

Table 3 Appointment wait times

What is the longest you are willing to wait for a	an office appointment for	a new problem?		
	18–24	25-44	45-64	Over 64
1–3 days	5 (36 %)	19 (58 %)	22 (21 %)	10 (23 %)
4–7 days	4 (29 %)	7 (21 %)	46 (43 %)	24 (56 %)
2 weeks	4 (29 %)	4 (12 %)	22 (21 %)	7 (16 %)
1 month	0 (0 %)	3 (9 %)	14 (13 %)	1 (2 %)
2 months	1 (7 %)	0 (0 %)	2 (2 %)	1 (2 %)
Once you arrive at the office, what is the longer	st that you are willing to v	vait if the doctor is running	g late?	
	18–24	25–44	45–64	Over 64
15 min	2 (14 %)	6 (18 %)	9 (8 %)	5 (12 %)
30 min	6 (43 %)	16 (48 %)	50 (47 %)	17 (40 %)
45 min	4 (29 %)	4 (12 %)	25 (24 %)	12 (28 %)
60 min	0 (0 %)	4 (12 %)	16 (15 %)	7 (16 %)
Over 1 hour	2 (14 %)	3 (9 %)	6 (6 %)	2 (5 %)
If you have a specific hand, wrist, or elbow pro physician or wait longer for an appointment		11	with any	
	18–24	25–44	45–64	Over 64
Earlier appointment with any physician	5 (36 %)	15 (45 %)	26 (25 %)	10 (23 %)
Wait longer for a specialist	9 (64 %)	18 (55 %)	80 (75 %)	33 (77 %)



788 HAND (2015) 10:785–788

Table 4 Delivery format of patient information

Would you like to receive information about your problem as a typed handout when you leave?

	18–24	25–44	45–64	Over 64
Yes	13 (93 %)	28 (85 %)	92 (87 %)	40 (93 %)
No	1 (7 %)	5 (15 %)	14 (13 %)	3 (7 %)

Would you like to receive information about your problem as an email when you leave?

	18–24	25–44	45–64	Over 64
Yes	5 (36 %)	10 (30 %)	50 (47 %)	11 (26 %)
No	9 (64 %)	23 (70 %)	56 (53 %)	32 (74 %)

Would you like to view a website at home for information about your problem?

	18–24	25–44	45–64	Over 64
Yes	9 (64 %)	20 (61 %)	72 (68 %)	15 (5 %)
No	5 (36 %)	13 (39 %)	34 (32 %)	28 (65 %)

I would MOST prefer to get information about my problem via... (choose 1)

	18–24	25–44	45–64	Over 64
Print-out	12 (86 %)	25 (76 %)	70 (66 %)	38 (88 %)
E-mail	1 (7 %)	7 (21 %)	26 (25 %)	4 (9 %)
Website	1 (7 %)	1 (3 %)	10 (9 %)	1 (2 %)

Would you like to view a sample video of your operation before your day of surgery?

	18–24	25–44	45–64	Over 64
Yes	7 (50 %)	13 (39 %)	48 (45 %)	23 (53 %)
No	7 (50 %)	20 (61 %)	58 (55 %)	20 (47 %)

Would you like to receive a copy of your office note before you leave the office?

	18–24	25-44	45–64	Over 64
Yes	11 (79 %)	27 (82 %)	76 (71 %)	35 (81 %)
No	3 (21 %)	6 (18 %)	30 (29 %)	8 (19 %)

to receive an e-mail with information that was discussed in the office regarding their specific medical problem. We feel this likely relates to a patients desire to "leave with something" from the office, whether a copy of their note detailing the visit or an instructional sheet with information. While e-mail is a convenient form of communicating, it produces no tangible or tactile feedback.

Nearly half of all patients would appreciate the opportunity to view a sample video of their procedure prior to surgery. From a patient's perspective, the act of undergoing an operation is a journey through the unknown. The stories from other patients, friends, or family may not accurately reflect the experience. Random websites may also provide techniques or methods that are not utilized by their specific physician (e.g.,

open vs. endoscopic carpal tunnel release), giving more confusion to the patient about the procedure or recovery period. Surgeon-specific or technique-specific videos can help to decrease that confusion.

We designed this survey study to provide insight into patients' desires regarding the delivery of their health care. It is meant only to serve as a descriptive study and not to provide rigorous statistical analysis of patient preferences. The strengths of our study include its breadth of patients surveyed. We did not limit surveys to a particular age group, satisfaction level, or type of patient (established or new), but rather every adult that entered the office. We feel this provides a better sample of a typical healthcare practice. Weaknesses of our study include a geographically distinct patient sample. We cannot guarantee that the preferences of our patient population will translate across all geographic regions. Further, as we did not intend to provide statistical analysis of our results, we did not perform a power analysis to determine a sample size. However, we believe that a sample of 196 patients represents a significant amount of patients to infer a baseline of patient preferences.

Recent legislation in the USA has coupled reimbursements with patient satisfaction and the implementation of electronic communication between physicians and patients. Providers who hope to be successful in at least the near future will need to adapt to these outcome measures. We hope that the current study will provide direction for physicians to provide care in the most effective manner.

**Conflict of Interest** Kristofer S. Matullo, MD has received consulting fees from DePuy Synthes.

**Statement of Human Rights** All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008 (5). Informed consent was not required for all patients being included in the study.

**Statement of Informed Consent** Informed consent was not required from patients given no identifying information was collected and the study was deemed exempt from the institutional IRB.

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