



# Shaping access to health care for refugees on the local level in Germany – Mixed-methods analysis of official statistics and perspectives of gatekeepers



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## ABSTRACT

**Background:** Analyses of refugee reception in European countries are increasingly focusing on the local level. We analyzed how gatekeepers can shape access to health care on a local level, taking as an example the federal state of North Rhine-Westphalia (NRW), Germany, where municipalities have implemented different local access models for newly arrived refugees.

**Methods:** We assessed the details of and the rationale for the implementation of local access models (implementation analysis), and the potential access to health care for refugees in municipalities (local policy analysis). We covered three municipalities with a health care voucher model and three with an electronic health card model. We combined data from official reports and semi-structured interviews (N = 21) with gatekeepers.

**Results:** Larger municipalities are more likely to implement the eHC. Gatekeepers report that costs, workload and control are the major aspects underlying the choice of a model in municipalities. Access plays only a minor role – even though some of the gatekeepers claim that the eHC can facilitate access. Regardless of the implemented model, gatekeepers on the local level can contribute to facilitating the access to health care for refugees.

**Conclusion:** Potential access of newly arrived refugees is – among others – determined by the gatekeepers' support and the implementation of the access models. Within the legal framework, municipalities implement the models differently.

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## 1. Introduction

In Germany, migration policies and the corresponding legal entitlements are enacted on a national level. This includes health policies for newly arrived refugees. Nevertheless, the 16 federal states and even the municipalities have considerable scope for action with regard to the implementation of national health policies and the organization of access to health care [1]. While a decentralized system like Germany's raises questions of equity, it goes along with opportunities for comparative research especially on the local level [2–5]. Comparative studies of different organizational models are thus feasible – like in the case of health care for newly arrived refugees where we observe different local access models.

We use the term “newly arrived refugees” (NAR) as an umbrella term for all newcomers who seek any form of humanitarian protection. We do not refer to them as asylum seekers as not all persons seeking humanitarian protection apply for asylum (e.g. war refugees).

In order to compare the impact of the different models on access to health care, we designed the mixed-methods study “FluGS” (“Forced migration, Health and Social Participation”). Our study comprises three major parts: a quantitative analysis of claims data on health care use, a qualitative analysis of interviews with NARs and another, qualitative study of interviews with local actors in municipalities – which we consider to be gatekeepers. In designing our study, we build on the classical behavioral model of health care use, initially developed by Andersen [6], updated for a more comprehensive study of the determinants of access to health care [7,8] and recently extended to the study of aggregated outcomes and the German context [9,10]. Accordingly, health care use is equated to realized access, while the possibilities to enter the health care system are conceptualized as potential access [8,11].

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The focus of the third part of the study, which we are presenting here, is on the impact of the implementation of health policy and the organization of health care on potential access to health care from the perspective of gatekeepers. For this purpose, we leave aside the other two aspects of our study – the perspective of refugees as well as the quantitative analysis of the patterns of health service utilization (e.g., type, size, purpose) and realized access.

We use the concept of gatekeepers here to shed light on NARs' process of entering the health care system. Gatekeeping usually refers to the general practitioners (GP) who exert control over the referral to specialists or inpatient care [12–14]. As such, gatekeepers are influential actors in the process of health care use, mediating between legal entitlements, institutional settings and the individual patients. The rationale behind gatekeeping is to install persons in charge of cost containment, efficient use of resources and the prevention of unnecessary treatments [15,16]. At the same time, gatekeepers might also function as guides through the health care system. They facilitate access to specialist services and coordinate inter-professional treatments [17,18]. While it is usually the GP that acts as gatekeeper, we have identified other persons being similarly in control over the use of health care services for NARs. For our study, we thus included not only GPs, but also the employees of local social welfare offices (SWO) and the statutory health insurance (SHI) who are both responsible for granting services to NARs and the social workers who work in communal accommodation facilities.

The major difference in access to health care for NARs compared to non-NARs derives from the fact that they are not members of the German SHI. Currently, 90% of the population in Germany is insured via the SHI [19]. Monthly contributions to the SHI allow free access to a large catalogue of outpatient services of GPs and specialists. SHI members can usually access specialists directly.

Both, specialists and GPs refer patients to inpatient care. Upon presenting the electronic health card (eHC) of the SHI, patients use health care services free of costs and the providers directly send their bills to the respective SHI. All SHIs are part of a financial compensation mechanism. Health insurances with a *goodrisk* structure (young and healthy members) of their insured individuals pay compensation to insurances with a *badrisk* structure (old and sick members). This compensation mechanism is additionally topped up with tax money. Only a few health care providers are not licensed for the treatment of SHI patients [20].

As NARs are not allowed to become members of the SHI, there are special health care services provided to them in the respective initial reception centers. However, after a few weeks, they are assigned to different municipalities, where the SWOs are responsible for the organization and financing of health care. With a few exceptions, there are no longer parallel provision systems to refugees once they are assigned to municipalities [21–23]. Therefore, they visit the same health care providers as SHI patients. However, the Asylum Seekers' Benefits Act (ASBA) limits the services that NARs are entitled to (with the exception of unaccompanied minors) for the first 15 months. According to article 4 of the ASBA, health services are granted only in the case of acute illness and pain, pregnancy and birth as well as for officially recommended vaccinations and some preventive check-ups. Other immediately necessary services can only be granted on a case-by-case basis according to article 6 of the ASBA.

In addition, there are different ways in which potential access is organized. Basically, two access models exist: the health care voucher (HcV) model and the eHC model. In most municipalities which use the HcV model, NARs receive or collect HcV from the SWO every three months before using any health care services. The HcV allow them to access GPs and specialists. Health care providers are then refunded by the SWOs. The SWO is also responsible for checking whether services are within the scope of the ASBA (case-

by-case review) – especially in the case of referrals from GPs to specialists (SP) or inpatient care. In municipalities using the eHC model, refugees receive eHC which are valid for up to 15 months. The eHCs are issued by a SHI and function like SHI-cards. In spite of this, NARs do not become members of the SHI. They still face the entitlement restrictions explained above and are not part of the shared risk pooling. However, there is no case-by-case review and usually no need to contact the SWO in the case of referrals [21,24,25].

The access models are subject to controversial political debates. Some claim that the eHC model is associated with additional costs while others claim that there are no additional costs and less bureaucracy [25–27]. As of today, seven federal states are using the HcV model, six are using the eHC model and in three states, the municipalities chose their model themselves [24,28,29].

Only little evidence is available on the actual impact of the models on access to health care. A quantitative survey among refugees shows that the eHC model increases adequate use of primary health care services [30]. Results from a qualitative study with NARs suggest that the difficulties in understanding and accessing the German health care system are worsened by the HcV model [31]. In addition, health care providers are not always familiar with legal entitlements of NARs [32]. However, as the behavioral model suggests, there are many other determinants of access to health care not only related to the health care system [7]. For NARs language differences, lack of interpreters or diversity-trained staff, discrimination or frequent relocations have been identified as important additional determinants [33–38]. However, there is also evidence suggesting that social networks, social support, coordination of health care and well-trained health professionals allow refugees to overcome these barriers [31,36,39,40] – ultimately underlining the important role of gatekeepers as facilitators.

The actual implementations of the access models and their impact on access to health care for NARs have not been studied in detail so far. We thus assess how municipalities implement national health policies on the local level and how gatekeepers perceive their personal as well as their institution's role in facilitating (or hampering) NAR's access to health care.

## 2. Materials and methods

Our study is situated in Germany's largest federal state North Rhine-Westphalia (NRW) – the only state in which both models are simultaneously used by a considerable number of municipalities. Following the concept developed by Schamman [4] (building on [41]), we differentiate between the analysis of how and why municipalities implement the two different access models (implementation analysis) and the analysis of processes or results of local policies (local policy analysis).

For the analysis of the (health) policy implementation, we drew on official statistics published by the Ministry for Labor, Health and Welfare of NRW [42] and the Federal Institute for Research on Building, Urban Affairs and Spatial Development [43]. In line with existing literature [2,4], we assume that larger independent municipalities are more open towards innovative policies and thus more likely to implement the comparatively new eHC model. They also receive more refugees as the number of refugees assigned to a municipality depends mainly on its population and area size. Thus, larger municipalities presumably benefit more from the outsourcing of billing and accounting to an SHI as part of the eHC model. We compared them to district-affiliated municipalities which are smaller and for which the district level takes over many administrative tasks, including some which are related to refugee health policies.

**Table 1**  
Overview of interviewed gatekeepers.

Role of Interviewees	Access model	
	eHC model (3 municipalities)	HcV model (3 municipalities)
SWO employees	5	5
Social workers	3	4
SHI employees	1	0
GPs	2	1

For a more detailed analysis of the implementations in municipalities in NRW and the local (health) policy analysis, we selected six municipalities for our empirical data collection. Of these, three were using the eHC and three the HcV model. We recruited municipalities using the eHC model via the SHI companies that were responsible for the implementation of the model. We recruited municipalities using the HcV model by sending a letter to the SWO management. We aimed at including at least one independent and one district-affiliated municipality for each of the two access models. Additionally, we aimed for variation in population size. Finally, we recruited employees in SWOs, GPs, social workers and SHI-staff in the six municipalities for qualitative interviews.

We conducted semi-structured interviews with these gatekeepers whose decision and support would determine health care access for refugees (Table 1). The recruitment of the interview partners took place via e-mail or telephone. In addition, we used snowball sampling to identify employees in the welfare offices and social workers who are working closely with refugees in the respective municipality. The selection of interview partners was balanced in terms of their position and of the access model (eHC municipalities = 11 interviews of which 4 in mid-size district-affiliated and 7 in major independent municipalities; HcV municipalities = 10 interviews of which 5 in mid-size district-affiliated and 5 in major independent municipalities). Interviews were conducted between July 2017 and July 2018.

As authors we have full access to health care services. We never had to leave our country or had refugee status. For the interviewees, we were outsiders, not belonging to the municipality. The interviews took place at the interviewees' workplace. As researchers, we may have been perceived as judging their work and actions. Hence, before each interview, we reiterated the anonymity and voluntary character of the interviews.

The topics for the interview guide (Table 2) were selected after a literature search on the topic and concerning the research framework. The interviews were fully transcribed and anonymized. Codes were developed both in a deductive and in an inductive approach. The data were analyzed with the help of computer-aided software (atlas.ti) and following a content analysis approach based on Mayring [44]. The analysis mainly took place in a team. The material was coded and analyzed by two authors in order to reduce subjective assessments. All quotations used below have been translated independently by two authors from German to English. Ethics approval was obtained from the ethical committee of Bielefeld University (application no. 2017-099) before the start of the project.

### 3. Results

#### 3.1. Implementation analysis

Municipalities have the option to decide between the HcV model and the eHC model in NRW since January 2016 [45]. Of the 396 municipalities in NRW, 26 (6.6%) have introduced the eHC in 2016 or 2017. At the end of 2017, 122,405 NARs lived in municipalities in NRW. Twenty-four municipalities were still using the eHC model (two had returned to the HcV model; in 2018, two more

**Table 2**  
Interview guide topics and developed codes.

Interview guide topics	Codes (deductive and inductive)
Organization of health care in the municipality	Issuing of HcV  Accounting Communication with NARs on access model
Implementation of the eHC (eHC municipalities only)	Initial additional workload  Changes related to introduction Cooperation with SHI
Municipalities' choice of a model	Costs  Workload Control Access
Access to health care for NARs	Symbolic value of the eHC  Gatekeeping Facilitating factors
Changes eHC vs. HcV (eHC municipalities only)	Change in workload  Change in tasks
Suggestions for improvement	Include NARs in SHI  Increase in staff

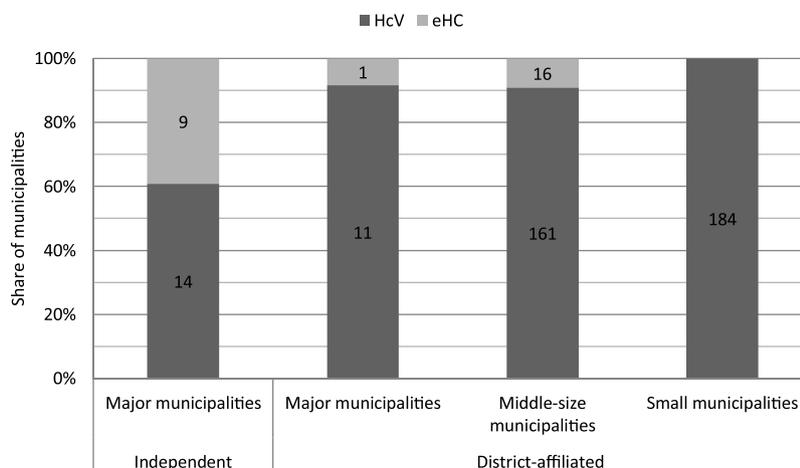
followed), and 23.2% of NRW's refugees (n = 28,422) lived in these municipalities [46].

All 9 independent municipalities using the eHC model have a population of more than 100,000 residents and are thus classified as major municipalities. The other 17 municipalities are middle-sized with populations between 20,000 and 100,000. None of the smaller municipalities (with populations of less than 20,000) is using the eHC model (Fig. 1). When compared to the share of municipalities with eHC model (6.6%), there is a comparatively high share of individuals using the eHC (23.2%) as rather large municipalities are using the eHC.

The three main topics that the interviewees brought up when asked to describe the rationale to implement the models were costs, workload and control. In two municipalities, access to health care was mentioned.

All gatekeepers in welfare offices assumed that their respective models lead to lower spending for NARs' health care use. In eHC municipalities, interviewees were convinced that outsourcing the administration of NARs' health care to the SHI decreases their overall expenses. In HcV municipalities, the interviewees preferred to administer the health care expenses themselves instead of paying an administrative lump sum to the SHI. In addition, some municipalities with HcV model have outsourced the administration of NARs' health care expenses to a private external service provider. According to the welfare officers in HcV municipalities, these private companies cost less money than the SHI.

The HcV model reportedly comprises time-consuming tasks like having to issue HcVs quarterly, answer questions from health care providers, and conduct case-by-case reviews. By contrast, the gatekeepers believed that the eHC decreases workload significantly, albeit initially requiring additional resources: "Well, we don't make a secret of it, it was already very time-consuming what has to be done at the beginning, but we always had the idea or the hope that the benefit would be in line with the [initial] effort" (SWO employee, eHC model, Int 91.91–94). In addition, the social welfare employees in eHC municipalities are not anymore responsible to interpret §6 ASBA as part of a case-by-case review, which is a burdensome



**Fig. 1.** Local access models in municipalities in NRW according to population size (absolute\* and relative\*\* frequencies).

\*shown by numbers in the diagram itself.

\*\*shown on the y-axis.

Source: own illustration (based on [47] as of February 2018).

obligation for the non-medically trained staff in the social welfare offices: “We are social welfare experts. We know about social welfare (. . .) It is logical and it makes sense to let the health insurance companies do it because they are experts in granting health services” (SWO employee, eHC model, Int 11. 931–934; 945–947). The uncertainty as to whether the eHC and the effort of implementation would pay off may also have been a reason for the wait-and-see attitude of the other municipalities.

All interviewees take a comparable view on the aspect of control. They agreed that the eHC model is associated with a loss of control over the granting of health services, their cost, and the related claims data: “You have a certain extent of cost control, so that you have the power to say yes and no” (SWO employee, HcV model, Int 131. 528–529). Thus, the gatekeeping function of welfare officers is largely delegated to the SHI which in turn does not make much use of it as they refrain from conducting case-by-case reviews.

In contrast, the welfare officers in HcV municipalities maintain control over access. In two municipalities gatekeepers reported that the decision to introduce the eHC model was facilitated by a strong political conviction that the eHC would facilitate equal access to health care for refugees. Gatekeepers in municipalities where there was no such political conviction believed that the final assessment of cost- considerations, expected workload and the importance of having control over the health care use of NARs was decisive for the choice of the implemented model.

### 3.2. Local policy analysis

The assessment of potential access to care for refugees in municipalities with eHC and HcV depended on the occupational group surveyed. Employees of the local welfare offices reported that the introduction of the eHC made their work much easier and enabled them to devote their limited time to other important tasks, e.g., finding suitable private accommodation for refugees who wished to leave communal accommodation facilities. The lower workload was linked to a preference for the eHC model, which was also perceived as facilitating refugees’ access to care since there was no more need to obtain an HcV: “I think for refugees this is definitely a relief, because like everyone else they hand in their eHC and then it’s done” (SWO employee, eHC model, Int 21. 461–463).

The employee of the SHI had a similar opinion: “From my perspective, the situation has improved (. . .) whenever there is an illness occurring, the patient or the customer can then also access medi-

cal care directly with his electronic health card” (SHI employee, Int 101.509–515).

Employees in municipal offices with HcV showed a preference for their model. They assumed that the eHC does not necessarily improve health care for refugees. They appreciated the direct contact with the refugees which the eHC would eliminate. Regular visits to the welfare office are not considered as a barrier but as facilitating access to health care. Upon visits, employees make doctor’s appointments for refugees, help to navigate the health system and provide information materials.

Social workers had a different view, highlighting the symbolic value of the eHC as a facilitating factor for access to health for refugees. The eHC increases the feeling of belonging or deservingness as it looks like normal SHI cards, whereas presenting the HcV identifies a person immediately as being different: “I think (. . .) as soon as one has a card, one has the feeling of being a part of this group and has the feeling that this is now something more official” (social worker, eHC model, Int 141. 486–491). The social workers believed that the eHC also facilitates access to health care since medical assistants, doctors or fellow patients are accustomed to using the card. Moreover, there is no need to be familiar with the different reimbursement regulations of the HcV.

In addition, when using the HcV model, patients need to report to the social welfare office before visits to specialist doctors, which is not required for patients with eHC. Therefore, the social workers assumed better access to health care especially for persons who seek medical care from different specialists frequently due to a (chronic) illness. Medical problems can be treated immediately, without loss of time.

The perspective of the health service providers was quite similar to that of social workers. As the HcVs are not electronically readable and must be renewed every quarter, additional workload accrues when refugees visit a doctor’s office: “The problems are really organisational. . . , we are left alone and the workload is absolutely out of proportion compared to the income” (GP, HcV model, Int 11. 144–149).

While bureaucratic hurdles can be removed by the eHC, entitlement restrictions remain the same. The majority of gatekeepers would like to see the entitlement restrictions in the first 15 months removed: “If I could make a wish regarding health care, then I would actually wish for access to normal health insurance for all groups of people. No matter whether they are (. . .) newly arrived asylum seekers, because that would ensure equal treatment of all people” (SWO

employee, eHC Model, Int 11.1030–1036). Moreover, all respondents reported problems with the availability and financing of interpreters, which can present a barrier regardless of the access model.

#### 4. Discussion

Larger municipalities were more likely to opt for the introduction of the eHC model, confirming that they are often drivers of innovative migration and integration policies [3]. The major arguments influencing the decision by municipalities to opt for eHC or HcV model were the expected changes in costs, workload, and ability to control health care use. Whether the models facilitate access was only a minor issue in the implementation process.

In line with the literature on local migration and integration policies [4,41], the gatekeepers emphasized the impact that municipalities have on potential access to health care for NARs even if they have to stay within the federal and national legal framework. They decide independently which model to implement. For the HcV model, they further decide on how they issue the HcVs and how they conduct case-by-case reviews or control the referrals from GPs to specialists. Depending on the choice of the model, the role of gatekeepers changes considerably. Gatekeeping by SWOs – in the sense of controlling service utilization – seems to be much stronger in HcV municipalities as they hand out the necessary HcVs and review referrals to specialists and inpatient care. The role of GP as coordinators of care is more important in HcV municipalities. The GPs reported that they need additional time to explain the HcV model and make sure patients are in possession of valid HcVs. If they are able to take the necessary time for NARs with HcVs, they are important facilitators of access to health care in HcV models. Social workers' roles as gatekeepers do not differ much between the models. They explain how the local access models work, support making appointments and help to identify health care providers. However, social workers in HcV municipalities need to explain the usage of the eHC as well since the NARs receive it after 15 months. Our results for NRW are in line with experiences from other federal states in Germany and from other settlement countries indicating the importance of GPs as coordinators of care [15,17] and of additional supporting services by social workers (e.g. support for making doctor's appointments) [31,48].

In our local policy analysis, we identified different opinions about the consequences of implementing a particular model for NARs' access to health care. Especially employees of SWOs defend "their" chosen model. We are not able to identify whether they actually prefer the respective model or defend it as part of their institutional identity or loyalty.

Our interviews with GPs and social workers support the claim that the HcV constitutes a barrier to health care in some situations [30,31]. GPs need to coordinate all referrals which subsequently have to be reviewed and accepted by the SWO. This additional access barrier has been removed in the eHC model. However, if gatekeepers see themselves also as facilitators of access and not only as controllers, they can – from their perspectives – reduce these barriers. As a consequence, NARs' access to health care in municipalities with HcV depends much more on the willingness and available time of GPs, SWO and social workers than in municipalities with eHC. This reinforces in parts the claim that in Germany "chance decides about access to health care" [1].

Moreover, we found positive indirect effects of the eHC that have not been described so far. From the perspective of gatekeepers the mere fact that the eHC is a card (and not a sheet of paper like the HcV) and looks like the card of non-refugee patients, creates feelings of belonging and equality. Thereby, stigmatization and discrimination [34,35] might be reduced as neither other patients

nor providers are able to identify NARs through the HcVs. Lastly, the gatekeepers unanimously mention language difficulties and the entitlement restrictions as major barriers – aspects already present in the literature [31,37,40].

Our study has some methodical limitations. Our analysis of differences between municipalities using eHC and HcV models remains descriptive. The unequal sizes and numbers of the communities which implemented eHC and HcV (26 vs. 370), as well as the limited official data available prevented more refined statistical analyses. Moreover, we cannot entirely exclude selection bias. Several municipalities which we contacted refused to participate. Hence, we cannot preclude that mainly municipalities participated which are interested in offering good access to health care for NARs, which limits representativeness. In addition, social workers and SWOs often cooperated very closely, so they may have voiced similar opinions on the respective access model. Future research should also include those municipalities which changed from eHC back to HcV, or are hesitant to facilitate access for NARs.

We could not include NARs' perspective and their actual use (realized access as opposed to potential access [8]) of health care. These important aspects are part of our ongoing research project and results will be published soon [49].

#### 5. Conclusion

Apart from these limitations, important policy lessons can be derived from our results. For the local level, our study shows that gatekeepers in the municipalities can facilitate access for NARs – irrespective of the model chosen. The choice of the model – HcV or eHC – is influenced mainly by three aspects: costs, workload and control. This has implications beyond the specific context because it shows the importance of gatekeeping in the sense of facilitating and not only in the sense of control. Thus, health policies can support gatekeepers in their role as facilitators (e.g., through financial incentives or less bureaucracy). One possibility in the German context is the implementation of the eHC model (in federal states where it has not been implemented so far) which allows gatekeepers to devote more time to other aspects as they do not have to deal with the HcVs (e.g., housing in the case of social workers or attention for medical needs in the case of GPs). Another policy option is to allow NARs to become members of the SHI straight away. This would relieve SWO and GPs from their role as gatekeepers.

#### Authors' contributions

KR and JW designed the study and drafted the manuscript. OR revisited the manuscript critically for important intellectual content. All authors read and approved the final manuscript.

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#### References

- [1] Razum O, Wenner J, Bozorgmehr K. Wenn Zufall über den Zugang zur Gesundheitsversorgung bestimmt: Geflüchtete in Deutschland. *Das Gesundheitswesen* 2016;78(October (11)):711–4.
- [2] Thranhardt D, Weiss K [cited 2018 Sep 24]. Available at: Flüchtlingspolitik im deutschen Föderalismus. Friedrich-Ebert-Stiftung; 2017 <http://library.fes.de/pdf-files/wiso/12762.pdf>.

- [3] Aumüller J. Die kommunale Integration von Flüchtlingen. In: Lokale Integrationspolitik in der Einwanderungsgesellschaft. Wiesbaden: VS Verlag für Sozialwissenschaften; 2009. p. 111–30.
- [4] Schammann Stadt H. Land, Flucht. Konzeptionelle Überlegungen zum Vergleich städtischer Flüchtlingspolitik in Deutschland. In: Barbehön M, Münch S, editors. Variationen des Städtischen – Variationen lokaler Politik. Wiesbaden: Springer Fachmedien Wiesbaden; 2017. p. 91–117.
- [5] Vázquez ML, Terraza-Núñez R, Hernández S, Vargas I, Bosch L, González A, et al. Are migrants health policies aimed at improving access to quality healthcare? An analysis of Spanish policies. *Health Policy (New York)* 2013, 263–246.
- [6] Andersen RM. Behavioral model of families' use of health services. *Research series No. 25*. Chicago: Center for Health Administration Studies, University of Chicago; 1968.
- [7] Andersen RM. Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? *Am Sociol Assoc* 1995;36(1):1–10.
- [8] Aday LA, Andersen R. A framework for the study of access to medical care. *Health Serv Res* 1974;9(3):208–20.
- [9] von Lengerke T, Gohl D, Babitsch B. Re-revisiting the behavioral model of health care utilization by andersen: a review on theoretical advances and perspectives. In: Janssen C, Swart E, von Lengerke T, editors. *Health care utilization in Germany theory, methodology, and results*. New York: Springer; 2014. p. 11–28.
- [10] Ciupitu-Plath CC, Gohl D, Kofahl C, Babitsch B. Migration and health care utilization in the European context. In: Janssen C, Swart E, von Lengerke T, editors. *Health care utilization in Germany theory, methodology, and results*. New York: Springer; 2014. p. 145–69.
- [11] Gulliford M, Figueroa-Munoz J, Morgan M, Hughes D, Gibbs B, Beech R, et al. What does 'access to health care mean'? *PubMed Commons. J Heal Serv Res Policy* 2002;7(3):186–8.
- [12] Höhne A, Jedlitschka K, Hobler D, Landenberger M. Hausarztzentrierte Versorgung in Deutschland. *Der Hausarzt als Lotse? Das Gesundheitswes* 2009;71(July (07)):414–22.
- [13] Wammes JGG, Jeurissen PPT, Verhoef LM, Assendelft WJJ, Westert GP, Faber MJ. Is the role as gatekeeper still feasible? A survey among Dutch general practitioners. *Fam Pract* 2014;31(5):538–44.
- [14] Kroneman MW, Maarse H, Zee J, van der. Direct access in primary care and patient satisfaction: a European study. *Health Policy (New York)* 2006;76(March (1)):72–9.
- [15] Garrido MV, Zentner A, Busse R. The effects of gatekeeping: a systematic review of the literature. *Scand J Prim Health Care* 2011;29(1):28–38.
- [16] Forrest CB. Primary care in the United States: Primary care gatekeeping and referrals: effective filter or failed experiment? *Bmj* 2003;326(7391):692–5.
- [17] Bodenheimer T, Lo B, Casalino L. Primary care physicians should be coordinators, not gatekeepers. *J Am Med Assoc* 1999;281(21):2045–9.
- [18] Grumbach K, Selby JV, Damberg C, Bindman AB, Quesenberry Jr C, Truman A, et al. Resolving the gatekeeper conundrum. *Jama* 2003;282(3):261.
- [19] Statistisches Bundesamt. Sozialeleistungen. Angaben zur Krankenversicherung (Ergebnisse des Mikrozensus). 2015. Fachserie 13 Reihe 1.1., Vol. 49; 2016.
- [20] Bormann C, Swart E. Utilization of medical services in Germany - outline of statutory health insurance system (SHI). In: Janssen C, Swart E, von Lengerke T, editors. *Health care utilization in Germany theory, methodology, and results*. New York: Springer; 2014. p. 29–41.
- [21] Bozorgmehr K, Razum O. Effect of restricting access to health care on health expenditures among asylum-seekers and refugees: a quasi-experimental study in Germany, 1994–2013. *PLoS One* 2015;10(7):e0131483.
- [22] Pross C. Third class medicine: health care for refugees in Germany legal status and refugee conditions in Germany. *Health Hum Rights* 1998;3(2):40–53.
- [23] Robert Bosch Expertenkommission zur Neuausrichtung der Flüchtlingspolitik. Zugang zu Gesundheitsleistungen und Gesundheitsversorgung für Flüchtlinge und Asylbewerber: Von der Erstversorgung bis zur psychosozialen Behandlung Inhalt. Stuttgart; 2016.
- [24] Wächter-Raquet M. Einführung der Gesundheitskarte für Asylsuchende und Flüchtlinge. In: *Der Umsetzungsstand im Überblick der Bundesländer*. Stand Mai 2016. Gütersloh: Bertelsmann Stiftung; 2016.
- [25] Wächter-Raquet M. Einführung der Gesundheitskarte für Asylsuchende und Flüchtlinge. In: *Der Umsetzungsstand im Überblick der Bundesländer*. Gütersloh: Bertelsmann Stiftung; 2016.
- [26] Deutscher Bundestag. Ausschuss für Gesundheit. Wortprotokoll Nr.18/18; 2016.
- [27] Burmester F. Medizinische Versorgung der Leistungsberechtigten nach §§ 4 und 6 AsylbLG über eine Krankenkasse. *Public Heal Forum* 2015;23(2):106–8.
- [28] Ministerium für Arbeit, Soziales Gesundheit F und F des LB. *Zuwanderung und Integration*; 2019 [cited 2019 Jun 24]. Available at: <https://masgf.brandenburg.de/masgf/de/start/soziales/zuwanderung-und-integration/>.
- [29] *Ärzteblatt*. Mehr Flüchtlinge erhalten Gesundheitskarte; 2017 [cited 2019 Jun 24]; Available at: <https://www.aerzteblatt.de/nachrichten/72619/Mehr-Fluechtlinge-erhalten-Gesundheitskarte>.
- [30] Claassen K, Jäger P. Impact of the introduction of the electronic health insurance card on the use of medical services by asylum seekers in Germany. *Int J Environ Res Public Health* 2018;15(April (5)):856.
- [31] Spura A, Kleinke M, Robra BP, Ladebeck N. Wie erleben Asylsuchende den Zugang zu medizinischer Versorgung? *Bundesgesundheitsblatt - Gesundheitsforsch - Gesundheitsschutz* 2017;60(4):462–70.
- [32] Folsch UR, Hasenfuss G, Spies H-F, Wesiack W, Faulbaum F. Flight and migration: a challenge for medicine in Germany. *Internist (Berl)* 2016;57(August (8)):822–30.
- [33] Edward J, Hines-Martin V. Exploring the providers perspective of health and social service availability for immigrants and refugees in a southern urban community. *J Immigr Minor Heal* 2015;17(August (4)):1185–91.
- [34] Chuah FLH, Tan ST, Yeo J, Legido-Quigley H. The health needs and access barriers among refugees and asylum-seekers in Malaysia: a qualitative study. *Int J Equity Health* 2018;17(August (1)):120.
- [35] van Loenen T, van den Muijsenbergh M, Hofmeester M, Dowrick C, van Ginneken N, Mechili EA, et al. Primary care for refugees and newly arrived migrants in Europe: a qualitative study on health needs, barriers and wishes. *Eur J Public Health* 2018;28(February (1)):82–7.
- [36] Joshi C, Russell G, Cheng I-H, Kay M, Pottie K, Alston M, et al. A narrative synthesis of the impact of primary health care delivery models for refugees in resettlement countries on access, quality and coordination. *Int J Equity Health* 2013;12(November):88.
- [37] Norredam M, Mygind A, Krasnik A. Access to health care for asylum seekers in the European Union—a comparative study of country policies. *Eur J Public Health* 2006;16(3):286–90.
- [38] Davidson N, Skull S, Burgner D, Kelly P, Raman S, Silove D, et al. An issue of access: delivering equitable health care for newly arrived refugee children in Australia. *J Paediatr Child Health* 2004;40(9–10):569–75.
- [39] Brücker H, Rother N, Schupp J, Babka von Gostomski C, Böhm A, Fendel T, et al. IAB-BAMF-SOEP-Befragung von Geflüchteten – Flucht, Ankunft in Deutschland und erste Schritte der Integration. *BAMF-Kurzanalyse* 2016;2016(5):1–18.
- [40] Woodward A, Howard N, Wolffers I. Health and access to care for undocumented migrants living in the European Union: a scoping review. *Health Policy Plan* 2014;29:818–30.
- [41] Caponio T, Borkert M. Introduction: the local dimension of migration policymaking. In: Caponio T, Borkert M, editors. *The local dimension of migration policymaking (IMISCoE reports)*. Amsterdam: Amsterdam University Press; 2010.
- [42] Ministerium für Arbeit Gesundheit und Soziales des Landes Nordrhein-Westfalen. *Gesundheitskarte*; 2018 [cited 2018 Aug 29]. Available at: <https://www.mags.nrw/gesundheitskarte-fuer-fluechtlinge>.
- [43] Bundesinstitut für Bau- Stadt- und Raumforschung. *Laufende Stadtbeobachtung und Raumabgrenzungen. Stadt- und Gemeindetypen in Deutschland*; 2017 [cited 2018 Aug 29]. Available at: <https://www.bbsr.bund.de/BBSR/DE/Raumbeobachtung/Raumabgrenzungen/StadtGemeindetyp/StadtGemeindetyp.node.html>.
- [44] Mayring P. *Qualitative Inhaltsanalyse – Grundlagen und Techniken*, 12th ed. Weinheim: Beltz; 2015.
- [45] Ministerium für Arbeit Gesundheit und Soziales des Landes Nordrhein-Westfalen. *Rahmenvereinbarung zur Übernahme der Gesundheitsversorgung für nicht Versicherungspflichtige gegen Kostenerstattung nach § 264 Absatz 1 SGB V in Verbindung mit §§ 1, 1a Asylbewerberleistungsgesetz in Nordrhein-Westfalen*; 2015 [cited 2018 Apr 5]. Available at: [https://www.mags.nrw/sites/default/files/asset/document/rahmenvereinbarung\\_online.pdf](https://www.mags.nrw/sites/default/files/asset/document/rahmenvereinbarung_online.pdf).
- [46] Landesbetrieb Information und Technik Nordrhein-Westfalen. *Empfängerinnen und Empfänger von Asylbewerberleistungen in Nordrhein-Westfalen 2010 bis 2017 (unpublished)*. Düsseldorf; 2018.
- [47] Landeswahlleiter des Landes NRW. *Wahlergebnisse in NRW. Kommunalwahlen; 2014, 2014* [cited 2018 Apr 5]. Available at: <https://www.wahlergebnisse.nrw.de/kommunalwahlen/2014/index.html>.
- [48] Das Jung F. Available at: *Bremer Modell – Gesundheitsversorgung Asylsuchender*. Gesundheitsamt der Freien Hansestadt Bremen; 2011. p. 1–86 [http://www.gesundheitsamt.bremen.de/sixcms/media.php/13/3.GBE.Gesundheitsversorgung\\_Asylsuchender.pdf](http://www.gesundheitsamt.bremen.de/sixcms/media.php/13/3.GBE.Gesundheitsversorgung_Asylsuchender.pdf).
- [49] Wenner J, Rolke K, Breckenkamp J, Sauzet O, Bozorgmehr K, Razum O. Inequalities in realised access to healthcare among recently arrived refugees depending on local access model: study protocol for a quasi-experimental study. *BMJ Open* 2019;9(5):e027357.