

# Client Satisfaction and Associated Factors Among Insured and Uninsured Adult Clients Visiting Public Health Institution in Enrage Enawga Woreda, Amhara Regional State North West Ethiopia, 2021: Institution Based Comparative Cross Sectional Study

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## ABSTRACT

**Background:** Community-Based Health Insurance is an emerging concept for providing financial protection against the cost of illness and improving access to quality health services for rural and urban populations. Knowing the factors for patient satisfaction is an important and direct indicator of quality of health care which is essential for providers to fill their gaps. Although few studies have been conducted on patient satisfaction in Ethiopia; but this study aimed to assess patient satisfaction and associated factors in the insured and uninsured clients under Community-based health insurance.

**Methods:** Institution-based comparative cross-sectional study was conducted from March 15 th2021 to April 30th, 2021. Over all 770 clients were selected from the health center by using simple random sampling techniques. The data were coded and entered into Epi-data3.1 and exported to SPSS Version 25 for analysis. Descriptive statistics and bivariate and multivariable logistic regression analyses were performed to identify the factors that affect client satisfaction with of p values less than 0.05.

**Results:** Out of 753 respondents with a response rate of 97.8% the insured and non-insured patient satisfaction was 215 (56.6%) and 171(45.8%) respectively. The mean score with Standard Deviation of the satisfaction score was  $3.6 \pm 0.37$  among insured and  $3.5 \pm 0.38$  among non-insured under the CBHI scheme. The Pearson chi-square test showed a statistically significant difference between insured patients with a higher mean satisfaction score than their counterpart noninsured with  $\chi^2 = 8.67$ ,  $df = 1$ ,  $P = 0.003$ .

**Conclusions:** The result shows that insured clients have a higher satisfaction score than non-insured clients. Therefore, to improve patient experiences at health centers and achieve financial risk protection through CBHI, program managers and healthcare providers should increase the satisfaction at the health facility to insured and non-insured community members.

## Introduction

The principle of patient satisfaction is straightforward with the whole health system, and it is also the measurement of health system responsiveness [1,2]. Even though it is challenging to find an agreed-upon definition, patient satisfaction is a measure of the level of healthcare content they receive from their providers [3,4]. Client satisfaction is an individual subjective evaluation of their cognitive and emotional reaction, as a result of interaction between their expectations and regarding to experience after obtaining service from healthcare providers [5,6]. Satisfaction may also directly affect the economic capability of an institution

by affecting the client's choice of health institution. Satisfaction with care is a vital power determining whether a person seeks medical advice, adheres to their treatment, and maintains a continuing relationship with healthcare providers [7].

Patient satisfaction is an indispensable health service outcome measurement which is the perceived fulfillment of patient needs and desires through the delivery of healthcare services [8]. It is an integral part of the health system management strategies to assess the performance of the health system for quality assurance and accreditations. It is also the direct measurement of

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organizational strengths and performance of the provision of the services. Patient satisfaction is evaluated from the dimensions of the health facility environment, patient-physician relationships, and service availability [9].

Universal health coverage (UHC) is a situation, where all people can access the health services, they need without incurring financial hardship. Health service equity and quality are important indicators in achieving universal health coverage, to achieve universal health coverage health insurance is a key component for satisfaction [10,11]. Countries in sub-Saharan Africa (SSA) like South Africa, Gabon, Mali, Senegal, Uganda, Tanzania, Nigeria, and Ghana have taken steps towards universal coverage by adopting risk pooling systems to supply financial protection, particularly to the poor and vulnerable in their societies [8,11,12].

The Ethiopian Federal Ministry of Health (FMOH) has been implementing a health sector development program (HSDP). It is a 20-year plan that encourages improvements in the coverage and utilization of the services over the periods of implementation of the health sector development. Program (HSDP). But there was still a gap in access and quality of services provided to communities [13]. Therefore, this study aimed to assess and compare client satisfaction and associated factors among insured and uninsured adults who visit public health facilities in Enarge Enawga woreda, Amhara region, North West Ethiopia 2021.

## Materials and Methods

### Setting and Duration of the Study

The study was conducted at Enarge Enawga Woreda East Gojam Amhara regional state from March 15th, 2021 to April 30th, 2021. It is away from 117 km at Debre Markos, 180km from Amhara Regional State, and 302 km from the capital city of Ethiopia, Addis Ababa. It consists of 28 rural and 3 urban kebeles. It has 1 primary hospital, 2 urban, and 5 rural health centers, and 2 private clinics. The Woreda has a population of 218257 among which 8168 are insured and 2743 are noninsured that got service in the seven health centers in the last three months (Enarge Enawga Woreda Health Office Health Management Information System (HMIS)).

### Study Design and Population

An institutional-based comparative cross-sectional study was employed among insured and uninsured adults. All adult clients attending public health facilities in Enarge Enawga woreda, Amhara region, North West Ethiopia were the source population. All adult patients who visited public health facilities during the data collection period and fulfilled the selection criteria were the study population.

### Inclusion and Exclusion Criteria

All adult Clients who were served and visited public health facilities were included in this study, whereas those clients who were critically ill, unable to respond to interviews and clients who were using exempted services but were members of CBHI were excluded from this study.

### Sample Size and Sampling Procedure

A double population proportion formula was used to estimate the sample size required for the study. The sample size calculation assumed the proportion (p1) was proportion satisfaction in

insured clients taken as 54.1% (Southern Ethiopia household heads' satisfaction), p2-proportion of satisfaction in uninsured clients 75.7% was taken the same study conducted in wollo, northeast Ethiopia,  $\alpha$  - the level of statistically significant 0.05;  $\beta$  = Type II error 0.2 and in consideration of a 10% non-response rate, the final sample size of this study was 770 [10,14]. There are seven fully functional health centers in Enarge Enawga woreda, Amhara region, North West, Ethiopia. All the health centers were included in the study. At first, the calculated sample size was proportionally allocated to each health center based on the number of patients who were seen at the health centers in the last three months, before the actual data collection for both groups. Furthermore, a simple random sampling method was used to select each adult client based on proportions to get the desired sample size.

### Data Collection Instruments and Procedures

A pre-tested structured questionnaire face-to-face interview was used to collect data from study participants. The data collection was conducted by using the PEI CBHI tool which was developed by reviewing different kinds of literature and guidelines and it consists of three parts which include: socio-demographic characteristics, experience with service utilization-related characteristics, and availability of resource and financial accessibility characteristics [1-3]. Data were collected by health information technician and data collection processes were supervised by supervisors.

### Definitions and Measurements

Patient satisfaction is respondents with an average score of less than the mean value are classified as dissatisfied, and those with an average score of greater and equal to the mean value are considered as satisfied [1].

### Data Processing and Analysis

Data were analyzed using SPSS version 23. Data were cleaned by running frequencies to each variable to check outliers, inconsistencies, and missed values. The assumptions for binary logistic regression were checked. Hosmer-Lem show statistic and Omnibus tests were done for model fitness. Variables with  $P < 0.25$  in the bivariate analysis and variables that were significant in previous studies were considered to select the candidate variables for the final model. Collinearity statistics (Variance inflation factor (VIF)  $> 10$  and tolerance (T)  $< 0.1$ ) were considered suggestive of the existence of multicollinearity. Adjusted Odds Ratio along with 95% CI and Pearson chi-square test was estimated to identify factors affecting insured and uninsured adult clients who visit public health facilities. The P-value  $< 0.05$  was considered to declare a result as statistically significant. Then simple frequencies, summary measures, tables, and figures were used to present the information.

### Data Quality Management

Data collectors and supervisors were provided with a daylong intensive training on the techniques of data collection and components of the data collection tool. Before the actual data collection, the questionnaire was pre-tested on 10% of insured and uninsured adult clients in the Debre Markos Health Center. Based on the findings from the pretest, ambiguous questions were amended. An ongoing formative checkup for completeness and consistency of responses was made by the supervisors daily.

**Ethics Consideration and Consent to Participate**

Ethical clearance was issued from the Institutional Review Board of Debre Markos University. Permission was secured from the respective health center administrators. Moreover, written consent was obtained from each study participant before the commencement of data collection. Before obtaining the consent of each participant, a letter of support and approval to undertake the research in health facilities was obtained from managers in each public health facility. Privacy, as well as the confidentiality of participants, was asserted. In any case, their right to withdraw from the study at any time was assured.

**Results**

**Socio-Demographic Characteristics of the Study Participants**

A total of 753 study participants participated in this study, yielding a response rate of 97.8%. The mean age and standard deviation of study participants were 42 ± SD 14.66 years old. Four hundred eleven 411(54.6%) were male and 478(63.5%) were married. More than half of the respondents 520 (69.1%) live in rural areas and 422 (56%) were farmers.

**Experience with Service Utilization of Insured and Uninsured Participants**

Most of the respondents visited the health center reputedly 582(77.3%). Health care provider gives health education to more than half of the participants 578(76.8%) and 466(61.9%) of the respondents have pre-information about the health facility.

**Availability of Resources and Financial Accessibility**

Among the respondents, more than half were satisfied with the cost of service and drugs but more than half of the respondents were dissatisfied with the availability of laboratory service.

**X2-Test Result**

To know a significant difference between insured and uninsured Pearson chi-square test was done for 380 insured and 373 uninsured clients (Table 1).

**Variable Category**

**Table 1: Chi-square result for insured and uninsured respondents on level of satisfaction with public health facility and associated factor among adult patients in Enrage Enawga Woreda, East Gojam zone, Amhara Regional state, Ethiopian2021(n=753).**

Insurance status	Satisfied	Dissatisfied	X <sup>2</sup>	p-value
Insured	215	165	8.67	0.003
Uninsured	171	202		

**Level of Satisfaction**

In this study a total of 753 respondents among those 380 insured clients 215(56.6%) and 373 uninsured clients 171(45.8%) were greater than the mean score which level as satisfied.

**Factors Affect Level of Satisfaction of Insured Client**

After control possible confounders in multivariable logistic regression, pre information about the facility, measuring blood pressure of the client, explain diagnosis to the patient and frequency of visit were having association of level of satisfaction for insured client at p-value < 0.05.

Result revealed that clients who have pre information about the health facility service were 0.26 times less likely satisfied with 95% CI: (0.16-0.43), p=0.00). Clients whose blood pressure measured were 3 times more likely satisfied (AOR =3.33, with 95% CI: (2.01-5.51)), p=0.00). Clients who got get explanation about their diagnosis were 2 times more likely satisfied (AOR=1.74 with 95% CI: (1.03-2.94), p=0.038)). Clients who visit the health facility once were 2 times more satisfied (AOR=2.04 with 95% CI: (1.05-3.99), p=0.036)).

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**Factors Affect the Level of Satisfaction of Insured Client**

After controlling possible confounders in multivariable logistic regression, pre-information about the facility, measuring the blood pressure of the client, explaining the diagnosis to the patient, and frequency of visit was associated with the level of satisfaction for an insured client at p-value < 0.05.

The result revealed that clients who have pre-information about the health facility service were 0.26 times less likely satisfied with 95% CI: (0.16-0.43), p=0.00). Clients whose blood pressure measured were 3 times more likely satisfied (AOR =3.33, with 95% CI: (2.01-5.51)), p=0.00). Clients who got get an explanation about their diagnosis were 2 times more likely satisfied (AOR=1.74 with 95% CI: (1.03-2.94), p=0.038)). Clients who visited the health facility once were 2 times more satisfied (AOR=2.04 with 95% CI: (1.05-3.99), p=0.036)).

**Factors Affect the Level of Satisfaction of Uninsured**

As result showed that clients who were educated (able to read and write) were 4 times more satisfied (AOR=4.17, with 95%CI=2.5-6.9), p=0.00). Clients who had a family member of 1-5were 2 times more satisfied with (AOR=2.3 95%CI=1.13-4.69, p=0.022). clients who got an explanation about the diagnosis were 3 times more satisfied (AOR =3.20 with, 95%CI=1.95-5.27, p=0.00). At the same time clients who measure their blood pressure were 2 times more satisfied (AOR=2.43 with 95%CI=1.47-3.99, p=0.00).

**Discussions**

In this study the level of satisfaction of the insured was 56.6% and the uninsured was 45.8%. The satisfaction of the insured is more than uninsured clients. This result is similar to the study conducted Tehuledere district Wollo Amhara region, Ethiopia 79.4 for insured and 75.7 were uninsured [1]. This result is nearly in line with a study conducted in India where 82% of insured and 73 % of non-insured clients were satisfied with the services received [2]. The findings of this study also reveal that the difference was statistically significant where insured patients have a higher mean of satisfaction score than their counterpart non-insured, and also similar to a study conducted in Ghana that found a statistically significant difference in the satisfaction of insured and non-insured clients [3].

According to the result of this study the level of satisfaction among insured clients was 56.6% with 95%CI (54%, 63%) which is higher than (42.6%,42.1%,50.2%) earlier study done

in Sheko district, Anilemo Hadiya and Nigeria respectively, and also the result was similar to (54.1% and 54.7%) in Felege hiwot referral hospital and Bangladesh [4-8]. But it is lower than 82 %, 91.3 and 79.4% study done in, South Wollo Amhara Ethiopia, south nation nationality Ethiopia and India [1,2]. The possible reason for the difference from the earlier finding may be due to difference in study participant educational status in Zaria Nigeria were university staff who were educated. On the other hand, socio cultural difference and study areas in India were hospitals, as well as Zaria Nigeria and also South Wollo the study participant were only outpatient clients [4,9].

Regarding uninsured clients the level of satisfaction with health facilities was 45.8% with 95%CI (44%, 52%) which is lower than (80.1%, 54.2% 77%,75.7%, and 57.8%) earlier studies done in Hawassa University Teaching Hospital, Wolaita Sodo University, Jimma University Specialized Hospital, South Wollo Amhara Ethiopia and Bahir Dar Felege Hiwot referral Hospital [10-12]. The difference may be due to the difference in study participants in which previous studies were male in Bahir dare Felege Hiwot referral hospital [12]. The other reason could be explained by the experience of patients and cultural values of patients for time, infrastructure. Moreover, the study area may influence patient experience, while this study was conducted in Health Center, others include hospitals. Because specialized teaching hospitals are equipped very well and have enough diversity of health professionals, better diagnostic facilities, health service infrastructures, and awareness of service providers of different levels that are expected to demonstrate the standard way of patient examination resulting in higher overall satisfaction level at Jimma and Wolaita Sodo [11,12].

Many satisfaction studies have tried to relate client satisfaction with socio-demographic variables in this study educational status was associated with uninsured client satisfaction. Respondents who were educated 4 times more likely satisfied than those who were uneducated (unable to read and write). This result differs from the study conducted at Jimma University Hospital [12]. The reason is due to the study area. Educational level increases satisfaction also increases because an educated person has the ability to understand the service, they get easily but uneducated will be confused with service [13].

Clients who visited the health facility once were 2 times more likely satisfied than those who visited the health facility reputedly. The frequency of health facility visits in other studies is not a predictor variable in Zaria Nigeria, Felege hiwot referral hospital among private wing and Felege hiwot referral hospital among insured women [10,14]. The difference might be in study settings and participant selection. Because unfamiliarized the clients with the service. The participant of the current study is insured and uninsured clients of both sexes whereas the study conducted in Felege hiwot was the study participants were insured females and the others were private wing. However; respondents with once visited the health facility are a predictor of an insured clients in this study. The probable reason might be the provision of similar laboratory services and drug prescription of the provider with reacted visits brought dissatisfaction of respondents with health facility service [3,15].

Patients who have pre-information about the health center service were less satisfied than respondents who did not have pre-information, this study is similar to a study done in India, which disagreed with the study with the private wing in Felege Hiwot Referral Hospital [16]. Pre-information about the health facility is not a predictor variable in Bahir Dare Felege Hiwot Referral Hospital. The difference might be due to the difference in tools and the participants of the study. But pre-information is not associated with uninsured client satisfaction. During the time of visit, clients who had information about health facility service were dissatisfied because they did not get the service they were informed of before due to different reasons [10,17].

According to the results of the present study consultation on diagnosis is an important factor in predicting the levels of patient satisfaction both insured and uninsured. Clients who got the explanation about their diagnosis were more likely satisfied than those who did not get an explanation about their diagnosis from healthcare provider. This study is similar for insured clients to the study conducted earlier in South Wollo Amhara Ethiopia [1]. As health service providers continue consulting their patients on explanations about the diagnosis, patient satisfaction increases. So, it indicates that it is better to give attention to outpatient consultation on diagnosis explanation to improve patient satisfaction [15].

Among uninsured Clients who had a family member of 1-5 were more likely satisfied than those who had more than five family members, this is a study similar to in Bangladesh. This might be due to one of the reasons as larger families required more healthcare and made frequent visits to the health facilities, but it is not a predictor variable in Lahore, Pakistan [1,2,18]. In my study Clients who measured their blood pressure were more likely satisfied than patients they did not measure their blood pressure for both insured and uninsured clients [19-25]. This is the new variable that is added to this research but another research not studied including this variable [26-30]. Measuring the blood pressure of client increases the satisfaction level of the client both insured and uninsured [31]. The reason is clients know their pressure status early and it is used as psychological treatment.

### Conclusions and Recommendations

The study finding shows that an insured patient has a higher level of satisfaction score than uninsured. Generally, in this study pre information about the facility and frequency of visits were significantly associated with insured clients, whereas family size and educational status were significantly associated with uninsured clients, but giving an explanation about the diagnosis and measuring the blood pressure of the client were associated determinants of both insured and uninsured client's satisfaction.

Healthcare providers shall give appropriate information, explain their diagnosis to the patient, and measure the blood pressure routinely to enhance client satisfaction at all times. The health center heads should conduct periodic identification of related influencing factors on patient satisfaction and give appropriate pre-formation about health facility service. The health center managers need to fulfill the availability of essential materials to reduce the dissatisfaction of insured patients and attract more members to the CBHI scheme. The researcher should be further investigated to fulfill client satisfaction

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Author contributions

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**References**

- Organization WH. The world health report 2000: health systems: improving performance: World Health Organization. 2000.
- Organization WH. World health statistics 2014: a wealth of information on global public health. World health statistics 2014: a wealth of information on global public health. 2014.
- Bleich SN, Özaltın E, Murray CJ. How does satisfaction with the health-care system relate to patient experience? Bulletin of the World Health Organization. 2009. 87: 271-278.
- Saraswati MS, Kristina SA, Zulkarnain AK. Perceived service quality and patient satisfaction at pharmacy department in Yogyakarta, Indonesia. Age. 2018. 21: 4.
- Oliver RL. Whence consumer loyalty? Journal of marketing. 1999. 63: 33-44.
- Zarei E, Arab M, Tabatabaei SM, Rashidian A, Forushani AR, et al. Understanding patients' behavioral intentions: evidence from Iran's private hospitals industry. Journal of health organization and management. 2014.
- Mitiku Kebede K, Geberetsadik SM. Household satisfaction with community-based health insurance scheme and associated factors in piloted Sheko district; Southwest Ethiopia. PLoS One. 2019. 14: e0216411.
- Atnafu DD, Tilahun H, Alemu YM. Community-based health insurance and healthcare service utilisation, North-West, Ethiopia: a comparative, cross-sectional study. BMJ open. 2018. 8: e019613.
- Adissu G, Bikis GA, Tamirat KS. Patient satisfaction with antiretroviral therapy services and associated factors at Gondar town health centers, Northwest Ethiopia: an institution-based cross-sectional study. BMC health services research. 2020. 20: 1-9.
- Abera A, Desale AY, Argaw MD, Desta BF, Tsegaye ZT, et al. Satisfaction with Primary Health Care Services between Insured and Non-insured patients under Community-Based Health Insurance Scheme: A Comparative Cross-Sectional Facility Based Study in North East Ethiopia. Fam Med Med Sci Res. 2020. 9: 245.
- Fenny AP, Enemark U, Asante FA, Hansen KS. Patient satisfaction with primary health care—a comparison between the insured and non-insured under the National Health Insurance Policy in Ghana. Global Journal of Health Science. 2014. 6: 9.
- Fadlallah R, El-Jardali F, Hemadi N, Morsi RZ, Abou Samra CA, et al. Barriers and facilitators to implementation, uptake and sustainability of community-based health insurance schemes in low-and middle-income countries: a systematic review. International journal for equity in health. 2018. 17: 1-18.
- Eshetie G, Feleke A, Genetu M. Patient satisfaction and associated factors among outpatient health service users at primary hospitals of North Gondar, Northwest Ethiopia, 2016. Advances in Public Health. 2020.
- Addise T, Alemayehu T, Assefa N, Erkalo D. The Magnitude of Satisfaction and Associated Factors Among Household Heads Who Visited Health Facilities with Community-Based Health Insurance Scheme in Anilemo District, Hadiya Zone, Southern Ethiopia. Risk Management and Healthcare Policy. 2021. 14: 145.
- Aragaw B. Assessment of Community Based Health Insurance Women Patients' satisfaction and Associated Factors at Felege Hiwot Referral Hospital, Northwest, Ethiopia. 2019.
- Nageso D, Tefera K, Gutema K. Enrollment in community-based health insurance program and the associated factors among households in Boricha district, Sidama Zone, Southern Ethiopia; a cross-sectional study. Plos one. 2020. 15: e0234028.
- Duku SKO, Nketiah-Amponsah E, Janssens W, Pradhan M. Perceptions of healthcare quality in Ghana: does health insurance status matter? PloS one. 2018. 13: e0190911.
- Robyn PJ, Bärnighausen T, Souares A, Savadogo G, Bicaba B, et al. Does enrollment status in community-based insurance lead to poorer quality of care? Evidence from Burkina Faso. International journal for equity in health. 2013. 12: 1-13.
- Devadasan N, Criel B, Van Damme W, Lefevre P, Manoharan S, et al. Community health insurance schemes & patient satisfaction-evidence from India. The Indian journal of medical research. 2011. 133: 40.
- Sarker AR, Sultana M, Ahmed S, Mahumud RA, Morton A, et al. Clients' experience and satisfaction of utilizing healthcare services in a Community Based health insurance program in Bangladesh. International journal of environmental research and public health. 2018. 15: 1637.
- Badacho AS, Tushune K, Ejigu Y, Berheto TM. Household satisfaction with a community-based health insurance scheme in Ethiopia. BMC research notes. 2016. 9: 1-10.
- Asefa A, Kassa A, Dessalegn M. Patient satisfaction with outpatient health services in Hawassa university teaching hospital, southern Ethiopia. Journal of Public Health and Epidemiology. 2014. 6: 101-110.

23. Daramola O, Akande T, Adeniran A, Evaluation of Patients' Satisfaction with Services Accessed under the National Health Insurance Scheme at a Tertiary Health Facility in North Central, Nigeria. *Journal of Community Medicine and Primary Health Care*. 2017. 29: 11-17.
24. Sagaro GG, Yalew AW, Koyira MM. Patients' satisfaction and associated factors among outpatient Department at Wolaita Sodo University Teaching Hospital, Southern Ethiopia: a cross sectional study. *Sci J Clin Med*. 2015. 4: 109-116.
25. Hailemariam A, Haddis F. Factors affecting unmet need for family planning in southern nations, nationalities and peoples region, Ethiopia. *Ethiopian journal of health sciences*. 2011. 21: 77-90.
26. Ambelie YA, Demssie AF, Gebregziabher MG. Patients' satisfaction and associated factors among private wing patients at Bahirdar Felege Hiwot Referral Hospital, North West Ethiopia. *Sci J Public Health*. 2014. 2: 417-423.
27. Oljira L, Gebre-Selassie S. Satisfaction with outpatient health services at Jimma hospital, South West Ethiopia. *Ethiopian Journal of Health Development*. 2001. 15: 179-184.
28. Aburayya A, Alshurideh M, Albqaeen A, Alawadhi D, Al Ayadeh I. An investigation of factors affecting patients waiting time in primary health care centers: An assessment study in Dubai. *Management Science Letters*. 2020. 10: 1265-1276.
29. Asamrew N, Endris AA, Tadesse M. Level of patient satisfaction with inpatient services and its determinants: a study of a specialized hospital in Ethiopia. *Journal of environmental and public health*. 2020.
30. Dagnew M, Zakus D. Community perception on OPD performance of a teaching hospital in Gondar town. *Ethiopian medical journal*. 1997. 35: 153-160.
31. Macha J, Kuwawenaruwa A, Makawia S, Mtei G, Borghi J. Determinants of community health fund membership in Tanzania: a mixed methods analysis. *BMC Health Services Research*. 2014. 14: 1-11.