

Continuity of Care: Perspectives of Uninsured Free Clinic Patients

Journal of Patient Experience
2019, Vol. 6(4) 305-310
© The Author(s) 2018
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2374373518805098
journals.sagepub.com/home/jpx


Akiko Kamimura, PhD, MSW, MA¹ , Samin Panahi, BS¹,
Zobayer Ahmmad, MS¹, Mary Stoddard, BS²,
Shannon Weaver, HBS³, and Jeanie Ashby, MPH⁴

Abstract

Background: Continuity of care is vital to the success of a health-care system because it improves patient satisfaction and health outcomes, and reduces hospitalizations and emergency room visits. **Objective:** The purpose of this study was to examine free clinic patients' perspectives of continuity of care in the United States. **Method:** A convenience sample of free clinic patients who were the age of 18 or older and spoke English or Spanish participated in a self-administered survey from January to April in 2017 (N = 580). **Results:** Better instructions from providers were associated with higher levels of continuity of care ($P < .01$). Higher levels of stress and worse self-rated general health were related to lower levels of continuity of care ($P < .05$ for stress, $P < .01$ for general health). Being employed was associated with lower levels of continuity of care ($P < .05$). Non-US born English speakers and Spanish speakers rated continuity of care higher than US born English speakers ($P < .01$). **Conclusion:** Even if a patient is unable to see the same physician over time, quality instructions from a well-coordinated provider team may enhance continuity of care from patient perspectives. The social context of patients such as working poor individuals is very important for providers to understand in order to identify barriers to continuity of care.

Keywords

free clinics, medically uninsured, continuity of care, patient perspectives, USA

Introduction

Continuity of care refers to a patient seeing the same provider over time (1). Continuity of care is vital to the success of a health-care system because it improves patient satisfaction and health outcomes, and reduces hospitalizations and emergency department visits (1,2). A study based on attachment theory indicates that the patient-physician emotional connection as well as continuity of care develops therapeutic relationships (3). However, previous studies on continuity of care often have not included patient perspectives of providers (eg, trust and confidence) in the analysis (4). In particular, there is lack of research on continuity of care from patient perspectives among underserved populations. Because of the paucity of research and lack of attention to underserved patient perspectives, little is known from patient perspectives about continuity of care at safety-net health-care facilities, such as free clinics, which serve underserved populations with limited human and financial resources in the United States.

Free clinics provide free or reduced fee health-care services to underserved populations. The majority of free clinic

patients are uninsured and live below 200% of federal poverty level (5). Free clinic patients have been shown to report lower physical compared to the US general population (6). Free clinic patients with chronic illness tend to have unmet needs for care (7). Thus, it is important for free clinics to provide preventive care for chronic illness (7). Previous studies on free clinics suggest high patient satisfaction (8,9). However, ensuring continuity of care can be very challenging in a free clinic setting, because providers of free clinics are often volunteers (7,10). Patients often do not expect volunteer providers to be with the clinic for long, and

¹ Department of Sociology, University of Utah, Salt Lake City, UT, USA

² International Affairs and Global Enterprise, University of Utah, Salt Lake City, UT, USA

³ Physician Assistant Studies, University of Utah, Salt Lake City, UT, USA

⁴ Malih Free Clinic, Salt Lake City, UT, USA

Corresponding Author:

Akiko Kamimura, Department of Sociology, University of Utah, 380 S 1530 E, Salt Lake City, UT 84112, USA.
Email: akiko.kamimura@utah.edu



do not always believe continuity of care is beneficial (11). Free clinic patients feel that they may not be able to see a provider in a timely manner if they see the same provider every visit because volunteer providers do not necessarily see patients regularly (11). Continuity of care can be very important for patient satisfaction among free clinic patients because interpersonal communications with health-care providers influences care and outcomes (12,13). Yet, since few studies have examined the issue of continuity of care at free clinics, the information about this issue on this topic is very limited. The purpose of this study was to examine free clinic patients' perspectives of continuity of care. This study analyzed the association between free clinic patients' perceptions of continuity of care, self-reported health, and sociodemographic characteristics of patients.

Methods

Setting

This study was approved by the university's institutional review board. This study was conducted at a free clinic, which provides free primary care services to uninsured individuals who live below 150% of the federal poverty line since 2005. The clinic is located in a metropolitan area of the Rocky Mountain Region in the United States. The clinic is funded by grants and donations, is open 5 days a week (33 hours per week), and is staffed by 10 employees and over 400 volunteers. The majority of the providers are physicians. Volunteers work both in administrative roles and clinical services. Although approximately half of clinic patients self-identify as Hispanic, patients are from more than 50 countries. The clinic almost always has Spanish interpreters on site and has access to interpreters in other languages. The clinic has been making efforts to improve continuity of care in the past year by scheduling patients with a consistent provider whenever possible.

Data Collection and Participants

Self-administered survey data were collected from January to April in 2017. Participants were the age of 18 or older and were able to read and speak English or Spanish. All survey materials were available in English and Spanish. English materials were translated into Spanish by a translator. Another translator back-translated the materials to ensure accuracy of the forward-translation. The third translator verified the accuracy of the translation. Sampling was based on a convenience sample. Participants were recruited by research assistants in the waiting room of the clinic by convenience sampling. All potentially eligible patients in the waiting room were approached by a research assistant. If a patient expressed an interest in participating in the survey, he or she received a consent cover letter and a survey instrument. Informed consent was obtained from each participant. Participants received a small gift (approximately US \$1 or less value) such as sample shampoo, conditioner, and/or

lotion at the completion of the survey. Since the gifts were on the same table with the survey materials, it is reasonable to assume that the majority of the participants knew about a gift.

Measures

Continuity of care. Continuity of care was measured by a 7-item scale developed by "Defusing the Confusion" published by Canadian Health Services Research Foundation (14). The scale uses a 5-point Likert scale (5 = Strongly agree, 1 = Strongly disagree). The following items were included: (1) Necessary information is recorded on medical charts and is transmitted between providers; (2) Providers are aware of what occurred previously and how this affects current care; (3) Your prior medical records are available when you meet with a provider; (4) The provider is aware of other visits; (5) Referral documents are completed and used; (6) Problems identified at previous visits are followed up; and (7) Follow-up visits occur as scheduled. Scoring was based on mean of the items (score range: 1-5). Higher scores indicated higher levels of continuity of care. But there is no specific cutoff point to determine adequate or inadequate levels of continuity of care. Cronbach α for this study population was 0.925 which suggests excellent reliability.

Instructions from providers. Instructions from providers were assessed using the disease self-management items (6 items) from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Item Set for Addressing Health Literacy (Agency for Healthcare Research and Quality) (15). The scale uses a 4-point Likert scale (1 = never, 4 = always). The examples of these items are: "Did this provider give you instructions about what to do to take care of this illness or health condition?" and "How often were these instructions easy to understand?" Higher scores indicated better instructions. Cronbach α for this study population was 0.907.

Provider communications. Provider communications were evaluated using the provider communication items (4 items) from the CAHPS Clinician & Group Survey (CG-CAHPS) (17). The scale uses a 4-point Likert scale (1 = never, 4 = always). The examples of these items are: "Provider listened carefully to patient" and "Provider spent enough time with patient." Higher scores indicated better communications. Cronbach α for this study population was 0.933.

Clerk/receptionist. Provider communications were evaluated using the clerk/receptionist items (2 items) from the CG-CAHPS (Agency for Healthcare Research and Quality, 2015) (16). The scale uses a 4-point Likert scale (1 = never, 4 = always). The 2 items include "Clerks and receptionists helpful" and "Clerks and receptionists courteous and respectful." Higher scores indicated better

Table 1. Sociodemographic Characteristics of Participants and Descriptive Statistics.^a

Variables	Total (N = 580)	US Born English Speakers (n = 144)	Non-US Born English Speakers (n = 145)	Spanish Speakers (n = 291)	P Value	
Frequency (%)						
Female	372 (64.1)	80 (55.6)	86 (59.3)	206 (70.8)	<.01	
Race/ethnicity						
White—Non-Hispanic	127 (22.6)	107 (80.5)	15 (10.7)	5 (1.7)	<.01	
Hispanic/Latino/Latina	360 (64.1)	15 (11.3)	63 (45.0)	282 (97.6)	<.01	
Asian or Pacific Islander	54 (9.6)	8 (6.0)	46 (32.9)	0		
Some college or higher	228 (39.3)	76 (52.8)	59 (40.7)	93 (32.0)	<.01	
Currently employed	262 (45.2)	61 (42.2)	64 (44.1)	137 (47.1)	NS	
Currently married	253 (43.6)	23 (16.0)	77 (53.1)	153 (52.6)	<.01	
US born	149 (25.7)	144 (100)	0	5 (1.7)		
Patient of the clinic—2 years or longer	280 (48.3)	47 (32.6)	78 (53.8)	155 (53.3)	<.01	
Mean (SD)						F
Age	47.90 (13.69)	44.51 (13.10)	48.54 (15.50)	49.40 (12.64)	<.05	6.05
Years in the US (non-US born only)	14.83 (10.43)		14.81 (12.23)	14.84 (9.39)		
Stress ^b	16.81 (5.76)	18.30 (6.91)	16.79 (4.99)	15.88 (5.14)	<.01	7.41
General health ^c	3.09 (0.97)	3.26 (1.03)	2.90 (1.03)	3.10 (0.88)	<.01	4.96
Continuity of care ^d	4.12 (0.75)	3.95 (0.84)	4.19 (0.78)	4.18 (0.64)	<.01	4.74
Instructions from providers ^e	3.16 (0.81)	3.04 (0.84)	3.16 (0.86)	3.23 (0.77)	NS	2.23
Provider communication ^f	3.53 (0.69)	3.45 (0.75)	3.55 (0.74)	3.56 (0.61)	NS	1.41
Clerks/ receptionist performance ^g	3.53 (0.72)	3.59 (0.61)	3.52 (0.80)	3.51 (0.73)	NS	0.63

Abbreviations: ANOVA, analysis of variance; NS, not significant; SD, standard deviation.

^aNo. (%) or Mean (SD). *P* value denotes significance from Pearson χ^2 tests between categorical variables (for cell size ≥ 5 only), and ANOVA tests for continuous variables comparing US born English speakers, non-US born English speakers, and Spanish speakers.

^bHigher scores indicate better health.

^cHigher scores indicate higher levels of stress.

^dHigher scores indicated higher levels of continuity of care.

^eHigher scores indicated better instructions.

^fHigher scores indicated better communications.

^gHigher scores indicated better clerk/receptionist performance.

clerk/receptionist performance. Cronbach α for this study population was 0.913.

Stress. Levels of stress was measured by a validated reliable 10-item scale, the Perceived Stress Scale (17). The scale uses a 5-point Likert scale (0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often). The examples of the items include “How often have you been upset because of something that happened unexpectedly?” and “How often have you felt that you were unable to control the important things in your life?” The positively stated items are reversed coded. Higher scores indicate higher levels of stress. Cronbach α for this study population was 0.692.

Self-rated general health. Participants were asked to rate their general health using a 5-point Likert scale (1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor).

Sociodemographic characteristics. The following demographic information was asked: whether a participant had been a patient of the clinic less than 2 years or 2+ years, age, gender, country of origin, race/ethnicity, educational attainment, employment status, and marital status.

Data Analysis

Data were analyzed using IBM SPSS version 22. Multiple regressions were performed with continuity of care as a dependent variable. The following sociodemographic characteristics were included as independent variables: age, gender (female = 1, not female = 0), nativity (US born = 1, not US born = 0), educational attainment (some college or higher = 1, less than some college = 0), employment status (employed = 1, unemployed = 0), marital status (married = 1, not married = 0), a patient of the clinic for 2+ years (yes = 1, no = 0). In addition, the following independent variables were included: instructions from providers, provider communication, and clerk/receptionist performance. The results of Pearson correlations showed that some of the correlations were statistically significant at the 0.01 level. Multicollinearity was tested using the variance inflation factor. There was no significant multicollinearity among the variables.

Results

Table 1 presents sociodemographic characteristics of participants (N = 580; US born English speakers n = 144, non-US born English speakers n = 145, Spanish speakers

$n = 291$) and descriptive statistics of stress, and self-rated general health. More than half of participants were female. Spanish speakers had higher percentages of female participants (70.8%) than US born and non-US born English speakers (55.6% and 59.3%; $P < .01$). Over 60% of the participants were Hispanic, Latino, or Latina (64.1%). Approximately 40% of the participants had some college or higher educational attainment (39.3%). The percentage of having some college or higher educational attainment was highest among US born English speakers (52.8%) and lowest among Spanish speakers (32%; $P < .01$). Less than half of the participants had a full or part time job (45.2%). Slightly more than 40% of the participants were married (43.6%). The percentage was the lowest among US born English speakers (16%) compared to non-US born English speakers (53.1%) and Spanish speakers (52.6%; $P < .01$). Half of the participants had been patients of the clinic for 2+ years (48.3%). The average age of the participants was 47.90 years (standard deviation [SD] = 13.69). US born English speakers (44.51 years, SD = 13.10) were significantly younger than non-US born English speakers (48.54 years, SD = 15.50) and Spanish speakers (49.40 years, SD = 12.64; $P < .01$). The average years in the US among non-US born participants was 14.83 (SD = 10.43).

US born English speakers (mean = 18.30, SD = 6.91) reported higher levels of stress compared to non-US born English speakers (mean = 16.79, SD = 4.99) and Spanish speakers (mean = 15.88, SD = 5.14; $P < .01$). Non-US born English speakers (mean = 2.90, SD = 1.03) reported the best self-rated general health while US born English speakers (mean = 3.26, SD = 1.03) reported the worst ($P < .05$). Non-US born English speakers (mean = 4.19, SD = 0.78) and Spanish speakers (mean = 4.18, SD = 0.64) rated higher on continuity of care than US born English speakers (mean = 3.95, SD = 0.84; $P < .01$).

Table 2 presents predictors of continuity of care. Better instructions from providers were associated with higher levels of continuity of care ($P < .01$). Higher levels of stress and worse self-rated general health were related to lower levels of continuity of care ($P < .05$ for stress, $P < .01$ for general health). Being employed was associated with lower levels of continuity of care ($P < .05$).

Discussion

This study examined factors associated with free clinic patients' perspectives of continuity of care and has 3 main findings. First, higher levels of continuity of care were associated with better instructions from providers, better self-rated general health, and lower levels of stress. Second, free clinic patients who were employed perceived lower levels of continuity of care. Third, non-US born English speakers and Spanish speakers rated continuity of care higher than US born English speakers.

It can be seen as intuitive that better instruction from providers correlates with better continuity of care. A

Table 2. Predictors of Continuity of Care.^a

Variables	β	P Value
Age	0.003	NS
Female	0.01	NS
US born	-0.11	NS
Some college or higher	0.001	NS
Employed	-0.17	<.05
Married	-0.01	NS
Clinic patient 2+ years	-0.06	NS
Stress	-0.01	<.05
General health	-0.17	<.01
Instructions from providers	0.26	<.01
Provider communication	0.07	NS
Clerks/ receptionist performance	0.05	NS
(Constant)	3.64	NS
R ²	0.20	
F	7.17	
P value	<.01	

Abbreviation: NS, not significant.

^aN = 580. Multivariate multiple regression. P value denotes significance from multivariate regression analysis.

previous study found a potential association among continuity of care, patient-physician communication, and health outcomes (18). Interestingly, the results of the current study show that better instructions from providers, rather than better communication, were associated with higher levels of continuity of care. Having good communication may not be enough to improve continuity of care. Rather, clear instructions on disease management and appropriate use of follow-up appointments could help sustain continuity of care. Additionally, higher levels of continuity of care were associated with better self-rated general health and lower levels of stress. This may be due to the individual self-efficacy and the desire to follow-up with a consistent provider in order to maintain chronic diseases. Further research may replicate or provide further explanation for this finding.

The second main result that being employed was related to lower levels of continuity of care indicates that the social context of free clinic patients could be an important factor for continuity of care. Even free clinic patients who are employed are still in poverty and un- or underinsured, which is a qualifying factor to being treated at a free clinic. Free clinic patients who have employment could be the "working poor" who work 27 hours or more per week but are still below the poverty level (19). It has been reported that the working poor tend to have health problems but have limited access to health care (20). Free clinic patients who have a job may work for long hours and/or have unpredictable work shifts that may make continuity of care difficult. Better understanding about the social context of free clinic patients and continuity of care would help improve healthcare practice for underserved populations.

Furthermore, this study suggests that US born English speakers rated levels of continuity of care lower than non-US born English speakers and Spanish speakers. Previous

studies on free clinic patients found that US born English speakers reported worse physical and mental health status than non-US born English speakers and Spanish speakers (6,21). Is depth of relationship supposed to mean connection in the relationship? (9). Although immigrant patients may need additional services to reduce barriers linked to their non-nativity or low English proficiency, it is important to further examine the issue of continuity of care among US born English speaking free clinic patients.

Limitations

Although this study contributes valuable knowledge about free clinic patients' perspectives of continuity of care, it has limitations. This study was cross-sectional and thus was unable to determine causal relationships among variables. However, some results (eg, higher levels of continuity of care were associated with better self-rated general health and lower levels of stress) could possibly tease out causation rather than correlation. Although patients of the clinic are from more than 50 countries, this study included only patients who spoke English or Spanish. The Cronbach α for the stress scale was not high. However, another study on free clinic patients focusing on stress used the same stress scale and had good reliability (0.84) (21). Since this project was conducted at only one free clinic, the results of this study may not be generalizable to other free clinics in the nation.

Conclusion

Although it may be challenging for free clinics and other safety-net health-care facilities to implement continuity of care, this practice nonetheless has benefits for patient well-being. Even if a patient is unable to see the same physician over time, quality instructions from a well-coordinated provider team may enhance continuity of care from patient perspectives. The social context of patients such as working poor individuals is very important for providers to understand barriers to continuity of care. All patients of free clinics and other safety-net health-care facilities experience disadvantages regardless of nativity and English language proficiency. Including services that address social disadvantages experienced by underserved populations may improve care for such populations. Future studies should further explore ways to enhance continuity of care and integrate medical and social services at free clinics and other safety-net health-care facilities. Finally, while this study was based only on patient perspectives, future research may examine the continuity of care from providers' and/or organizational perspectives for a more comprehensive understanding of continuity of care.

Acknowledgments

The authors want to thank the patients who participated in this study and acknowledge the contribution of the staff and volunteers

of the Maliheh Free Clinic. In addition, we thank Guadalupe Aguilera, Travis Dixon, Misty Pedersen, Zane Pedersen, Mu Pye, Maria Reyes, Emily Seegrist, and Shanna Singh for their help in data collection, data entry or translation related to this study.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This project was funded by the Sorenson Legacy Foundation.

ORCID iD

Akiko Kamimura, PhD, MSW, MA  <https://orcid.org/0000-0001-6528-5770>

References

- Hussey PS, Schneider EC, Rudin RS, Fox DS, Lai J, Pollack C. Continuity of care and the cost of treating chronic disease, 2014. Retrieved April 20, 2018, Available from: https://www.rand.org/pubs/research_briefs/RB9795.html.
- van Walraven C, Oake N, Jennings A, Forster AJ. The association between continuity of care and outcomes: a systematic and critical review. *J Eval Clin Pract*. 2010;16:947-56.
- Schultz K, Delva D, Kerr J. Emotional effects of continuity of care on family physicians and the therapeutic relationship. *Can Fam Physician*. 2012;58:178-85.
- Health Quality Ontario. Continuity of care to optimize chronic disease management in the community setting: an evidence-based analysis. *Ont Health Technol Assess Ser*. 2013;13:1-41.
- Darnell JS. Free clinics in the United States a nationwide survey. *Arch Intern Med*. 2010;170:946-53.
- Kamimura A, Christensen N, Tabler J, Ashby J, Olson LM. Patients utilizing a free clinic: physical and mental health, health literacy, and social support. *J Community Health*. 2013;38:716-23.
- Nadkarni MM, Philbrick JT. Free clinics and the uninsured: the increasing demands of chronic illness. *J Health Care Poor Underserved*. 2003;14:165-74.
- Ellett JD, Campbell JA, Gonsalves WC. Patient satisfaction in a student-run free medical clinic. *Fam Med*. 2010;42:16-8.
- Kamimura A, Ashby J, Myers K, Nourian MM, Christensen N. Satisfaction with healthcare services among free clinic patients. *J Community Health*. 2015;40:62-72.
- Nadkarni MM, Philbrick JT. Free clinics: a national survey. *Am J Med Sci*. 2005;330:25-31.
- Kamimura A, Chen J, Aguilera G, Stoddard M, Sin K, Pye M, et al. Patient satisfaction and perspectives of continuity of care among free clinic patients in the USA: a qualitative study. *Divers Equal Health Care*. 2017;14:169-74.
- Platonova ER, Warren-Findlow J, Saunders WJ, Hutchison JA, Coffman MJ. Hispanics satisfaction with free clinic providers:

- an analysis of patient-centered medical home characteristics. *J Community Health*. 2016;41:1290-7.
13. Platonova EA, Saunders WB, Warren-Findlow J, Hutchison JA. Patient perceptions of patient-centered medical home characteristics and satisfaction with free clinic services. *Popul Health Manag*. 2016;19:324-31.
 14. Canadian Health Services Research Foundation. Defusing the confusion: concepts and measures of continuity of healthcare, 2002. Retrieved April 20, 2018, Available from: http://www.cfhi-fcass.ca/Migrated/PDF/ResearchReports/CommissionedResearch/cr_contcare_e.pdf.
 15. Agency for Healthcare Research and Quality. CAHPS® item set for addressing health literacy, 2012. Retrieved April 20, 2018, Available from: <https://www.cahpsdata.base.ahrq.gov/files/CGGuidance/About%20the%20Item%20set%20for%20Addressing%20Health%20Literacy.pdf>.
 16. Agency for Healthcare Research and Quality. An overview of version 3.0 of the CAHPS clinician & group survey, 2015. Retrieved April 20, 2018, Available from: https://www.ahrq.gov/sites/default/files/wysiwyg/cahps/surveys-guidance/cg/about/cg_3-0_overview.pdf.
 17. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav*. 1983;24:385-96.
 18. Hsiao CJ, Boulton C. Effects of quality on outcomes in primary care: a review of the literature. *Am J Med Qual*. 2008;23:302-10.
 19. US Bureau of Labor Statistics. A profile of the working poor, 2013. Retrieved April 20, 2018, Available from: <https://www.bls.gov/opub/reports/working-poor/archive/a-profile-of-the-working-poor-2013.pdf>.
 20. Zimmerman E, Woolf SH. Understanding the relationship between education and health, 2014. Retrieved April 20, 2018, Available from: <https://nam.edu/wp-content/uploads/2015/06/BPH-UnderstandingTheRelationship1.pdf>.
 21. Kamimura A, Ashby J, Jess A, Chernenko A, Tabler J, Trinh HN, et al. Stress, coping strategies, and depression among

uninsured primary care patients. *Am J Health Behav*. 2015; 39:742-50.

Author Biographies

Akiko Kamimura, PhD, MSW, MA, is Associate Professor of Sociology at the University of Utah. She has published over 80 peer-reviewed journal articles in the areas of social determinants of health, health disparities, minority and immigrant health, intimate partner violence, health promotion, health education, community-based research, health management and policy, and global health.

Samin Panahi, BS, earned a bachelor of science in Health Society and Policy from University of Utah. She is currently a doctoral student in Sociology at the University of Utah. Her research interests include disparities, survey based research and community health.

Zobayer Ahmmad, MS, is a PhD student in the Department of Sociology, University of Utah. He received his Master of Science degree in Sociology. His research includes Asian American health, social determinants of health, and underserved health. He is currently working on several projects using the National Longitudinal Study of Adolescent to Adult Health and Utah Population Database.

Mary Stoddard, BS, received her Bachelors of Arts in International Studies and Bachelors of Science in Health, Society, & Policy and a minor in Sociology at the University of Utah. She is currently pursuing a Master's of Science in International Affairs & Global Enterprise at the University of Utah. She has co-authored several publications relating to topics including community health, free clinics, patient perspectives, and refugee health.

Shannon Weaver, HBS, is a student in the Physician Assistant Studies at the University of Utah. She has published approximately 20 peer-reviewed journal articles. She is interested in research on community health for underserved populations.

Jeanie Ashby, MPH, is Executive Director of Maliheh Free Clinic and has over 15 years experience in health care administration.