

Transforming Rural and Native American Health

Abstract

#### **OBJECTIVE:**

To identify inefficiencies in a medical practice with the goal of creating a more efficient workflow from the perspective of the patient.

#### **METHODS:**

Human: Survey distribution and sentiment identification Software: Statistical analysis

#### **RESULTS & CONCLUSIONS:**

According to the responses of patients of two rural primary care clinics, the results revealed areas of weakness and improvement centered around patient satisfaction. In addition to clinical staff, patients submitted their rating regarding all aspects of the clinic. The patient perspective is not currently being analyzed to transform workplace efficiencies, but this study aims to use the patient perspective insight to identify inefficiencies as well as deliver more patient-centered healthcare through the distribution of surveys.

## Background

The Oklahoma State University Center for Health Systems Innovation (CHSI) conducted a study of rural primary practices in Oklahoma. The Patient Evaluation Advisory Tool (PEAT), a survey used to assess patient satisfaction, was distributed to two rural primary care clinics. **Fieldwork** included traveling to both sites, administering paper surveys, and collecting individual responses. Participants included patients present in the waiting area prior to their visit. Survey questions were designed to identify **inefficiencies in the clinical workflow** based on the perspective of the patient. Analysis was conducted through statistical manipulation in Microsoft Excel. Visual representation of the responses was obtained through compiling the data into pie graphs. Results should not be interpreted as generalized findings for all rural practices, but solely for the use of the two participating clinics.

## Methods

Each survey begins with eight questions, including demographics, which describe the participant (Figure A). The survey portion contains fifty questions and statements, which cover the following categories: Phones, Check-In/Visit Preparedness, Same Day Access, Services, Check Out, Patient Care/Doctor Efficiency, Pharmacy & Diagnostics, Billing, About You, and Yes/No Questions/Technology. The survey concluded with a written response question of "What is one thing that this clinic could do better that would make you happier?" Excluding the Yes/No Questions, the patient answered each statement with "Always," "Often," "Rarely," or "NA" (Not applicable). Survey data was transferred to an excel file that acted as a digital copy of the survey. Responses were then matched with a corresponding clinical file that could be distributed for future studies. This allowed for organization and data comparison. Next, an algorithm was used to sum the responses to each survey question. The total number of responses to each question was collected and this allowed for statistical analysis (Figure B). This aggregate data was then converted into pie charts that allowed for efficient reporting purposes. The physicians received individualized reports for those surveys where the patient had selected them as their doctor. The doctor could then see their patients' answers to all fifty questions of the survey. If the "Rarely" and "NA" sum was greater than 10% in any given pie chart, then that category was flagged for investigation by the clinic.

# **Assessment of Rural Primary Care Clinics Through the Patient Evaluation Advisory Tool**

[Heston Richardson, OMS II], [Cameron Lenz, OMS II], [Tomi Adewumi, M.S., MHA], [Ipe Paramel, M.S.], [Marjorie Erdmann, M.S.], [William Paiva, Ph.D.]

## Methods (Cont'd)

Thank you		nation Advisory Tool part in this brief survey as we continually t	rv to provide vo	ou with better servi	ce and in	crease th	e quality	of care a	iven
		E). This survey should take about 10 minute							
Date:Age range of patient:									
		(circle one) 0-18 19-25 26-35 36-45							
***Doctor/	Health Pro	vider for today's appointment					I have ta	ken this	
Type of Insurance:		Private	Person taking survey:  Guardian				survey in the last		
		Self-pay	8	☐ Patient			3 mc	onths	
		Medicaid/Medicare							
		Choose the answer that most often corresp	onds to vou.		Always	Often	Rarely	Never	N
PHONES:					<u>/</u>	<u> </u>	1101017	110101	
	1	I call to make appointments at the clinic.			Always	Often	Rarely	Never	N
	2	I am placed on hold when I call the clinic.			Always	Often	Rarely	Never	N
		An automated phone answering system is/we	ould be easy and	clear to use in this	Yes	No	NA		
	3	clinic.			Yes	NO	Maybe		
	4	My doctor receives my messages.			Always	Often	Rarely	Never	N
	5	I can ask health-related questions and get a rday.	response from the	e clinic the same	Always	Often	Rarely	Never	N
CHECK-IN/V	isit Prepa/	redness:							
	6	I receive a reminder notification for each app	oointment.		Always	Often	Rarely	Never	N
	7	Upon arrival, my personal information is ver	ified.		Always	Often	Rarely	Never	N
	8	I am asked to verify my health insurance or pelinic staff.	proof of insurance	e is requested by	Always	Often	Rarely	Never	N
	9	I am told of my correct copay amount.			Always	Often	Rarely	Never	N
SAME DAY	ACCESS:	·							
	10	I can get a same day appointment when need	led.		Always	Often	Rarely	Never	N

Figure A: portion of PEAT survey

	Sum	Total	Percentage	
Figure B:	42	145	29.0%	
	103	145	71.0%	
Snapshot of	10	155	6.5%	
Shapshot of	Sum	Total	Percentage	
1040 000 1-1010	17		12.3%	
data analysis	15		10.9%	
•	27	_	19.6%	
	24	138	17.4%	
	19		13.8%	
	15		10.9%	
	17	-	12.3%	
	4		2.9%	
	17	155	11.0%	
	Sum	Total	Percentage	
	23	112	20.5%	
	89		79.5%	
	Sum	Total	Percentage	
	23		26.4%	
	22	_	25.3%	
	11	87	12.6%	
	23		26.4%	

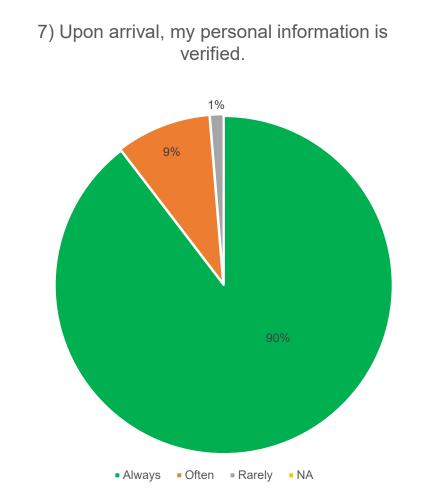
11 87
23 8
63 150
Sum Total P
109
28
16

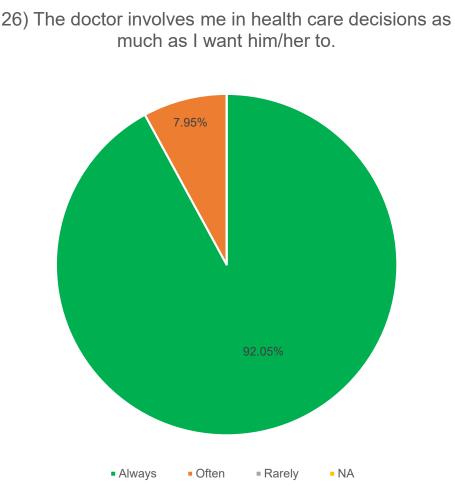
## Results and Findings

#### **Rural Clinic One**

#### Strengths

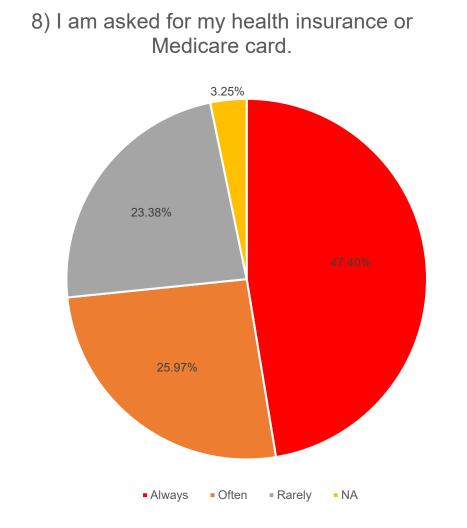
The two graphs displayed below demonstrate two areas of strength for this clinic. The green slice of the first pie chart (Question 7) reflects that over 50% of the surveyed patients were satisfied with the clinic's verification of their personal information. The second pie chart (Question 26) reflects that over 50% of surveyed patients were satisfied with their doctor's efforts to involve them in healthcare decisions.

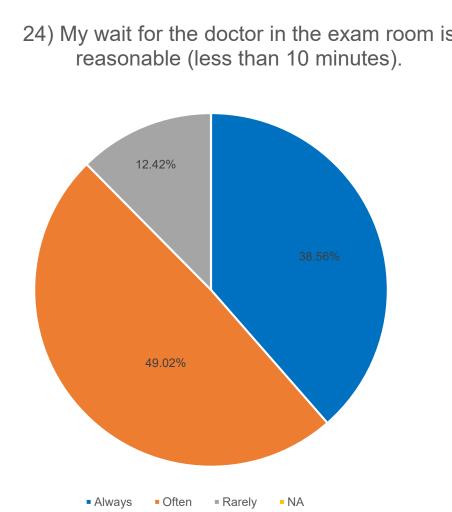




#### Weaknesses

Areas of improvement centered around health insurance verification (Q8) and wait times (Q24). Only 47.4% of surveyed patients reported that they were always asked for health insurance verification. 12.42% of surveyed patients reported that they rarely experienced wait times less than 10 minutes.



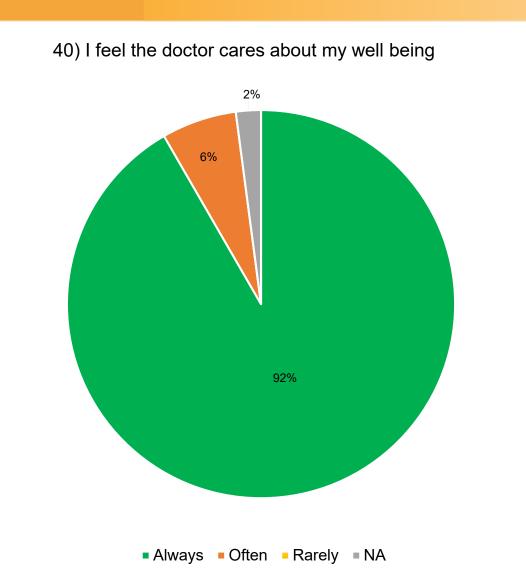


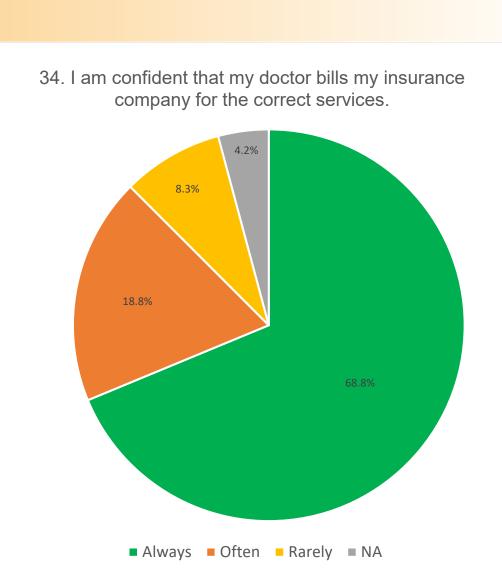
#### **Rural Clinic Two**

#### **Strengths**

The two graphs displayed in the top right report that patients experienced satisfaction with their personal health care (Q40) and felt confident the clinic staff billed their insurance companies for the correct services during their visit (Q34). This reflects a primary care clinic that embraces patient-focused care and utilizes a billing system that maximizes efficiency.

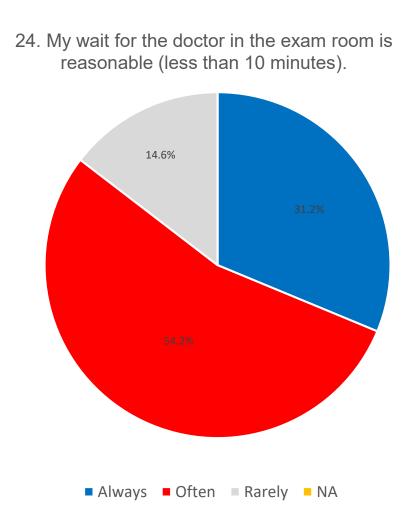
## Results and Findings (Cont'd)





#### Weakness

One area of improvement centered around patient wait times in the clinic lobby (Q24). As seen in the graph below, only 31.2% of respondents considered their wait time to always be reasonable (under 10 minutes). This means 68.8% experienced a wait time over 10 minutes, which varied in frequency. This could reflect poor time management, or that the clinic places an emphasis on ensuring all issues are addressed during a patient's visit.



### Conclusion

The patient perspective is not currently being utilized to transform workplace inefficiencies on a large scale. Utilizing a patient-centered survey like PEAT provides rural practitioners and clinical staff the unique insight of the patient to help enable changes that lead to greater efficiencies in workflow. While patient satisfaction is an important indicator for care as it measures, according to AHRQ (Agency for Healthcare Research and Quality), the provider's ability to meet patient expectations, patient experience surveying generates much more detailed feedback for providers on how their process and procedures are experienced by patients. In the two clinics, physicians expressed great interest and enthusiasm for this type of feedback and highly valued that it was directly from patients.

Rural primary care efficiency can be hindered by multiple facets of a clinic's operations. According to the responses of patients from the two clinics, there are areas extending from health insurance verification to reasonable wait times that can be improved upon. These seemingly simple aspects can compound into larger problems for the clinic, both financially and through its reputation with patients.

The future goal is to partner with more rural primary care clinics that seek to identify inefficiencies of workflow through this unique perspective. The insight provided by PEAT can help transform healthcare into being more patient-centered while focusing on clinical efficiency.

Acknowledgement: The authors and CHSI acknowledge the survey development work of Wesley Hood, CHSI 2017 Summer Intern, who in concert with the staff at CHSI created the PEAT assessment tool. Through patient survey research and CHSI training, he aligned the PEAT to the proprietary CHSI Clinic Efficiency Assessment Tool (CEAT). The CEAT measures the efficiency of the necessary, specific, categorized processes within outpatient clinics. The aim of the PEAT was to create patient-centered feedback to process assessments and quality improvement targets.