

Patient Satisfaction in a Dental School-Based Veteran Dental Clinic

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Heroes Clinic

- Opened in August 2014 with funding from Delta Dental of Colorado
- Free dental care to student veterans at CU's Denver and Anschutz Medical campuses - helping them to transition into the work force
- In 2015 - program expanded to all 4 campuses
- Later - 4 other local Universities



Programs

- Pathways 1 program to restore oral health for homeless veterans striving for employment.
- Pathways 2 established in 2016 to help low-income veterans that did not qualify for Medicaid.
- Pathways 3 established in 2017. This program provides a discount on cost of care, rather than free of charge.

Eligibility for all the Pathways programs requires proof of honorable service.

How is the Heroes clinic different?



Orientation for Faculty and Students

- Heroes Clinic strives to create an environment that is supporting and comfortable for the veterans
- Workshop on Hidden Disabilities for faculty - Post-Traumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI) were included.
- Senior dental students receive an orientation –
 - how to communicate with the patients
 - timeliness of treatment
 - detailed explanation of treatment modalities
 - managing anxiety and treatment related apprehensions

Orientation for Patients

- Patients are oriented to the model of care in Heroes clinic
- “Giving back control” to the patients
- Emphasis on shared decision making

Special Accommodations

- Weighted or a “thunder” blanket has proved useful for some veterans
- Emphasis on location of the patient within the clinic
- Accommodating service animals
- Referral to all disciplines with VA - housing, mental health, service animals and VA benefits

Objective of the study

To evaluate the perception of care delivery, including, feedback on the quality of care and empathy of dental providers and to understand if they were satisfied with the model of care.

Methods

- Cross-sectional survey was sent to 500 patients
- Used both email (Redcap) and mail
- Surveys – SERVQUAL and Dental Satisfaction Questionnaire (DSQ)
- SERVQUAL is used to measure perceptions of care service quality. It includes two measures, Empathy and Responsiveness.

SERVQUAL	Items
Empathy	<ol style="list-style-type: none">1. My dental student clearly explained all treatment2. Assistant director gave explanation related to administration procedures.3. Dental student gave personal attention in listening to the patient's complaint.4. Assistant director gave personal attention to registration procedures.5. The dental student was knowledgeable regarding the patient's needs for the treatment.
Responsiveness	<ol style="list-style-type: none">1. Assistant director responded promptly to long time waiting.2. Assistant director responded promptly to issues or concerns related to care.3. Assistant director responded promptly to issues or concerns related to delays in care.

DSQ	Items
General Satisfaction	There are things about the dental care I receive at the CU Heroes Clinic that could be better.*
Quality of care	<ol style="list-style-type: none"> 1. CU Heroes Clinic dental students are very careful to check everything when examining their patients. 2. CU Heroes Clinic dental students always treat their patients with respect. 3. CU Heroes Clinic dental students are not as thorough as they should be. * 4. Dental students usually explain what they are going to do before they begin treatment. 5. The CU Heroes Clinic is very modern and up to date. 6. Dental students should do more to keep people from having problems with their teeth.*
Pain Management	<ol style="list-style-type: none"> 1. Sometimes I avoid going to the dental student because it is so painful. * 2. CU Heroes Clinic dental students should do more to reduce pain. * 3. I am not concerned about feeling pain when I go for dental care at CU Heroes Clinic.
Availability /Convenience	<ol style="list-style-type: none"> 1. One of the reasons I come to the CU Heroes Clinic is because there are not enough dentists in my area. * 2. CU Heroes Clinic Dental Clinic is very conveniently located.
Accessibility	<ol style="list-style-type: none"> 1. It is hard to get an appointment at the CU Heroes Clinic for dental care right away.* 2. Office hours at the CU Heroes Clinic are good for most people.

Statistical methods

- Outcome variable: patient perception of the care they receive at the Heroes clinic
- Descriptive statistics – demographic data
- Scaled means of all the independent variables
- Bivariate logistic regression analyses were conducted to test the association of SERVQUAL and DSQ independent variables with the outcome variable
- A stepwise forward selection logistic regression – best fit within the model

Results

	Categories	Percent
Age	20-35	52
	36-50	15.3
	51-65	13.7
	66-80	17
	80+	2.2
Military Era	WWII	1.1
	Korea	1.1
	Vietnam	24.7
	Gulf/desert storm	10.92
	Post 9/11	62
Treatment Plan	First appointment	10.9
	Middle	48.5
	Last appointment	40.5

Results

SERVQUAL	Mean	Scaled Mean
Empathy (5 items)	23.31	4.66
Responsiveness (3 items)	14.03	4.67
DSQ		
General Satisfaction (1 item)		3.60
Quality of Care (6 items)	26.99	4.49
Pain Management (3 items)	11.41	3.80
Availability and Convenience (2 items)	7.73	3.86
Accessibility (2 items)	8.12	4.06
Outcome (1 team)		4.42

Results – Bivariate (SERVQUAL)

- The patients rated their overall perception of care higher when students
 - knowledgeable regarding their needs (OR=3.3, p=0.007)
 - clearly explained all the treatment (OR=3.4, p<0.0001)
 - gave personal attention in listening to their complaint (OR=7.8, p=0.028)
- When the Assistant Director
 - gave personal attention to registration procedures (OR=2.6, p=0.012)
 - explained clearly about the administration procedures (OR=2.1, p=0.019)
 - responded promptly to a long time waiting (OR=3.1, p=0.004)
 - issues or concerns related to care (OR=4.1, p <0.0001)
 - delays in care (OR=2.9, p=0.0003).

Results – Bivariate (DSQ)

- The patients rated their overall perception of care higher when dental students
 - clearly explain the procedure before beginning the treatment (OR=2.2, p=0.039)
 - treated the patients with respect (OR=4.5, p=0.028)
- Clinic qualities
 - Heroes clinic is modern and up to date (OR=6.4, p=0.006)
 - Convenient to the majority of the veterans (OR=1.3, p<0.0001)
 - Suitable office hours for most of the people (OR=2.7, p<0.0001)
 - Easy to get an appointment at the clinic (OR=1.4, p=0.021)

Results - stepwise forward selection logistical regression

- Overall patient perception of care remained significantly higher every time
 - Dental student gave personal attention in listening to their complaints (OR=3.9, p=0.0007)
 - Assistant Director responded promptly to delays in care (OR=2.2, p=0.29)
 - Dental students gave a complete explanation of the procedure before beginning the treatment (OR=3.7, p<0.0001)
 - Dental students did good pain management (OR=1.7, p=0.012)

Conclusion

- Person-centered care approach – higher satisfaction in patients
- Orientation of the students and faculty is helpful in providing care to veterans
- Supervisory role of the Assistant Director increased satisfaction in patients

Heroes clinic is funded by Delta
Dental of Colorado

Thank you



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