

**REPORT**

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# Healthcare needs among refugees from Ukraine arriving in Norway during 2022

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Healthcare needs among refugees from Ukraine arriving in Norway during 2022

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## Key messages

This study has measured self-reported health and healthcare needs among adult refugees from Ukraine arriving in Norway during 2022. Further, we have assessed received information about, and access to, health services in Norway. Following the full-scale invasion of Ukraine, more than 35 000 Ukrainian refugees applied for protection in Norway in 2022. Most of the arrivals are women and children, and there is a lack of systematic information about the health and healthcare needs of the group, which may differ significantly from that of other refugees. Although almost half of the study participants rated their overall health as good or very good, the Ukrainian refugees rated their health poorer in several areas, when compared to the Norwegian population. The main findings show:

- The refugees reported their health as poorer overall, with more long-term illnesses or health problems.
- The refugees reported poorer mental health with more symptoms of psychological distress during the last week.
- The refugees reported considerably poorer self-rated dental health.
- Most of the refugees had received information about health services in Norway in a way they either fully or to some extent understood. The more recently arrived refugees were less likely to report having received understandable information about health services. Further, the more newly arrived were less likely to report knowing how to contact health services, or to have received the health care they felt they had needed in Norway.

These findings may contribute to planning and ensuring appropriate health services for this group. Follow-up and continuity of treatment for long-term illnesses or health problems, as well as support for psychological distress and mental health care, represent important healthcare needs. Further, dental health services may also be a considerable need among the refugees. The findings suggest that information about health services in Norway can be improved, especially among the newly arrived.

## Hovedbudskap (norsk)

Denne studien har målt selv-rapportert helse og helsetjenestebehov blant voksne flyktninger fra Ukraina som kom til Norge i 2022. Vi har også undersøkt informasjon flyktningene har mottatt om, og deres tilgang til, helsetjenester i Norge. Som følge av fullskala-invasjonen av Ukraina har mer enn 35 000 ukrainske flyktninger søkt om beskyttelse i Norge i 2022. Flesteparten av de ankomne er kvinner og barn, og det mangler systematisk informasjon om helsen og helsetjenestebehovet i denne gruppen, som kan skille seg betydelig fra andre flyktninger. Selv om nesten halvparten av studiedeltakerne vurderte sin helse som god eller veldig god, rapporterte de ukrainske flyktningene dårligere helse på en rekke områder sammenlignet med den norske befolkningen. De viktigste funnene viser:

- Flyktningene oppgav dårligere helse alt i alt, og mer langvarig sykdom eller helseproblemer.
- Flyktningene rapporterte dårligere psykisk helse, med flere psykiske plager den siste uken.
- Flyktningene rapporterte betydelig dårligere selvvurdert tannhelse.
- De fleste flyktningene hadde mottatt informasjon om helsetjenester i Norge på en måte de helt eller i noen grad forstod. De mer nyankomne flyktningene hadde i mindre grad mottatt forståelig informasjon om helsetjenester. I tillegg rapporterte de mer nyankomne i mindre grad å vite hvordan de kunne komme i kontakt med helsetjenesten, eller å ha mottatt helsetjenester de opplevde et behov for i Norge.

Funnene kan bidra til planlegging og sikring av tilgjengelig helsetjenester for denne gruppen. Å sikre oppfølging av og kontinuitet i behandling for langvarige sykdommer og helseproblemer blant flyktninger, inkludert støtte for psykiske plager og psykisk helsehjelp, representerer viktige helsetjenestebehov. Videre kan tannhelsetjenester også være et særlig behov blant flyktningene. Funn fra denne undersøkelsen tyder på at særlig blant de nyankomne kan informasjonen om helsetjenester i Norge bli bedre.

## Preface

The number of refugees from Ukraine to Norway is currently over 46 000 individuals, making them the largest group of refugees in Norway. Demographically, they differ significantly from previous refugee groups in that the number of women and children is much higher. The number of refugees is likely to increase further. We hope this study can contribute to a better understanding of Ukrainian refugees' healthcare and information needs and enable better planning and scaling of services. The study was carried out at the initiative of the Norwegian Institute of Public Health.

Thanks to everyone who participated in the survey and contributed to the recruitment of respondents. A special thanks to Nadiya Fedoryshyn, Birgit Kvernflaten, Thomas Sevenius Nilsen, Tony Mathias Leino and Karine Nordstrand for quality assurance and useful feedback.

Oslo, May 2023

Thor Indseth

Department Director

## Executive summary

### Introduction

The full-scale invasion in Ukraine has led to a sharp increase in the number of refugees coming to Norway, however there is a lack of systematic information about the health and healthcare needs of the group, which may differ significantly from that of other refugee groups. There are still few studies on the healthcare needs among the refugees, and to allow for better planning and scaling of health services for refugees from Ukraine in Norway, more systematic knowledge is needed.

This study aimed to measure self-reported health and healthcare needs in a sample of adult refugees from Ukraine, compared to the Norwegian population. A secondary aim was to assess received information about, and access to, health services in Norway.

### Methods

#### *Recruitment and survey design*

The target population was adult refugees from Ukraine and who arrived in Norway during 2022. Data were collected via an online, digital questionnaire (*UKR-R survey*) in a cross-sectional study design between 28<sup>th</sup> October 2022 – 31<sup>st</sup> January 2023. Several survey items were taken from existing Norwegian public health surveys, including a short version of the Hopkins Symptom Checklist (HSCL-5) measuring psychological distress. Data from five Norwegian County Public Health Surveys between 2020-2022 (*NOR surveys, n=256 920*) were used as a comparison group. The UKR-R survey further contained questions on usual healthcare needs and information about, and access to, healthcare services in Norway.

Participants in UKR-R survey were recruited via several potential physical and social media contact points, including asylum reception centres, municipalities, non-profit organisations, and Facebook groups for refugees in Norway. Survey respondents accessed the questionnaire by scanning a QR code or via a link on posters and flyers or via social media posts.

#### *Statistical analyses and weighting*

Results for outcome measures were weighted by age and sex against all Ukrainian refugees registered with collective protection in Norway. Data from NOR surveys were also weighted against the target population to assess whether UKR-R survey respondents had different healthcare needs than that of an equivalent Norwegian population.

### Results

#### *The UKR-R survey participants*

Respondents to UKR-R survey ( $n=731$ ) were 83% female, most aged 30-39 years (36%) and 40-49 years (29%), 69% with higher education, and 53% with responsibility for at least one child under the age of 18 years in Norway. Ninety-five percent had, or intended to, apply for collective protection and 79% of these were already resettled in a municipality. Most respondents (93%) reported that they had been screened for tuberculosis, but more recent arrivals were less likely to have been screened.

### *Self-reported health*

Forty-eight percent of UKR-R survey respondents rated their overall health as good or very good, compared to 73% of respondents in NOR surveys ( $p<0.001$ ). Thirty-one percent in UKR-R survey rated their dental health as good or very good, compared to 74% of the respondents in NOR surveys ( $p<0.001$ ). Older persons tended to rate their overall health and dental health as poorer compared to the younger age groups.

UKR-R respondents had a mean HSCL-5 score of 2.24 (95% CI: 2.18, 2.29), compared to 1.60 (95% CI: 1.595, 1.601) in NOR surveys, where mean scores over 2 can indicate psychological distress. More respondents in UKR-R survey than in NOR surveys reported having been extremely or quite a bit bothered during the last week by nervousness or shakiness inside, feeling fearful, feeling hopeless about the future, feeling blue or sad, and by worrying too much about things.

More respondents to UKR-R survey reported having long-term illnesses or health problems compared to NOR surveys (58% vs. 44%,  $p<0.001$ ). In both surveys, 73% of respondents reported that their long-term illnesses or health problems affected their daily lives to some or a great extent ( $p=0.11$ ). Both the proportion reporting long-term illnesses, and the degree to which their daily lives were affected by them, increased with age.

A similar proportion in both UKR-R surveys and NOR surveys reported having disabilities or problems due to injury (19% vs. 22%,  $p=0.06$ ), but more in UKR-R survey reported them affecting their daily life to some or a great extent (77% vs. 73%,  $p<0.001$ ). Both the proportion reporting disabilities, and the degree to which their daily lives were affected by them, increased with age.

### *Self-assessed healthcare needs, information about, and access to health services in Norway*

Most respondents to UKR-R survey reported needing health services 2-4 times per year for long-term illnesses, health problems or disabilities. Seventy percent had needed to see a see a doctor, psychologist, or other health professional during the last 12 months, and 81% of these had had a consultation. Older respondents generally reported a greater need for health services compared to younger respondents. Eighty-six percent of respondents reported that they had needed health care in Norway. Of these, 32% responded that they had received the health care they felt they needed, 42% answered 'To some extent', and 26% answered that they had not.

Thirty-nine percent of respondents reported that they had received information about the health services in Norway in a way that they could understand, while 49% answered 'To some extent'. Most reported that they knew how to contact a doctor or other health professional if they needed help, either fully (49%) or to some extent (43%). The more recent arrivals were less likely to report having received understandable information about health services, to know how to contact health services, and to report having received the health care they felt they had needed in Norway.

## **Discussion**

This survey has provided more systematic information on the health and healthcare needs of refugees from Ukraine in Norway. Respondents rated their overall health and dental health as poorer than in the Norwegian population. Respondents on average reported more symptoms of psychological distress, and higher proportions reported having long-

term illnesses, health problems or disabilities compared to in NOR surveys. At the same time, ratings of overall health among UKR-R survey respondents were higher compared to the population average in Ukraine, but lower compared to other refugee and immigrant groups in Norway. The observed higher levels of psychological distress symptoms among the refugees may be expected and is in keeping with existing knowledge. Reports from Ukraine also suggest a degree of undertreatment for mental health problems and barriers to health care including stigma. The relatively high proportions of cardiovascular risk factors and chronic respiratory diseases is also in keeping with public health reports from Ukraine.

Relative to other refugee groups, a shorter geographical distance and fewer practical and legal hindrances would make it easier for Ukrainians with some form of health challenge to seek refuge in Norway. Ensuring follow-up and continuity of treatment for long-term illnesses or health problems among the refugees, as well as support for psychological distress and mental health care, represent important healthcare needs. Further, dental health may also be a considerable healthcare need among the refugees. The expected large numbers of refugees through 2023, and high share of children and women in reproductive age, should also be considered when planning and scaling of health services for this group of refugees.

Although most respondents who had needed health care had had a consultation, this was not the case for all, and there were still indications of some unmet health needs. This may be seen in relation to respondents' knowledge of the health system in Norway. Findings from this survey suggest that especially among the more recently arrived, information about, and access to, health services in Norway could be improved.

The survey relied on self-selection, and a digital questionnaire, which has likely affected who has responded. As in other existing surveys among refugees from Ukraine, respondents were predominately highly educated females. Weighting by age and sex partly compensates for non-responsiveness, however we have not been able to adjust for potential differences in education level. Results may not be fully representative and may underestimate the overall health and healthcare needs among refugees from Ukraine. Survey items were largely based on existing public health surveys in Norway, which has allowed comparison with a sample from the general population, but at the cost of a more tailored questionnaire to the healthcare needs of refugees.

## **Conclusion**

The survey found that refugees from Ukraine arriving during 2022, compared to an equivalent Norwegian population, rated their overall health and dental health as poorer, a higher proportion reported having long-term illnesses or health problems, and more symptoms of psychological distress. There were indications of unmet or only partially met healthcare and information needs, especially among more recently arrived persons, and indicates an area for improvement. Health status and healthcare needs are not static and may change over time, however the findings may help to inform planning of health services and information to refugees from Ukraine, especially in municipalities and areas that receive large numbers of refugees. Future surveys should be better tailored for refugee populations and be extended to include other refugee groups than from Ukraine. Other research methods such as register-based studies and qualitative interviews may complement and build on the current findings.

## Sammendrag (norsk)

### Innledning

Fullskala-invasjonen av Ukraina har ført til en kraftig økning i antall flyktninger som kommer til Norge. Likevel er det en mangel på systematisk informasjon om deres helse- og helsetjenestebehov, som muligens avviker betydelig fra andre flyktninggrupper. Det finnes fortsatt få studier om helsetjenestebehov blant flyktningene, og det er behov for mer systematisk kunnskap for å tilrettelegge for bedre planlegging og skalering av helsetjenester for flyktninger fra Ukraina i Norge.

Hensikten med denne studien var å måle selvrapportert helse- og helsetjenestebehov i et utvalg voksne flyktninger fra Ukraina, sammenlignet med den norske befolkningen. I tillegg ble informasjon om og tilgang til helsetjenester i Norge utforsket.

### Metode

#### *Rekruttering og studiedesign*

Målgruppen for undersøkelsen var voksne flyktninger fra Ukraina som kom til Norge i løpet av 2022. Data ble samlet inn via et nettbasert, digitalt spørreskjema (*UKR-R-undersøkelsen*) i et tverrsnittstudie-design mellom 28. oktober 2022 – 31. januar 2023. Flere spørsmål fra eksisterende norske folkehelseundersøkelser ble inkludert, blant annet en kortversjon av Hopkins Symptom Checklist (HSCL-5) som måler psykiske plager. Data fra fem fylkeshelseundersøkelser mellom 2020-2022 (*NOR-undersøkelser*,  $n=256\ 920$ ) ble brukt som sammenligningsgruppe. UKR-R-undersøkelsen inneholdt videre spørsmål om vanlige helsetjenestebehov og informasjon om og tilgang til helsetjenester i Norge.

Deltakere i UKR-R-undersøkelsen ble rekruttert via en rekke fysiske og digitale kontaktpunkter, inkludert asylmottak, kommuner, frivillige organisasjoner og via sosiale medier som Facebook-grupper for flyktninger i Norge. Respondentene i undersøkelsen fikk tilgang til spørreskjemaet ved å skanne en QR-kode eller via en lenke gjengitt på plakater og flygeblad eller via innlegg på sosiale medier.

#### *Statistiske analyser og vekting*

Utfallsmålene ble vektet for sammensetning av alder og kjønn for alle ukrainske flyktninger registrert med kollektiv beskyttelse i Norge. Data fra NOR-undersøkelsene ble også vektet mot samme målgruppe for å kunne vurdere om respondentene i UKR-R-undersøkelsen hadde andre helsebehov enn en tilsvarende norsk befolkning.

### Resultat

#### *Deltakerne i UKR-R-undersøkelsen*

Respondentene i UKR-R-undersøkelsen ( $n = 731$ ) var 83% kvinner, de fleste i alderen 30-39 år (36%) og 40-49 år (29%), 69% med høyere utdanning og 53% med ansvar for minst ett barn under 18 år i Norge. Nittifem prosent hadde, eller hadde til hensikt å søke om kollektiv beskyttelse i Norge og 79% av disse var allerede bosatt i en kommune. De fleste respondentene (93%) rapporterte at de hadde blitt undersøkt for tuberkulose, men blant de nylige ankomne var det mindre sannsynlig at de hadde blitt undersøkt.

### *Selvrapportert helse*

Førtiåtte prosent av UKR-R-respondentene vurderte sin helse alt i alt som god eller veldig god, sammenlignet med 73% av respondentene i NOR-undersøkelsene ( $p < 0,001$ ). Trettien prosent i UKR-R-undersøkelsen vurderte tannhelsen sin som god eller svært god, sammenlignet med 74% av respondentene i NOR-undersøkelsene ( $p < 0,001$ ), til tross for at 84-86% i begge undersøkelsene rapporterte å ha vært hos tannlegen i løpet av de siste 2 årene ( $p = 0,09$ ). Eldre personer hadde en tendens til å vurdere sin generelle helse og tannhelse som dårligere sammenlignet med de yngre aldersgruppene.

UKR-R-respondentene hadde en gjennomsnittlig HSCL-5-skår på 2,24 (95% KI: 2,18, 2,29), sammenlignet med 1,60 (95% KI: 1,595, 1,601) i NOR-undersøkelsene, hvor gjennomsnittsskår over 2 kan indikere psykiske plager. Flere respondenter i UKR-R-undersøkelsen enn i NOR-undersøkelsene rapporterte å ha vært veldig mye eller ganske mye plaget den siste uken av nervøsitet eller indre uro, redsel eller engstelse, følelse av håpløshet med tanke på fremtiden, nedtrykthet eller tungsindighet, og bekymring eller uro.

Flere respondenter i UKR-R-undersøkelsen rapporterte å ha langvarige sykdommer eller helseproblemer sammenlignet med NOR-undersøkelsene (58% vs. 44%,  $p < 0,001$ ). I begge undersøkelsene rapporterte 73% av respondentene at deres langvarige sykdommer eller helseproblemer påvirket hverdagen i noen eller stor grad ( $p = 0,11$ ). Både andelen som rapporterte om langvarige sykdommer, og i hvilken grad hverdagen ble påvirket av dem, økte med alderen.

En tilsvarende andel i både UKR-R-undersøkelsen og NOR-undersøkelsene rapporterte at de hadde funksjonsnedsettelse eller plager som følge av skade (19% vs. 22%,  $p = 0,06$ ), men flere i UKR-R-undersøkelsen rapporterte at de påvirket hverdagen i noen eller stor grad (77% vs. 73%,  $p < 0,001$ ). Både andelen som meldte om funksjonsnedsettelser og plager som følge av skade, og i hvilken grad hverdagen ble påvirket av dem, økte med alderen.

### *Selvvurderte helsebehov, informasjon om og tilgang til helsetjenester i Norge*

De fleste respondentene i UKR-R-undersøkelsen rapporterte at de hadde behov for helsetjenester 2-4 ganger per år for langvarige sykdommer, helseproblemer eller funksjonsnedsettelser. Sytti prosent hadde hatt behov for å oppsøke lege, psykolog eller annet helsepersonell i løpet av de siste 12 månedene, og 81% av disse hadde hatt en konsultasjon. Eldre respondenter rapporterte generelt et større behov for helsetjenester sammenlignet med yngre. Åttiseks prosent av respondentene rapporterte at de hadde hatt behov for helsehjelp i Norge. Av disse svarte 32% at de hadde fått den helsehjelpen de følte de trengte, 42% svarte «i noen grad», og 26% svarte at de ikke hadde fått helsehjelpen.

Trettini prosent av respondentene rapporterte at de hadde fått informasjon om helsetjenesten i Norge på en måte som de kunne forstå, mens 49% svarte «i noen grad». De fleste svarte at de visste hvordan de skulle kontakte lege eller annet helsepersonell hvis de trengte hjelp, enten helt (49%) eller i noen grad (43%). De nyankomne rapporterte i mindre grad at de hadde fått forståelig informasjon om helsetjenester, at de visste hvordan de skulle kontakte helsevesenet, og at de hadde fått den helsehjelpen de følte de hadde hatt behov for i Norge.



## Diskusjon

Denne undersøkelsen har gitt mer systematisk informasjon om helse- og helsetjenestebehovene blant flyktninger fra Ukraina i Norge. Respondentene vurderte sin generelle helse og tannhelse som dårligere enn den norske befolkningen. Respondentene rapporterte i gjennomsnitt flere symptomer på psykiske plager, og høyere andeler rapporterte å ha langvarige sykdommer, helseproblemer eller funksjonsnedsettelse sammenlignet med NOR-undersøkelsene. Samtidig var vurderingen av generell helse blant UKR-R-respondentene høyere sammenlignet med gjennomsnittet i den ukrainske befolkningen, men lavere sammenlignet med andre flyktning- og innvandrergupper i Norge. De observerte høyere nivåene av psykiske plager blant flyktningene er å forvente og i tråd med eksisterende kunnskap. Rapporter fra Ukraina tyder også på en viss grad av under-behandling for psykiske helseproblemer og barrierer for helsetjenester, inkludert stigma. Den relativt høye andelen kardiovaskulære risikofaktorer og kroniske luftveissykdommer er også i tråd med folkehelse rapporter fra Ukraina.

I forhold til andre flyktninggrupper vil kortere geografisk avstand og færre praktiske og juridiske hindre, gjøre det lettere for ukrainere med en eller annen form for helseutfordring å søke beskyttelse i Norge. Å sikre oppfølging og kontinuitet i behandling for langvarige sykdommer eller helseproblemer blant flyktningene, samt støtte for psykiske plager og psykisk helsehjelp, representerer viktige helsetjenestebehov. Videre kan tannhelsetjenester også være et betydelig behov blant flyktningene. Det forventede store antallet flyktninger gjennom 2023, og høy andel barn og kvinner i reprodutiv alder, bør også tas hensyn til ved planlegging og skalering av helsetjenester for denne gruppen flyktninger.

Selv om de fleste respondentene som hadde et behov for helsehjelp, hadde hatt en konsultasjon, var dette ikke tilfelle for alle, og det var fortsatt indikasjoner på noen udekkede helsebehov. Dette kan ses i sammenheng med respondentenes kjennskap til helsesystemet i Norge. Funn fra denne undersøkelsen tyder på at særlig blant de nyankomne kan informasjonen om, og tilgangen til, helsetjenester i Norge bli bedre.

Undersøkelsen baserte seg på selvseleksjon, og et digitalt spørreskjema, som sannsynligvis har påvirket hvem som har svart. Som i andre undersøkelser blant flyktninger fra Ukraina, var respondentene overrepresentert med høyt utdannede kvinner. Vekting etter alder og kjønn kompenserer delvis for manglende respons, men vi har ikke kunnet justere for mulige forskjeller i utdanningsnivå. Resultatene er muligens ikke helt representative og kan undervurdere de generelle helse- og helsetjenestebehovene blant flyktninger fra Ukraina. Spørsmålene i undersøkelsen var i stor grad basert på eksisterende folkehelseundersøkelser i Norge, som har gjort det mulig å sammenligne med et utvalg fra den norske befolkningen, men på bekostning av et mer skreddersydd spørreskjema om flyktingers helsetjenestebehov.

## Konklusjon

Undersøkelsen viste at flyktninger fra Ukraina som ankom i løpet av 2022, sammenlignet med den norske befolkningen, vurderte sin helse alt i alt og tannhelse som dårligere, der en høyere andel rapporterte å ha langvarige sykdommer eller helseproblemer, og flere symptomer på psykiske plager. Det var indikasjoner på udekkede eller bare delvis dekkede helsetjeneste- og informasjonsbehov, særlig blant nyankomne, som indikerer et forbedringsområde. Helsetilstand og helsetjenestebehov er ikke statisk og kan endre seg

over tid, men funnene kan bidra til planlegging av helsetjenester og informasjon til flyktninger fra Ukraina, spesielt i kommuner og områder som mottar et stort antall flyktninger. Fremtidige undersøkelser bør være bedre tilpasset flyktning befolkningen og bør med fordel utvides til å omfatte andre flyktninggrupper i tillegg. Andre forskningsmetoder som registerbaserte studier og kvalitative intervjuer kan utfylle og bygge videre på de disse funnene.

## Introduction

### Background

As a result of the full-scale invasion of Ukraine on 24<sup>th</sup> of February 2022, nearly one-third of Ukrainians have been forcibly displaced from their homes. This is one of the largest displacement crises in the world today (United Nations High Commissioner for Refugees, 2023). Especially women, children and elderly are among those fleeing the country, since under martial law, men aged 18–60 years generally cannot leave Ukraine. As of 7<sup>th</sup> of March 2023, United Nations High Commissioner for Refugees (UNHCR) has estimated that there are over 8 million persons fleeing from Ukraine across Europe, and over 4 million have registered for temporary collective protection or similar national protection schemes in 34 countries in Europe (United Nations High Commissioner for Refugees, 2023). European countries, including Norway, resolved to offer refugees from Ukraine<sup>1</sup> temporary collective protection. In Norway, collective protection is regulated by the Immigration Act, Section 34, and refugees with collective protection are granted a residence permit for one year at a time (Lovdata, 2022a).

There has been a sharp increase in the number of refugees coming to Norway as a result of the full-scale invasion. Over 35 000 people from Ukraine applied for collective protection in Norway in 2022 (The Norwegian Directorate of Immigration, 2023d). In comparison, a total of 31 150 people applied for asylum in 2015, of which 10 448 were from Syria (The Norwegian Directorate of Immigration, 2023a), and in 2019 there were 2 305 asylum applications (The Norwegian Directorate of Immigration, 2023b). The majority of asylum seekers to Norway have previously been adult men, and therefore the refugees who have come from Ukraine differ demographically as well as in number (The Norwegian Directorate of Immigration, 2023c; The Norwegian Directorate of Immigration, 2023e).

In a normal situation, all asylum seekers to Norway are processed at the National Arrivals Centre in Råde, where they stay for a short period of between a few days to a few weeks to register, submit their application for protection, complete the asylum interview and undergo mandatory screening for tuberculosis. Residents should also have access to healthcare services and recommended early health assessments. Under normal conditions, the goal is that 70% of asylum seekers complete the entire application procedure and receive a decision within 21 days (Hernes, Deineko, Myhre, Liodden, & Staver, 2022). Asylum seekers and refugees then move to one of several asylum reception centres where they stay until being resettled in a municipality. As a result of the full-scale invasion, it has been necessary for the asylum reception system to be rapidly upscaled to accommodate the large influx of asylum seekers from Ukraine. This saw the establishment of multiple decentralized registration points and temporary asylum centres and accommodation for asylum seekers. In addition, several refugees from Ukraine choose to live privately, for example with family or friends in Norway (Hernes et al., 2022).

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<sup>1</sup> We refer to all persons fleeing Ukraine due to the war as 'refugees from Ukraine' or 'Ukrainian refugees' in the common use of the term 'refugees' and for simplicity. The term therefore encompasses third-country nationals, asylum seekers, persons granted collective protection pursuant to Section 34 of the Immigration Act, persons applying for other types of resident permits, and those who do not intend to apply for residency in Norway.

Depending on the numbers of refugees arriving, current capacity at asylum centres, and processing time for resettlement, refugees from Ukraine will normally stay at an asylum centre for 1-3 months before being resettled and given permanent housing in a municipality in Norway. When resettled in a municipality, collective protection gives adults up to 55 years old the right to attend the introduction program and Norwegian language instruction (The Directorate of Integration and Diversity, 2022).

### **Health status and healthcare needs**

Refugees arriving to Norway are recommended to be offered a general health assessment, and a more complete assessment would usually be offered by the receiving municipality after the refugee has been resettled after approximately three months. However, these health assessments are voluntary for both parties, and the content and timing are not mandated, unlike for tuberculosis screening. Due to the sharp increase of arrivals and establishment of temporary reception centres and accommodations, health screenings may have been further delayed or not completed, additionally there is no collective overview or registers of such information. There is therefore a lack of systematic knowledge about the health state and healthcare needs among the refugees who have come to Norway thus far. Furthermore, the refugees arriving from Ukraine differ considerably in demographic composition from refugees the Norwegian asylum system typically receives, with many women and children, and elderly. There have also been indications that their health and healthcare needs may be different from that of other refugee groups. Additionally, it is also uncertain how transferable knowledge on the health status in the general Ukrainian population is to the persons fleeing Ukraine due to the full-scale invasion. Health status and healthcare needs among refugees are not static and can depend on the current situation in their homeland and the conditions of their flight.

The Norwegian Institute of Public Health (NIPH) published, in May 2022, scenarios for healthcare needs among refugees from Ukraine in Norway (Gjefsen, Gjesvik, Skyrud, & Indseth, 2022). These projections were based on the Norwegian Directorate of Immigration's (UDI) statistics and estimates of future arrivals, and on the average usage of health services in the Norwegian population according to the refugees' age and sex. Estimates were therefore rather uncertain. Nonetheless, the projections predicted a large increase in need for general practitioner services in particular, as well as some increase on hospital admissions.

The lack of available data to allow adequate planning for the healthcare needs of refugees from Ukraine is not unique to Norway, and also applies to other European countries hosting large numbers of Ukrainian refugees (Spiegel, 2022a, 2022b). Polish estimates, based on demographics of pension-aged refugees in Poland and public health data from Ukraine, predicted a substantial burden of cardiovascular, pulmonary and gastrointestinal disease in particular (Piotrowicz et al., 2022). Similar to NIPHs projections, challenges identified included an insufficient number of general practitioners and increased demand on tertiary care. Additionally, awareness of diseases not common in Polish nationals (e.g. tuberculosis), the need for health information and guidance in Ukrainian, interpreting services, and appropriate reimbursement systems were highlighted (Piotrowicz et al., 2022).

To our knowledge, there has only been two studies conducted so far that have included questions on health or healthcare needs among refugees from Ukraine in Norway (Hernes

et al., 2022; Michelsen, Nissen, & Ottesen, 2023). In the study by Michelsen et al. (2023), more than half of the respondents reported a need for help for their mental health issues since arrival in Norway, but only around 30% of these had been offered any help. Additionally, more than 70% did not know where to find information about mental health care (Michelsen et al., 2023). In the study by Hernes et al. (2022), the main focus of the survey was the refugees' general experiences during the arrival phase in Norway. In the survey, carried out between May and July 2022, 20% of the respondents stated that healthcare services had not yet been needed (Hernes et al., 2022). Among those who had been in contact with the healthcare services, they rated them as fairly good (3.9 out of 5), while access to medicine was rated slightly less favourably (3.5 out of 5) (Hernes et al., 2022).

Additionally, there are three European surveys that have explored health and healthcare needs among refugees from Ukraine (Buchcik, Kovach, & Adedeji, 2023; Head, Brackstone, Crane, Walker, & Perelli-Harris, 2022; Scott, 2022). Among refugees staying in Poland who needed health care, 40% needed treatment for chronic diseases and 44% for acute illnesses (Scott, 2022). In the same survey, 10% reported mental health issues (Scott, 2022). In a survey that included 12 European countries, 20% of the refugees reported having poor health and more than 70% reported having at least one chronic disease (Head et al., 2022). Additionally, 58% reported having difficulties with healthcare access (Head et al., 2022). A study on Ukrainian refugees in Germany, described that almost half of the female participants reported to experience severe psychological distress (46%), while 20% of the male participants reported the same (Buchcik et al., 2023).

Public health reports from Ukraine prior to the full-scale invasion have found that non-communicable diseases account for 91% of deaths, where cardiovascular diseases, diabetes, cancers, chronic respiratory diseases, and mental health conditions are among the leading causes (World Health Organization, 2020b). Additionally, chronic infectious diseases, such as HIV and tuberculosis are highly prevalent compared to in other European countries (Eriksen, Shuftan, & Litvinova, 2021; Murphy et al., 2022). Mental health remains a challenge in Ukraine, with relatively high rates of depression and suicide, in addition to access challenges and underuse of health services for mental health issues (Eriksen et al., 2021; World Health Organization, 2020b). Until the full-scale invasion, Ukraine has had a well-functioning health system, and undergone several reforms in recent years to improve health services and access (World Health Organization, 2020b). However, disruptions especially since the full-scale invasion, may have resulted in interruption to treatment and access to medications (Kumar et al., 2022).

Asylum seekers and refugees have the same right to healthcare as the rest of the population in Norway (Norwegian Directorate of Health, 2023b). This includes both somatic and mental health care, and both primary and specialist health services. Most patients over 16 years must pay a user fee when they visit their general practitioner and outpatient clinics in specialist health services. However, once the stipulated yearly cap is reached, an exemption card is issued. Furthermore, some patient groups are exempt from the user fees, and hospital admissions are free of charge (Helsenorge, 2023).

Asylum seekers who are children up to 18 years old, and certain other groups, have the right to necessary dental care in the public system, as for in the Norwegian general population. Asylum seekers outside of the specified groups must arrange and cover dental care themselves, but assistance should be given to residents of asylum centers in

contacting appropriate care (Norwegian Directorate of Health, 2023a). The rights apply regardless of whether the asylum seeker lives privately or in an asylum reception center.

To allow for better planning and scaling of health services, there is therefore a need for more systematic knowledge about the health and healthcare needs of the refugees from Ukraine who have come to Norway thus far.

### **Study aims**

The overall aim of this survey was to help ensure sufficient and timely health services for refugees in Norway by measuring self-reported health and healthcare needs in a sample of Ukrainian refugees. The results should inform health authorities about healthcare needs among refugees from Ukraine, as well as provide increased knowledge about the refugees' health status. We aimed to put the findings on health-related outcomes into context by comparing them to an equivalent Norwegian population.

A secondary aim was to gain insight into whether refugees from Ukraine felt that they had received adequate information about health services in Norway, and whether they had received the health services they felt they needed since arrival in Norway.

## Methods

### Study population and data collection

The population of interest for the survey was people fleeing Ukraine due to the war, aged 18 years or older, and who arrived in Norway during 2022. Data were collected via an online, digital questionnaire in a cross-sectional study design. In this report we refer to this survey and these data as *UKR-R survey*.

The design of the questionnaire and recruitment methods were influenced by several factors. To encourage a low threshold for participation we endeavoured to keep the questionnaire as brief as possible and did not collect any directly identifying information or contact information from respondents. Refugees often change address, and registered contact information may be outdated, especially during the early phase, and furthermore we considered that recruitment via direct contact, for example by letter or electronically, could be perceived as providing a direct link between their response and identity. Lastly, the study had to be feasible within the limited available resources and budget.

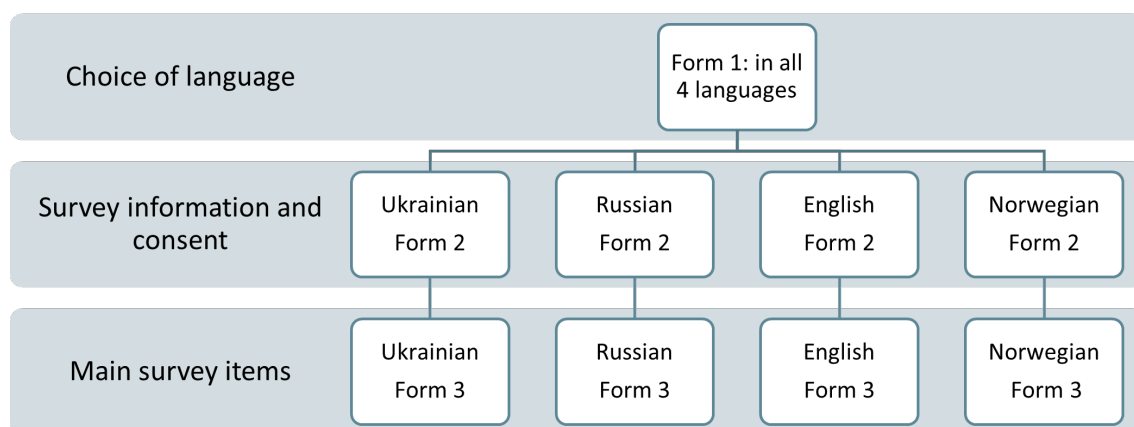
### Development of the digital questionnaire, *UKR-R survey*

The digital questionnaire contained questions on self-rated health, long-term health conditions and their usual healthcare needs, and information about, and access to, healthcare services in Norway. Respondents were asked about basic demographic information such as sex, age group and highest completed education. They were also asked to provide information on where they were in the process of resettlement in Norway, and whether they had completed mandatory screening for tuberculosis. A copy of the English version of the digital questionnaire is available in Appendix A.

Several survey items were taken or adapted from previously administered public health surveys in the Norwegian population, such as the Norwegian County Public Health Surveys, NCPHS ([Fylkeshelseundersøkelser](#)) (Norwegian Institute of Public Health, 2023a). These surveys include established health indicators and instruments such as self-rated overall health and a short version of the Hopkins Symptom Checklist, measuring symptoms of depression and anxiety (Derogatis, 1973).

The questionnaire and information material were developed in close collaboration with a native Ukrainian and qualified translator in Ukrainian and Russian living in Norway. Feedback about the survey items was sought from colleagues at the NIPH with experience in survey design and refugee health. Translations to Ukrainian and Russian were performed by a qualified translator and independently quality checked by native speakers at the NIPH. Translations to English were performed by a native speaker with experience in translations and independently quality checked by a second native speaker, both working at NIPH. Where there were disagreements, the differences were discussed until a final translation was agreed upon. The final digital versions of the questionnaire were also independently quality checked by native speakers of each language. The questionnaire was available in Norwegian and English in addition to Ukrainian and Russian, so that staff at recruitment points could understand and give assistance if needed, and to cater to possible Ukrainian refugees who may not be native speakers of either Ukrainian or Russian.

The digital survey was constructed using Nettskjema, a tool for designing and conducting online surveys developed and operated by the University Information Technology Center (USIT) at the University of Oslo. A total of nine questionnaires/forms were linked together (Figure 1) to allow respondents to first choose a language (form 1), then receive information about the survey and give consent (form 2), and finally provide their responses to survey items in their chosen language (form 3). Form 2 and 3 were each provided in four language versions. Each language version per form were coded identically, allowing the data from them to be easily combined.



**Figure 1** Schematic representation of the digital forms making up the survey

### Survey items

Several survey items were taken from the Norwegian County Public Health Surveys, NCPHS (in this report referred to as NOR surveys and described in more detail later). The short version of the Hopkins Symptom Checklist, HSCL-5, was used to give an indication of psychological distress. It comprises five questions about how much the respondent has been bothered by the following symptoms: nervousness or shakiness inside, feeling fearful, feeling hopeless about the future, feeling blue or sad, and worrying too much about things (Strand, Dalgard, Tambs, & Rognerud, 2003). In the HSCL-5 there are four answer options: 'Not at all' (1 point), 'A little' (2 points), 'Quite a bit' (3 points), and 'Extremely' (4 points). A mean score can be calculated across the five items and will have a value between 1 and 4. We followed NOR surveys (Knapstad et al., 2022) and Strand et al. (2003) in using a cut-off mean score of 2, above which indicates psychological distress. Note that there are some variations across studies in the time frame respondents are asked to report symptoms for. UKR-R survey follows NOR surveys by specifying 'during the last week'. There may also be slight variations to the wording in different Norwegian translations. UKR-R survey used the same wording in Norwegian as NOR surveys, and the original English wording in the English version. Translations to Ukrainian and Russian were made with both the Norwegian and English versions of the questionnaire available. Variations in time frame and wording may affect direct comparability with other surveys or studies.



Other survey items taken from previous Norwegian County Public Health Surveys include questions about self-rated overall health and dental health, the presence of long-term illnesses, health problems, disabilities, or problems due to injury and, if relevant, how much these affect the respondent's daily life.

The UKR-R survey questionnaire also included additional items not found in the County Public Health surveys in order to further assess the refugees' situation and healthcare needs.

To give an estimate of healthcare needs due to chronic conditions, respondents to the UKR-R survey who had long-term illnesses, health problems or disabilities, were asked to give an estimate of how frequently they needed health services per year. This information was specifically included to help inform and update scenarios for healthcare needs among refugees from Ukraine in Norway (Gjefsen et al., 2022).

If respondents indicated that they had had healthcare needs during the last 12 months, they were also asked whether they had accessed health services, both prior and since arrival to Norway.

To assess information about and access to healthcare services in Norway among the refugees from Ukraine, respondents were asked if they had received information about health services in Norway in a way that they could understand, whether they knew how to contact a doctor or healthcare professional if they needed help, and if they had received the health care that they felt they had needed while in Norway.

The 5-level EQ-5D version (EQ-5D-5L), a generic measure of health status and health-related quality of life, was also included in the UKR-R survey questionnaire. Results pertaining to the EQ-5D will be reported in a separate publication.

Lastly, the UKR-R survey included questions about the healthcare needs of respondents' children, if applicable. However, results pertaining to the health and healthcare needs of the children are not included in the final report due to limitations in the interpretation of the results. This is discussed further in the Study limitations section of the Discussion.

## **Recruitment**

Recruitment was based on self-selection via several potential contact points for asylum seekers and refugees from Ukraine in Norway. We targeted both physical contact points and social media. Participants answered the questionnaire by scanning a QR code or accessing a link to the questionnaire on posters and flyers made available at physical contact points and digitally, as well as via posts in Facebook groups for refugees in Norway. Posters and brochures about the study were presented in Ukrainian and Russian, while the website had information also in Norwegian and English. Participants could choose to answer the questionnaire in Ukrainian, Russian, English or Norwegian. Data were collected in the period 28<sup>th</sup> October 2022 – 31<sup>st</sup> January 2023.

The following physical recruitment points were contacted and invited to participate in the study:

1. Asylum reception system:
  - All ordinary asylum reception centres

- The National Arrivals Centre in Råde
  - Temporary asylum reception centres (“akuttinnkvarteringer”) that were operational during the data collection period
2. Municipalities:
- All municipalities with an operational ordinary or temporary asylum reception centre, or registered with at least 20 resettled refugees from Ukraine
3. Non-profit organisations:
- Pre-selected organisations: The Ukrainian Association of Norway (Den Ukrainske Forening i Norge), The Norwegian Organisation for Asylum Seekers (NOAS), Caritas Norway, Norwegian Red Cross
  - All non-profit organisations who received government grants for integration activities for refugees from Ukraine in Norway

Physical recruitment points were contacted via email with information about the study and an invitation to participate as a recruitment point, including digital versions of the poster and flyer in Ukrainian and Russian to be hung up or distributed to refugees from Ukraine. Printed versions of the poster and flyers were also offered to be sent out to the recruitment points by post. If no reply to the initial email contact was received, an email reminder was sent after approximately three weeks.

Asylum reception centres and the National Arrivals Centre were contacted directly. Municipalities were contacted via the municipality’s general email address as well as via the local NAV office (Norwegian Labour and Welfare Administration). The pre-selected non-profit organisations were contacted directly, and organisations who had received government grants were either contacted directly or via The Directorate of Integration and Diversity (IMDi).

Social media posts with a picture, information about the study, and a link to the survey were posted in Facebook groups for Ukrainians in Norway including: ‘Ukrainske flyktninger til Norge – info / Біженці з України в Норвегії’ [Ukrainian refugees in Norway – info] and ‘Про медичну допомогу в Норвегії’ [About medical care in Norway]. The social media post was also published on the Norwegian Institute of Public Health’s (NIPH) Facebook page for migration health (Folkehelseinstituttet – Migrasjonshelse) and shared via email to NIPHs migration health network. The post was reposted and shared several times during the recruitment period to the social media groups.

### **Comparison group, *NOR* surveys**

Data from recent public health surveys in the Norwegian population were used to form the basis of a Norwegian comparison group to the refugees from Ukraine. Since 2018, the NIPH has carried out public health surveys among Norwegians aged 18 years or older, in collaboration with the different counties in Norway, the Norwegian Counties Public Health Surveys, NCPHS (Norwegian Institute of Public Health, 2023a). The county surveys include some questions on health and, as previously described, these survey items were included in the UKR-R survey. In this report we refer to the Norwegian Counties Public Health Surveys and data from them as *NOR surveys*.

The Norwegian County surveys are internet-based, and invitations are sent out by SMS and e-mail. Participants are selected randomly from the Norwegian Population Registry, and e-mail addresses or telephone numbers are obtained from the contact registry from the Agency for Public Management and eGovernment (Difi). More information about the county public health surveys is available in English here:

<https://helsedata.no/en/forvaltere/norwegian-institute-of-public-health/norwegian-counties-public-health-surveys/>

Anonymized data from the following county surveys were used to form the comparison group in the current study: Rogaland (2020), Viken (2021), Vestfold & Telemark (2021), Møre & Romsdal (2021) and Vestland (2022).

**Table 1 Description of respondents to Norwegian County public health surveys (NOR surveys) compared to the Norwegian adult general population**

	NOR surveys	Adult general population
<i>n</i>	256 920	3 980 918
Female, <i>n</i> (%)	140 254 (54.6)	50.3 %
<b>Age</b>		
18-29 years, <i>n</i> (%)	30 910 (12.0)	19.8 %
30-39 years, <i>n</i> (%)	37 302 (14.5)	15.9 %
40-49 years, <i>n</i> (%)	46 218 (18.0)	17.7 %
50-59 years, <i>n</i> (%)	55 478 (21.6)	16.4 %
60-69 years, <i>n</i> (%)	49 900 (19.4)	14.3 %
70 + years, <i>n</i> (%)	37 111 (14.4)	15.8 %
With higher education, <i>n</i> (%)	133 542 (52.3)	33.3 %

*NOR surveys = county surveys in Norway. Adult general population = Norwegian adult population (18 years and older) from microdata.no for year 2018, retrieved January 2023.*

## Data management and ethical considerations

Data collection and data storage for UKR-R survey was carried out using Nettskjema and Services for Sensitive Data (Tjenester for Sensitive Data, TSD), from the University of Oslo. The data was then transferred to a secure server at NIPH for analysis. The anonymised data from the county public health surveys, NOR surveys, were also stored and analysed on the secure server at NIPH.

Participants in both the survey among refugees from Ukraine (UKR-R survey) and the county public health surveys (NOR surveys) gave consent before answering the questionnaires. The survey among refugees from Ukraine did not collect information that could directly identify individual participants. A data protection impact assessment

(DPIA) for the project was completed and the project follows established guidelines to ensure participant's rights. NIPHs Data Protection Officer gave approval for the project to be carried out. Additionally, the Regional Committee for Medical and Health Research Ethics reviewed the project and deemed it to be health services research, and hence outside of the committee's mandate and not requiring their approval.

## Statistical analyses

Data were collected using questionnaires in the four different languages (Figure 1). Data from each questionnaire were combined. A total of 741 responses to the questionnaire were received prior to exclusions. Known test responses provided in the technical testing of the survey upon release ( $n=2$ ) and respondents with missing on more than 10 of the 26 main survey items (not including filter questions) ( $n=8$ ) were excluded. When calculating the mean score across the five survey items measuring psychological distress (HSCL-5), we followed Strand et al. (2003) by excluding respondents who did not answer at least four of the five survey items (UKR-R survey  $n=1$ , NOR surveys  $n=901$ ).

For UKR-R survey respondents, we summarised number and proportion of respondents per age group and with female sex, presented with the corresponding official statistics provided by UDI for refugees from Ukraine registered in 2022 with collective protection. We also described number and percentage of respondents who reported having higher education, having responsibility for children under the age of 18, whether they intended to/had applied for collective protection in Norway, and status for resettlement in a municipality. A similar summary of respondent characteristics was provided for NOR surveys' respondents (Table 1).

Responses per response category for survey items related to health and healthcare needs were presented in figures and tables. All responses for these survey items were weighted to reflect the composition of age and sex in the target population (all refugees from Ukraine registered in Norway during 2022). See section below on weighting for more information on how data were weighted.

Results per survey item were presented as weighted proportions per response category. Where the same survey items were used in both UKR-R and NOR surveys, results for all respondents were presented for both. Differences between UKR-R and NOR surveys were tested for significance using a two-sample test for equality of proportions with Pearson's chi-squared test statistic and confidence level of 95%.

For UKR-R survey, we also presented weighted results per age group, weighted for sex. Due to relatively few male respondents, results were not additionally analysed per sex. For selected items we also analysed results by month of arrival in Norway (Jan/Feb-Dec 2022).

A mean score was calculated across all 5 items of the HSCL-5, and we have also presented proportions for the individual symptoms. We used a weighted t-test to calculate 95% confidence intervals for responses to UKR-R and NOR surveys.

## Weighting and representativeness

A typical source of error in surveys such as this relates to who is included in the final sample. If the study participants are very different from the target population in terms of

important respondent characteristics, the results from the survey may not accurately reflect the group as a whole. Some studies have for example found that participants answering population-based health surveys have better health than those who do not participate (Knudsen, Hotopf, Skogen, Øverland, & Mykletun, 2010). Bias in surveys can come from different sources, for example, as a result of sampling and selection of respondents, or attrition caused by drop-out or missing responses.

Respondent characteristics such as age, sex, and educational level can influence responses to health-related items. Because we found that there were differences between our sample of participants and the population of interest, we have weighted responses so that the results will better represent the population of interest. Weighting is meant to compensate for non-responders, or those sub-groups that have a low participation in the survey.

For the UKR-R survey participants, we would like the answers to represent all refugees from Ukraine who have arrived in Norway during 2022 due to the invasion. UDI publishes information about the age and sex of persons from Ukraine who have registered for temporary collective protection in Norway pursuant to the Immigration Act, Section 34 (The Norwegian Directorate of Immigration, 2023e). Because some demographic groups (age and sex) represent a smaller proportion of UKR-R survey participants compared to the same demographic group in the target population, these answers were weighted so that the answers from underrepresented groups counted more in the UKR-R survey results, and vice versa for the demographic groups who were overrepresented among the survey participants. For groups who were particularly underrepresented, a few individual respondents may receive very high weights, for example males in the highest age groups, and thus potentially bias results. To mitigate this, we aggregated the highest age groups to one category (50 + years of age) in the analyses. Where results are presented per age group, responses were weighted by sex within each age group.

Although most refugees from Ukraine have applied for collective protection, some may have applied for other types of visas, and some may not have applied for any residency or visa in Norway at all, and these people are therefore not included in UDI's official statistics. However, we assume that this applies to relatively few, among other things based on responses given in the current study, and should not affect weighting nor our findings to a great extent.

The aim of this study has been to assess the relative healthcare needs of refugees coming from Ukraine, compared to that of a Norwegian general population. Both the Norwegian general population as whole, and respondents to NOR surveys, have a very different composition of respondent characteristics such as age and sex than the target population (refugees from Ukraine). To better compare these two groups (respondents to UKR-R and NOR surveys) and assess whether UKR-R survey respondents have different healthcare needs than that of the Norwegian population, we have weighted responses from NOR surveys by the composition of age and sex in the refugee population as reported in official UDI statistics.

Although we have weighted according to age and sex, we cannot control for other differences in the study sample such as education, motivation, attitudes or lifestyle. The respondents have actively chosen to participate and may differ in various ways to those who did not. We discuss representativeness further in the Discussion chapter.

## Acknowledgements

This project would have been very challenging without the efforts of project participants Inger Opedal Paulsrud and Tetyana Tkachenko. Tetyana has been instrumental to the adaption, translation, and quality assurance of the questionnaire and all information material in Ukrainian and Russian. Inger set up and linked the digital questionnaires and consent forms in Nettskjema, as well as ensuring that data was securely collected and transferred from TSD to the secure server in NIPH. Thank you also to Thomas Nilsen for advice on the adaptation of questions from the Norwegian County Public Health Surveys and regarding data from relevant surveys.

We are also very grateful to the numerous colleagues who contributed in different ways, including, but not limited to, providing feedback on the questionnaire during development, quality assurance of translations and of the final digital versions of the questionnaire, and development of information material. Lastly, we are grateful to all participants in the survey, both those who helped with recruitment and respondents to the questionnaire.

## Results

Crude and weighted proportions for outcome measures can be found in Appendix B.

### The UKR-R survey participants

In total, 731 valid responses were received to the UKR-R survey, of which 601 (83%) were from women. Most respondents used the Ukrainian (68%) or Russian (30%) versions of the questionnaire.

The survey respondents are described in Table 2, as well as all adult refugees from Ukraine registered with collective protection by UDI during 2022, and respondents to NOR surveys. Most respondents to UKR-R survey were in the age groups 30-39 years (36%) and 40-49 years (29%), and 69% had completed higher education. Ninety-two percent were born in Ukraine and 5% were born in Russia.

Respondents to the UKR-R survey were more often female and somewhat younger, compared to all adult refugees from Ukraine registered with collective protection with UDI. So that the results would be more representative of the entire target population, UKR-R respondents' answers about health, healthcare needs and information about health services, were weighted against the age and sex distribution of all adult refugees from Ukraine registered with collective protection by UDI. This means, for example, that answers given by older men carry relatively more weight. See Methods section for more information on weighting.

**Table 2 Description of respondents to UKR-R survey, refugees from Ukraine registered with collective protection by the Norwegian Directorate of Immigration (UDI registered), and respondents to Norwegian county surveys (NOR surveys)**

	UKR-R survey	UDI registered	NOR surveys
<b>n</b>	731	23 911	256 920
<b>Female, n (%)</b>	601 (82.2)	16 543 (69.2)	140 254 (54.6)
<b>Age</b>			
<b>18-29 years, n (%)</b>	130 (17.8)	5 385 (22.5)	30 910 (12.0)
<i>% Female</i>	80.6		
<b>30-39 years, n (%)</b>	265 (36.3)	6 899 (28.8)	37 302 (14.5)
<i>% Female</i>	82.9		
<b>40-49 years, n (%)</b>	210 (28.7)	5 102 (21.3)	46 218 (18.0)
<i>% Female</i>	82.8		
<b>50-59 years, n (%)</b>	81 (11.1)	2 661 (11.1)	55 478 (21.6)
<i>% Female</i>	87.7		
<b>60-69 years, n (%)</b>	32 (4.4)	2 653 (11.1)	49 900 (19.4)
<i>% Female</i>	78.1		
<b>70 + years, n (%)</b>	12 (1.6)	1 211 (5.0)	37 111 (14.4)
<i>% Female</i>	83.3		
<b>Completed higher education, n (%)</b>	500 (68.4)	-	133 542 (52.3)
<b>Born in Ukraine, n (%)</b>	669 (91.5)	-	232 (0.1)

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. UDI registered = official statistics provided by the Norwegian Directorate of Immigration (UDI) on adult refugees from Ukraine registered with temporary collective protection pursuant to the Immigration Act, Section 34, per 31.12.22. NOR surveys = county surveys in Norway. Data are not weighted.



Fifty-three percent of respondents indicated that they had responsibility for at least one child under the age of 18 years in Norway (Table 3). Among the respondents with children, most reported having children aged 6-9 years (39%), followed by 10-12 years (30%), 2-5 years (29%), and 13-15 years (24%).

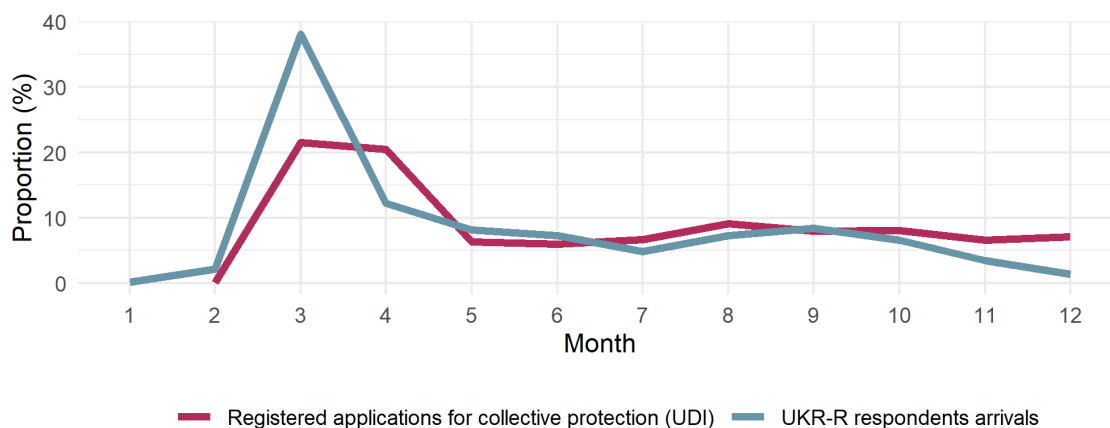
**Table 3 Description of children under the age of 18 years that respondents to UKR-R survey have responsibility for in Norway**

	<i>n (%)</i>
<b>With at least one child under the age of 18</b>	385 (52.7)
<b>One child</b>	218 (56.6)
<b>Two children</b>	126 (32.7)
<b>Three children</b>	34 (8.8)
<b>Four or more children</b>	7 (1.8)
<b>In which age groups<sup>(a)</sup></b>	
<b>0-1 years</b>	31 (8.1)
<b>2-5 years</b>	110 (28.6)
<b>6-9 years</b>	149 (38.7)
<b>10-12 years</b>	115 (29.9)
<b>13-15 years</b>	93 (24.2)
<b>16-17 years</b>	48 (12.5)

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. Data are not weighted.*

(a) Respondents could select multiple age groups if applicable, such that proportions sum to over 100%.

Most respondents to UKR-R survey arrived in March and April 2022, which reflects the arrival pattern for all refugees from Ukraine in Norway. This is illustrated in Figure 2, which shows the pattern of registered applications for collective protection registered with UDI during 2022. Note that particularly in February and March, there were delays in the registration of applications for protection until the system was scaled up in response to the rapid increase of asylum seekers, which may have affected date of registration with UDI.



**Figure 2 Arrival month in 2022 of UKR-R survey respondents compared to registered applications for collective protection in Norway, proportion (%) of respondents/applications**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. UDI registered = official statistics provided by UDI on all refugees from Ukraine registered with temporary collective protection pursuant to the Immigration Act, Section 34, per 31.12.22. Data are not weighted.*

Almost all survey respondents had, or intended to, apply for collective protection in Norway (95%) (Table 4). Of these, 79% were already resettled in a municipality, while 16% were waiting to be resettled. The majority of those not yet resettled in a municipality (93%) had been allocated their accommodation by the Norwegian authorities.

**Table 4 Description of UKR-R survey respondents in terms of the resettlement process in Norway**

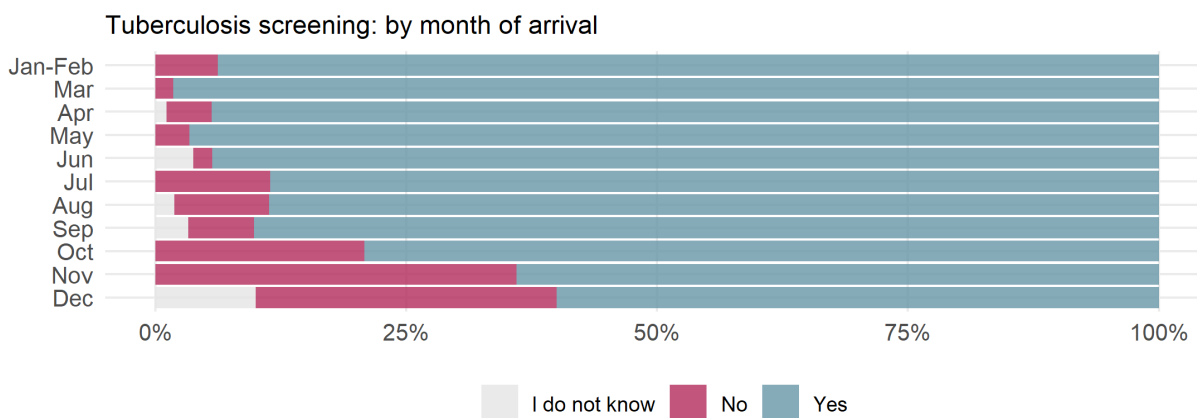
	<i>n (%)</i>
<b>Will apply or have applied for collective protection</b>	696 (95.2)
<b>Status of application in Norway<sup>(a)</sup> (n=690)</b>	
<i>Waiting to register application</i>	7 (1.0)
<i>Have applied and waiting for decision from UDI</i>	31 (4.5)
<i>Granted protection, waiting to be settled in a municipality by IMDi</i>	110 (15.9)
<i>Have been settled in a municipality by IMDi</i>	542 (78.6)
<b>How respondents found their current accommodation<sup>(b)</sup> (n=142)</b>	
<i>Allocated accommodation by Norwegian authorities</i>	132 (93)
<i>Found accommodation themselves</i>	10 (7)

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. IMDi = The Directorate of Integration and Diversity. UDI = The Norwegian Directorate of Immigration. Data are not weighted.*

(a) This question was only asked respondents who answered that they intended to, or had, applied for collective protection in Norway.

(b) This question was only asked respondents who were not yet resettled in a municipality by IMDi

Screening for tuberculosis is mandatory for refugees coming to Norway, and for adults screening includes taking a chest x-ray. Most respondents to UKR-R survey (93%) reported that they had been screened for tuberculosis (had a chest x-ray) since arriving in Norway, while 1% responded that they did not know. The more recently the respondents had arrived in Norway, the less likely they reported having been screened for tuberculosis (Figure 3).



**Figure 3 Proportion of UKR-R survey responses to whether participants had been screened for tuberculosis (chest x-ray) since arriving in Norway, by month of arrival in 2022**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. Data are not weighted.*

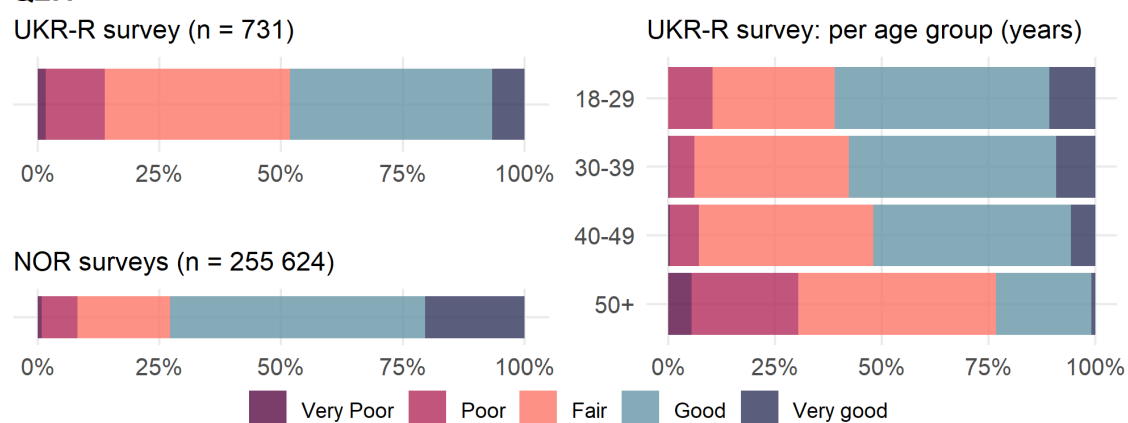
## Self-reported health

### Overall health and dental health

Respondents to the UKR-R survey were asked to rate their overall health and dental health, and to state when they last visited a dentist or dental hygienist. These questions are taken from the county surveys in Norway, and answers from UKR-R survey are compared to those from NOR surveys. Proportions shown in the figures are calculated after weighting and therefore may not reflect number of respondents per response category.

Just under half of the respondents in the UKR-R survey (48%) reported that they had good or very good health all in all, compared to 73% of respondents in NOR surveys ( $p < 0.001$ ) (Figure 4). Among the UKR-R respondents, the eldest (50 years or older) reported poorer health with a lower proportion of ratings of very good or good health, compared to the other age groups.

#### Q2.1

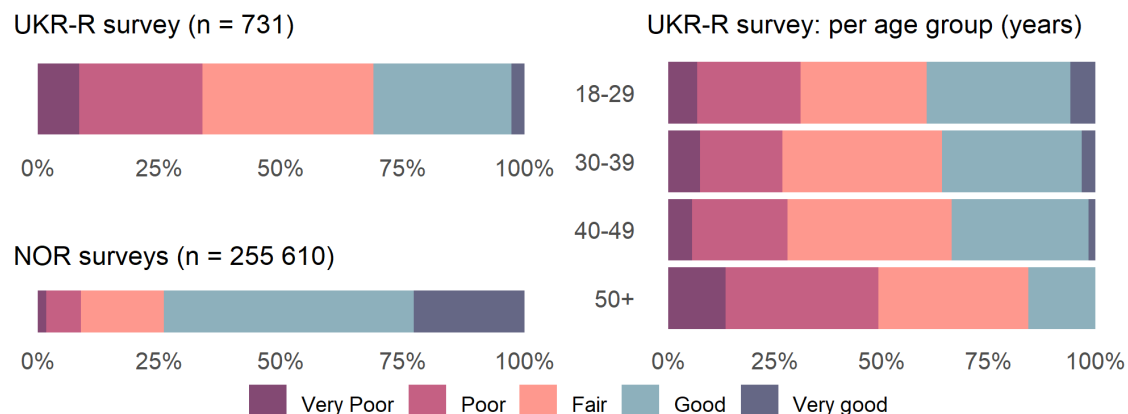


**Figure 4** How do you rate your own health, all in all?

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

Dental health was rated lower among respondents to UKR-R survey compared to NOR surveys (Figure 5). Among the respondents in UKR-R survey, 31% rated their dental health as good or very good, compared to 74% of the respondents in NOR surveys ( $p < 0.001$ ). The eldest UKR-R survey respondents (50 years or older) reported lower ratings of dental health compared to the younger respondents (18-49 years old).

## Q2.2

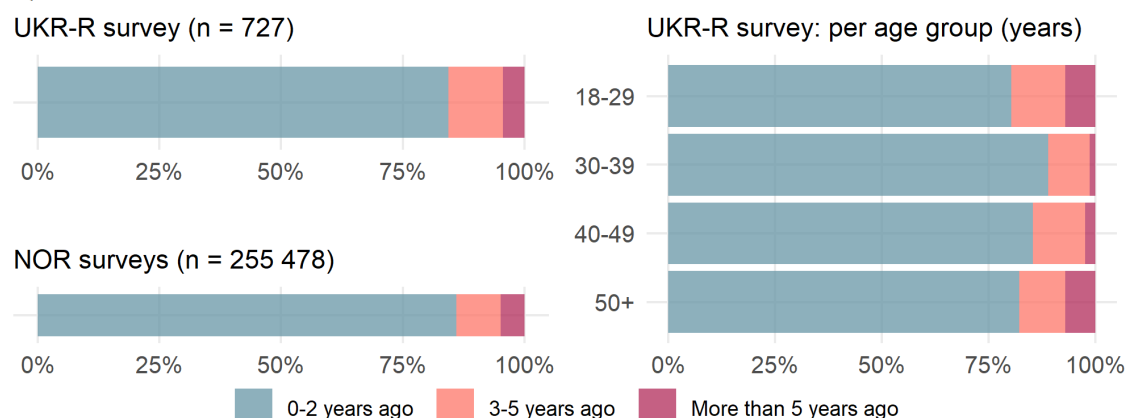


**Figure 5 How do you rate your dental health?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

Reports of going to the dentist or dental hygienist were similar among those in UKR-R survey and NOR surveys (Figure 6). Most respondents (84%) of the UKR-R survey reported having been to the dentist or dental hygienist within the last 2 years, comparable to 86% in NOR surveys ( $p=0.09$ ). Of the UKR-R respondents who had been to the dentist or dental hygienist within the last two years, 70% had been to a dentist outside of Norway and 30% had been to a dentist in Norway.

## Q2.3



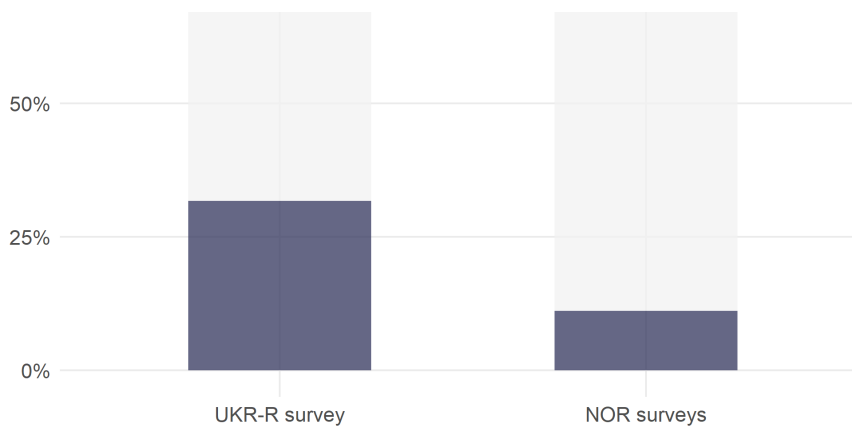
**Figure 6 When did you last go to the dentist/dental hygienist?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

### *Psychological distress during the last week*

Psychological distress was measured via a short version of the Hopkins Symptom Checklist (HSCL-5), which measures five symptoms of depression and anxiety on a four-point scale (1= 'Not at all' – 4= 'Extremely') (Strand et al., 2003).

In total, 730 of 731 (99.9%) respondents to UKR-R survey, and 255 594 of 256 189 (99.8%) respondents to NOR surveys, had provided enough valid responses to calculate a mean HSCL-5 score (at least 4 valid responses for survey items Q2.4-Q2.8). The weighted mean score for UKR-R survey respondents was 2.24 (95% CI: 2.18, 2.29), whilst the weighted mean score for NOR surveys was 1.60 (95% CI: 1.595, 1.601). A mean score >2 on HSCL-5 can indicate psychological distress. A higher proportion of UKR-R survey respondents had a mean HSCL-5 score >2 (31.7%) compared to respondents to NOR surveys (11.2%) ( $p<0.001$ ) (Figure 7).



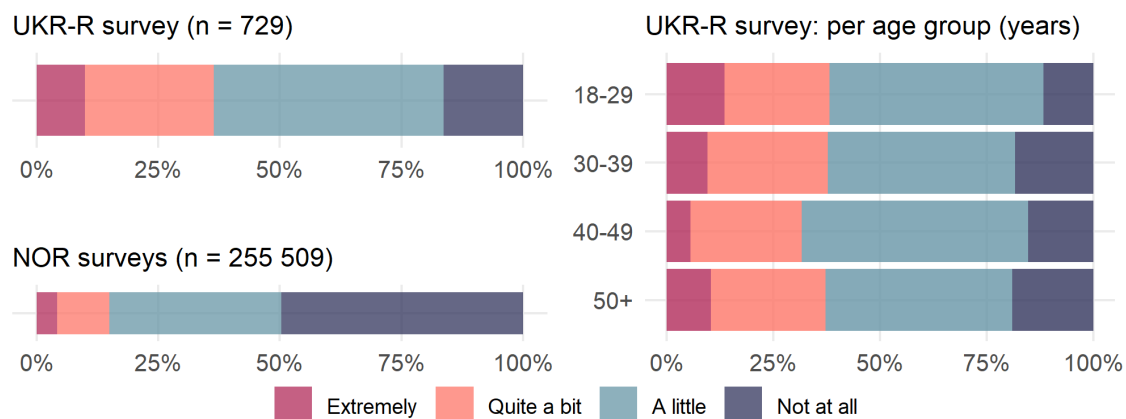
**Figure 7 Proportion of respondents with a mean Hopkins Symptom Checklist (HSCL-5) score higher than 2**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway.*

Each item from the HSCL-5 was also analysed separately, and the proportion of respondents for each response category was calculated after weighting, and therefore may not reflect number of respondents per response category.

A larger proportion of respondents to UKR-R survey reported to have been extremely or quite a bit bothered by nervousness or shakiness inside during the last week (36%) compared to those in NOR surveys (15%) ( $p < 0.001$ ) (Figure 8).

## Q2.4



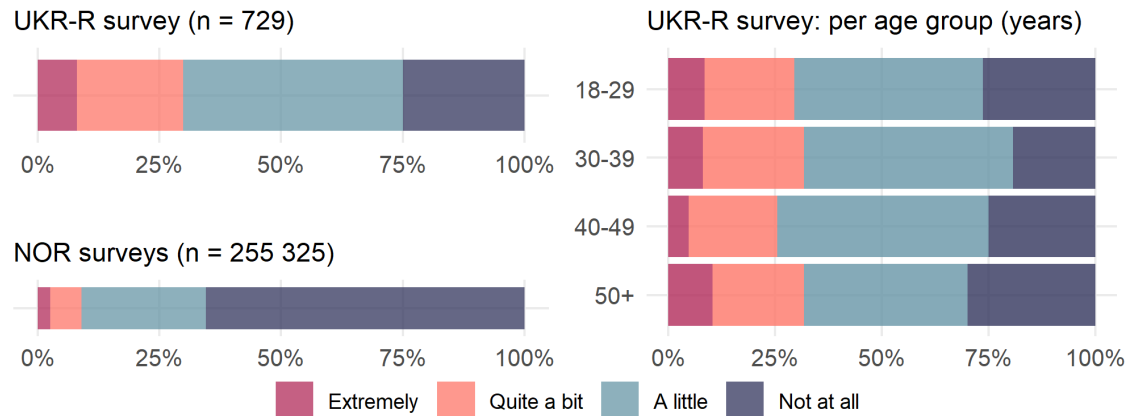
**Figure 8 To what extent have you been bothered by nervousness or shakiness inside during the last week?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

Respondents to the UKR-R survey more often reported to have been extremely or quite a bit bothered by feeling fearful during the last week (30%) compared to those in NOR surveys (9%) ( $p < 0.001$ ) (Figure 9)



**Q2.5**

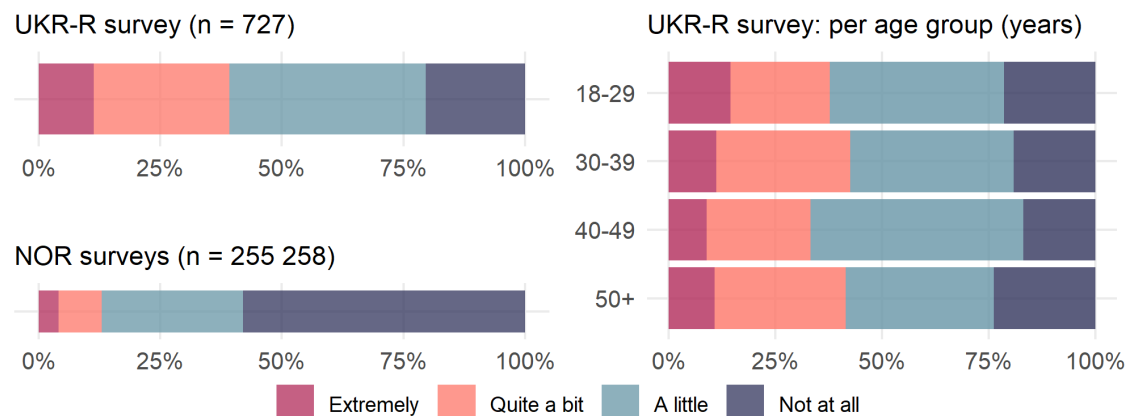


**Figure 9 To what extent have you been bothered by feeling fearful during the last week?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

The extent to have been bothered by feeling hopeless about the future the last week was greater among those in UKR-R survey, where more people reported that they had been bothered extremely or quite a bit (39%) compared to those in NOR surveys (13%) ( $p < 0.001$ ) (Figure 10).

**Q2.6**

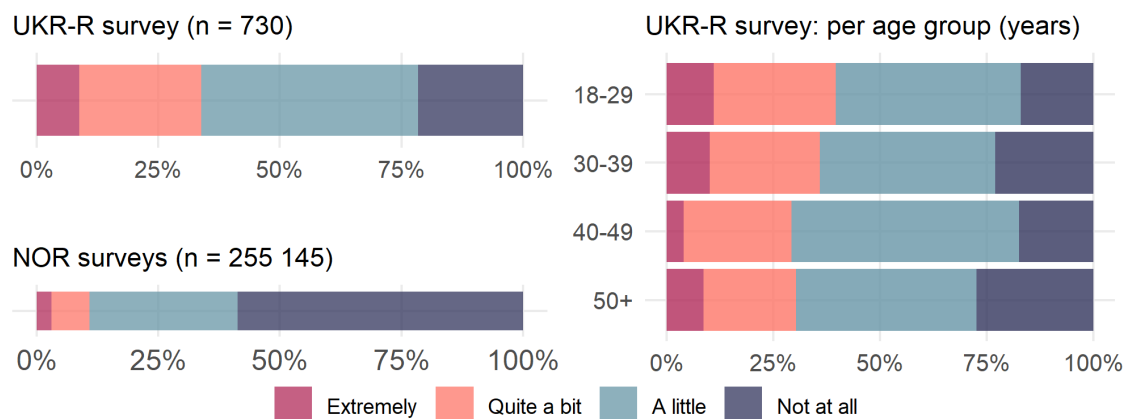


**Figure 10 To what extent have you been bothered by feeling hopeless about the future during the last week?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

Having been extremely or quite a bit bothered by feeling blue or sad the last week was more frequent among the respondents in UKR-R survey (34%) compared to the respondents in NOR surveys (11%) ( $p < 0.001$ ) (Figure 11). In the UKR-R survey, the two youngest age groups (18-29 and 30-39) appeared to report somewhat more being bothered by feeling blue or sad during the last week.

## Q2.7

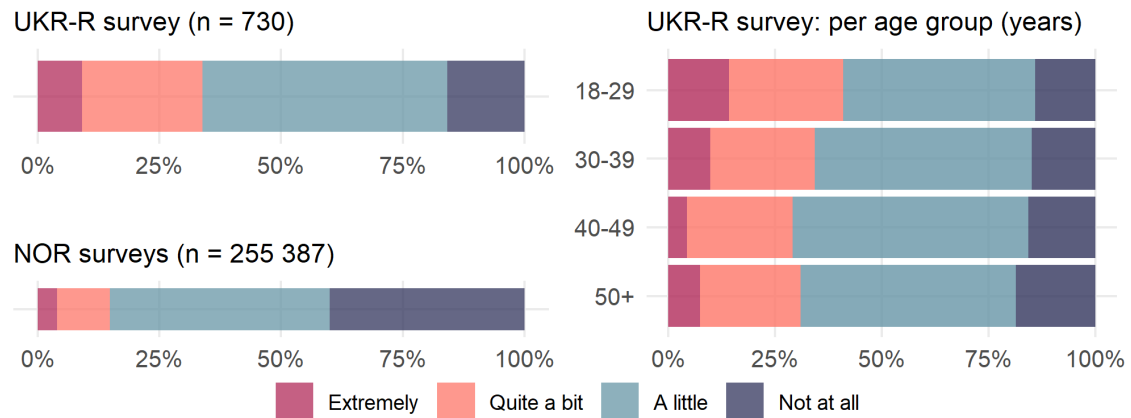


**Figure 11 To what extent have you been bothered by feeling blue or sad during the last week?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

The proportion reporting having been bothered by worrying too much about things extremely or quite a bit, was greater among those in UKR-R survey (34%) compared to NOR surveys (15%) ( $p < 0.001$ ) (Figure 12). Across the age groups in the UKR-R survey, those between 18 and 29 years of age, reported somewhat more frequently that they had been bothered to an extreme degree by worrying too much, compared to the other age groups.

### Q2.8



**Figure 12 To what extent have you been bothered by worrying too much about things during the last week?**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

### *Long-term illnesses, health problems or disabilities*

The questions included in this section are taken from county surveys in Norway and results from UKR-R survey are compared with NOR surveys. Proportions shown in the figures and tables are calculated after weighting and therefore may not reflect number of respondents per response category.

Respondents were asked whether they had any long-term illnesses or health problems (Table 5). These conditions were defined as physical or mental illnesses or health problems that have lasted, or are expected to last, at least six months. Respondents were asked to include illnesses or problems that are seasonal or come and go.

More people in UKR-R survey (58%) reported having long-term illnesses or health problems compared to those in NOR surveys (44%) ( $p < 0.001$ ). In both surveys, the proportion of people reporting that they had long-term illnesses or health problems increased with age.

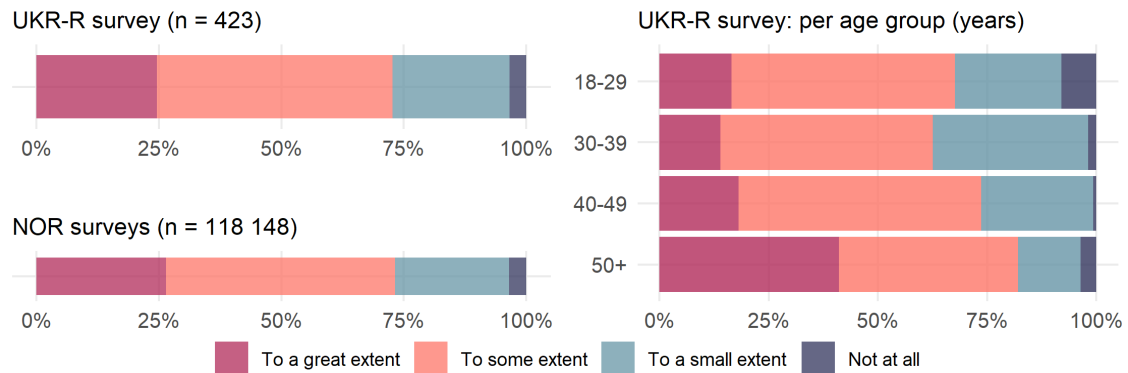
**Table 5 Do you have any long-term illnesses or health problems?<sup>(a)</sup>**

	UKR-R survey (n=728)	NOR surveys (n=255 088)
<b>Proportion responding 'Yes' (%)</b>	58.1	43.6
<b>Per age group</b>		
<b>18-29 years</b>	45.1	35.0
<b>30-39 years</b>	50.9	40.3
<b>40-49 years</b>	57.2	45.5
<b>50+ years</b>	78.6	52.9

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.*

(a) Defined as physical or mental illnesses/health problems that have lasted, or are expected to last at least six months, and including illnesses or problems that are seasonal or come and go.

Those who reported that they had long-term illnesses or health problems were asked whether these affected their daily lives (Figure 13). Ratings in UKR-R survey were very similar to ratings in NOR surveys. In both surveys, 73% of respondents reported that their long-term illnesses or health problems affected their daily lives to some or a great extent ( $p = 0.11$ ). Similarly, 25% in UKR-R survey and 26% in NOR surveys reported that illnesses or health problems affected them to a great extent ( $p = 0.94$ ). According to age, the eldest respondents (50 years or older) in the UKR-R survey reported more frequently that illnesses or health problems affect them to a great extent compared to the younger age groups.

**Q2.9a**

**Figure 13 How do these illnesses/health problems affect your daily life? (a)**

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

(a) This question was only asked those who reported that they had long-term illnesses or health problems in the preceding question.

Respondents were asked if they had had any of a list of specified long-term illnesses or health problems during the last 12 months (Table 6). Multiple long-term illnesses or health problems could be selected. This survey item is included in some previous public health surveys in Norway. In the data we have, only the county survey in Vestfold & Telemark (2021) includes this item, and therefore results from UKR-R survey are only compared to one county survey. Data from the county survey in Vestfold & Telemark were weighted against all adult refugees from Ukraine registered with collective protection by UDI, according to age and sex, in the same way as for NOR surveys collectively.

Among the respondents to the UKR-R survey the most common responses were back disorders (23%), depression (20%), hypertension (19%), and allergy (18%) (Table 6). In the county survey in Vestfold & Telemark, after weighting, the most common responses were allergy (33%), neck disorders (19%), depression (16%) and back disorders (15%). Compared to the county survey in Vestfold & Telemark, higher proportions of UKR-R survey respondents reported having angina, hypertension, and/or chronic bronchitis/COPD/emphysema. Whereas comparable proportions in both surveys reported myocardial infarction, diabetes, urinary incontinence and cancer. A lower proportion of respondents to UKR-R survey reported asthma, allergy, osteoarthritis and neck disorders, compared to in the county survey in Vestfold & Telemark.

**Table 6 Have you had any of these long-term illnesses / health problems during the last 12 months? (a)**

	UKR-R survey (n=731)	NOR surveys (n=34 137)	
Asthma, also allergic asthma	28 (3.8%)	3902 (11.4%)	***
Chronic bronchitis, COPD or emphysema	49 (6.7%)	652 (1.9%)	***
Myocardial infarction (MI) or permanent problems after MI	7 (1%)	226 (0.7%)	
Angina/heart cramps	35 (4.8%)	449 (1.3%)	***
Hypertension/high blood pressure	140 (19.2%)	3756 (11%)	***
Stroke or permanent ailments after stroke	12 (1.6%)	189 (0.6%)	***
Osteoarthritis	63 (8.6%)	4166 (12.2%)	**
Back disorder such as sciatica, lumbago or prolapse	170 (23.3%)	5115 (15%)	***
Neck disorder	80 (10.9%)	6420 (18.8%)	***
Diabetes	31 (4.2%)	1065 (3.1%)	
Allergy	128 (17.5%)	11357 (33.3%)	***
Chronic liver failure, cirrhosis	15 (2.1%)	59 (0.2%)	***
Urinary incontinence/urine leakage	43 (5.9%)	2294 (6.7%)	
Chronic renal failure (not kidney stones)	8 (1.1%)	133 (0.4%)	**
Cancer	9 (1.2%)	515 (1.5%)	
Depression	149 (20.4%)	5371 (15.7%)	***

\*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county survey in Vestfold & Telemark only. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway. COPD = Chronic Obstructive Pulmonary Disease

(a) Respondents could select multiple long-term illnesses / health problems.

Respondents were also asked whether they had any disabilities or problems due to injury (Table 7). These conditions were defined as physical or mental disabilities or problems that have lasted, or are expected to last, at least six months. Respondents were asked to include disabilities or problems due to injury that come and go.

A similar proportion in both surveys reported that they had disabilities or problems due to injury; 19% in UKR-R survey and 22% in NOR surveys ( $p=0.06$ ). In both surveys, the proportion of people reporting that they had disabilities or problems due to injury increased with age.

**Table 7 Do you have any disabilities, or do you have any problems due to injury? <sup>(a)</sup>**

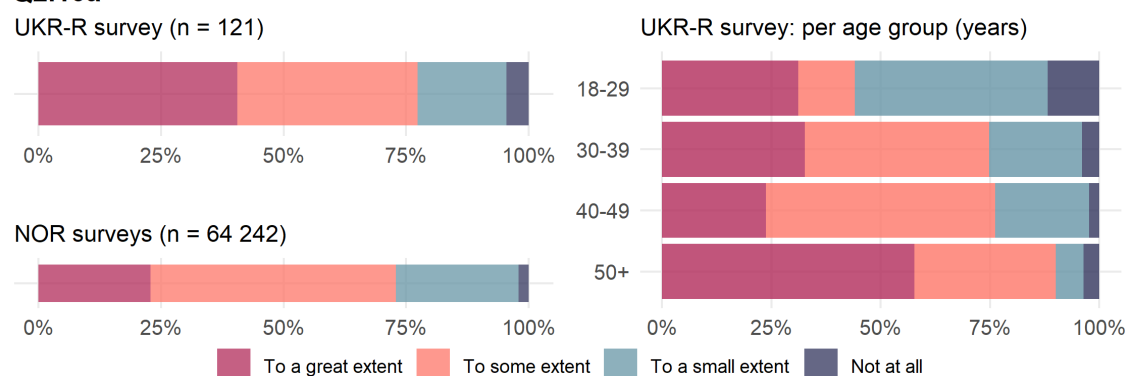
	UKR-R survey (n=726)	NOR surveys (n=255 273)
<b>Proportion responding 'Yes' (%)</b>	19.1	21.9
<b>Per age group</b>		
<b>18-29 years</b>	10.5	16.3
<b>30-39 years</b>	16.2	18.0
<b>40-49 years</b>	17.2	23.1
<b>50+ years</b>	30.8	29.7

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.*

(a) Defined as physical or mental disabilities or problems that have lasted, or are expected to last, at least six months, and including problems that come and go.

Among those who reported that they had disabilities or problems due to injury, around 77% of respondents to UKR-R survey and 73% to NOR surveys reported that they affected their daily lives to some or a great extent ( $p < 0.001$ ) (Figure 14). The proportion of respondents who answered 'To a great extent' was 41% in UKR-R survey compared to 23% in NOR surveys ( $p < 0.001$ ). Across the age groups in UKR-R survey, there was an age gradient with more people in the eldest age group reporting that the disabilities or problems due to injury affected their lives to a greater extent, compared to the younger respondents.

### Q2.10a



**Figure 14** How do these disabilities or problems affect your daily life? <sup>(a)</sup>

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway. NOR surveys = county surveys in Norway. Data from both surveys are weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

(a) This question was only asked those who reported that they had disabilities, or problems due to injury in the preceding question.



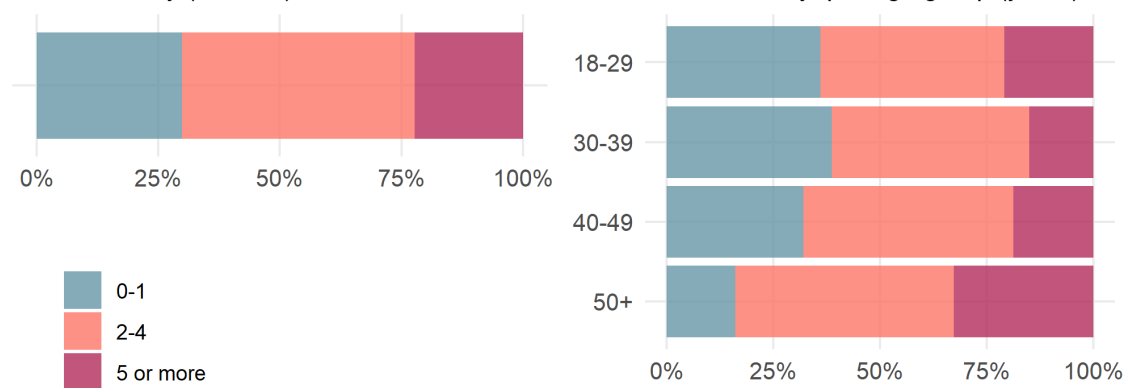
## Self-assessed healthcare needs and usage of health services

This section aims to give an estimate of self-assessed healthcare needs and usage of health services among refugees from Ukraine in Norway. The questions in this section are unique to the UKR-R survey and are therefore not compared with data from NOR surveys. Proportions shown in the figures are calculated after weighting and therefore may not reflect number of respondents per response category.

Among those with long-term illnesses, health problems or disabilities, most reported that they usually needed health services 2-4 times per year (48%), while 30% answered '0-1', and 22% answered '5 or more' (Figure 15). Across the age groups, there was a trend that the older age groups generally responded that they would need health services more frequently than the younger age groups.

### Q2.12

UKR-R survey (n = 531)



**Figure 15** How many times per year do you usually need health services for long-term illnesses/health problems or disabilities/problems due to injury? <sup>(a)</sup>

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.

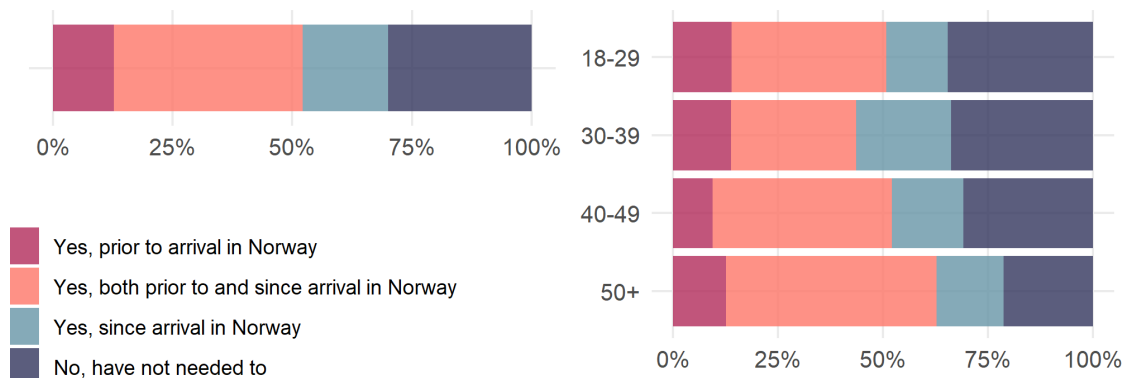
(a) Respondents who did not have any long-term illnesses/health problems or disabilities, were asked to answer 'Not applicable' and are not included in the figure (n=186).

Respondents were further asked whether they had a self-assessed need to see a doctor, psychologist, or other health professional during the last 12 months, and if so, whether they had had a consultation. Respondents were also asked to specify whether this had occurred prior to or since their arrival in Norway, or both.

Over two thirds of respondents (70%) reported that they had needed to see a doctor, psychologist, or other health professional during the last 12 months (Figure 16). Thirteen percent had needed to prior to arrival in Norway, 40% both prior to and since arrival in Norway and 18% since arrival in Norway only. The eldest respondents (50 years or older) reported a higher need to see a health professional than the younger respondents.

### Q2.13

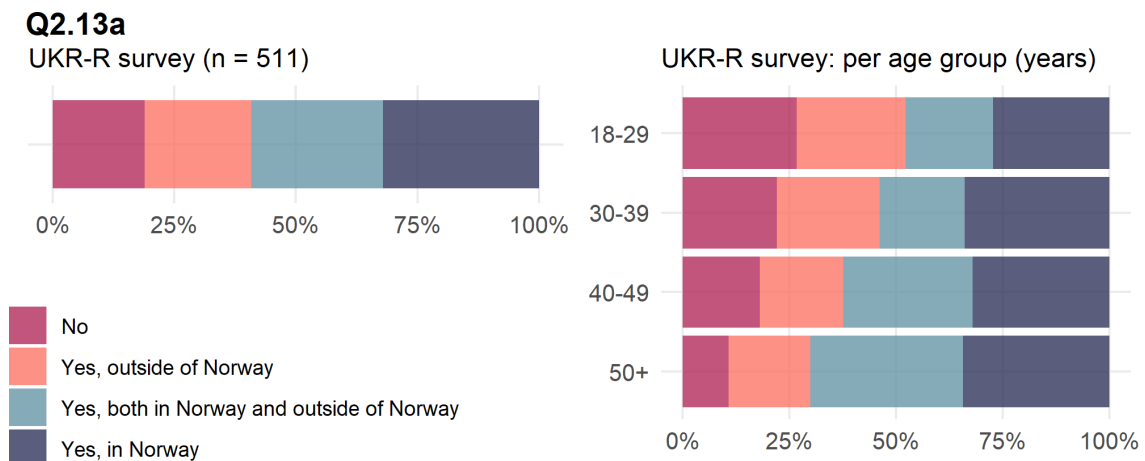
UKR-R survey (n = 727)



**Figure 16 Have you needed to see a doctor, psychologist, or other health professional during the last 12 months?**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.*

Among those who reported that they had a self-assessed need to see a doctor, psychologist, or other health professional during the last 12 months, 81% of respondents reported having had a consultation (Figure 17). Thirty-two percent reported having had a consultation in Norway only, 27% both in Norway and outside of Norway, and 22% had a consultation outside of Norway only. Having had a consultation was more frequent in the eldest age group (50 years or older) and decreased by decreasing age. For those in the youngest age group (18-29 years), 26% reported not having had a consultation although they stated that they needed it.



**Figure 17 Have you had a consultation with a doctor, psychologist, or other health professional during the last 12 months? <sup>(a)</sup>**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all adult refugees from Ukraine registered with collective protection in Norway, results per age group weighted by sex.*

(a) This question was only asked those who reported that they had needed to see a doctor, psychologist, or other health professional during the last 12 months in the preceding question.

## Information about and access to healthcare services in Norway

Asylum seekers and refugees in Norway should receive information about their rights, health entitlements and about health services in Norway, and in a language and way that they understand. In a normal situation, all asylum seekers are processed at the National Arrivals Centre (NAC) in Råde and would receive such information there. On arrival at the NAC, asylum seekers are shown the health services located at the centre and given information about their health entitlements and health services in Norway.

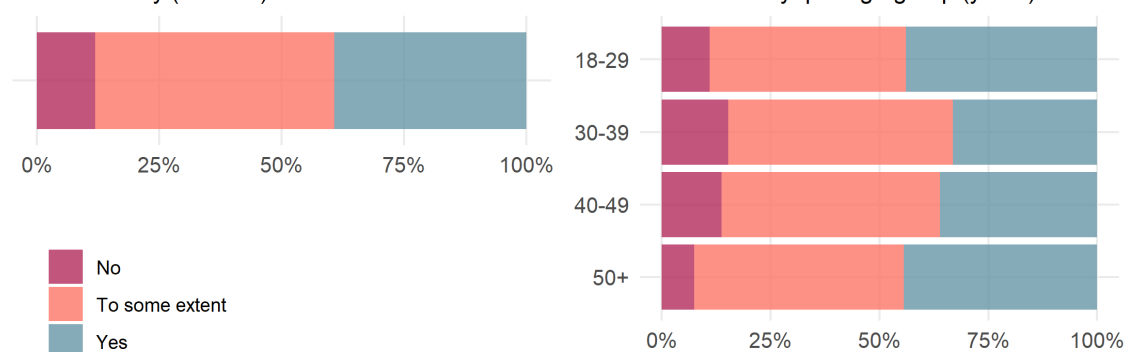
Due to the rapid upscaling of the Norwegian asylum reception system to accommodate the large influx of asylum seekers from Ukraine, and establishment of temporary asylum centres, the way in which information about health services was supplied may have been disrupted, incomplete or insufficient. Although information about entitlements and health services was made available in Ukrainian and Russian online at [helsenorge.no](https://helsenorge.no), it is possible that not all refugees from Ukraine have had access or been aware of this. The information supplied by reception centres and accommodations may have differed in content, form and quality. In addition, asylum seekers and refugees were often moved several times between different temporary centres.

Respondents to the UKR-R survey were therefore asked if they had received information in a way that they could understand about health services in Norway, and whether they knew how to contact a doctor or healthcare professional if they needed help.

Thirty-nine percent of respondents to UKR-R survey reported that they had received information about the health services in Norway in a way that they could understand, while 49% reported that they had received understandable information to some extent (Figure 18). There appeared to be some minor differences across the age groups. Those between 30 and 39 years, appeared to report more frequently than the other age groups that they had not received any information.

### Q5.1

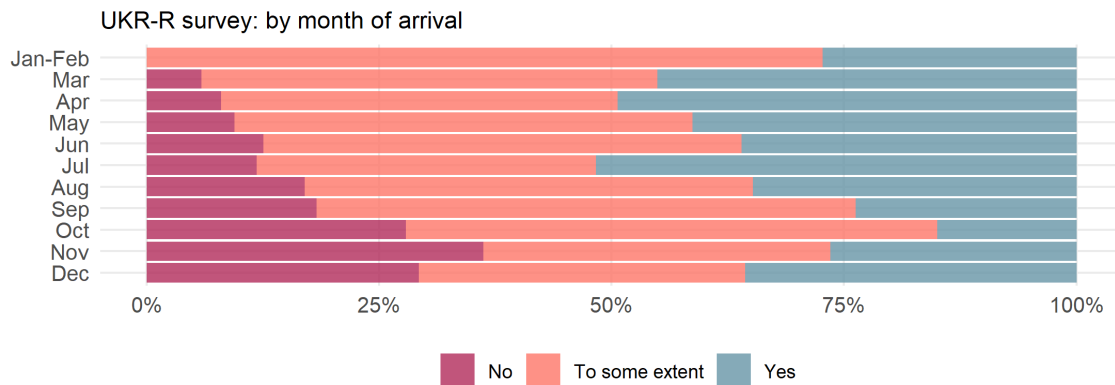
UKR-R survey (n = 728)



**Figure 18** Have you received information in a way that you can understand about the health services you can use in Norway?

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway, results per age group weighted by sex.

When analysed by month of arrival, there was a clear trend that the more recently the person had arrived, the less information they reported having received in a way that they could understand (Figure 19). When respondents were spilt into two groups according to period of arrival, among those who arrived in January to June 2022, 44% answered 'Yes', 49% answered 'To some extent' and 7% answered 'No'. Corresponding proportions for those who arrived in July to December 2022 were 31%, 49% and 21%.



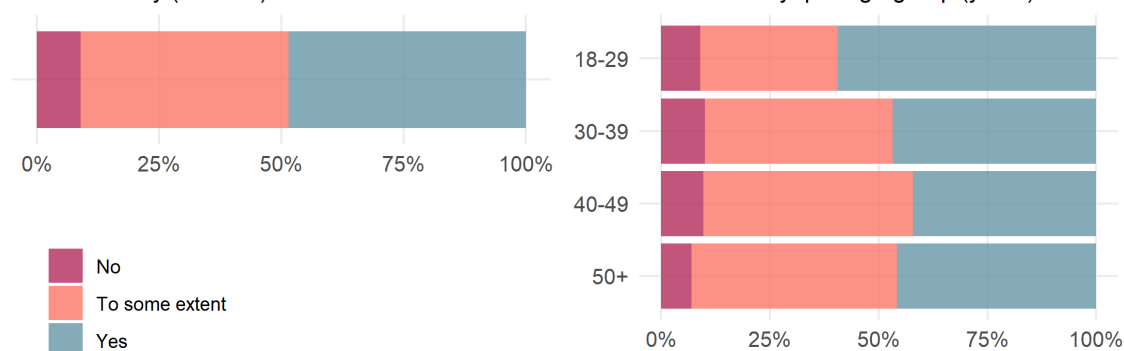
**Figure 19** Have you received information in a way that you can understand about the health services you can use in Norway? Responses by month of arrival

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway.*

Most of the respondents reported that they knew how to contact a doctor or other health professional if they needed help, either fully (49%) or to some extent (43%) (Figure 20). There were few differences across the age groups, but the youngest respondents reported slightly more that they knew how to contact a doctor or other health professional if they needed help.

**Q5.2**

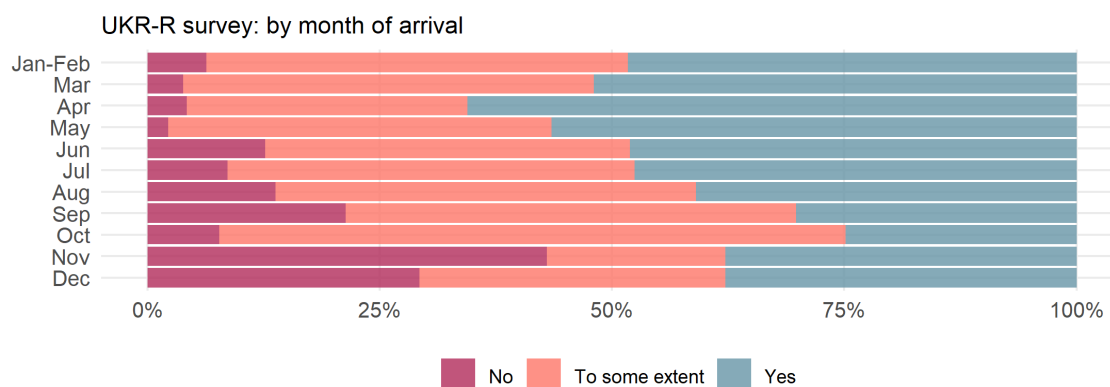
UKR-R survey (n = 728)



**Figure 20** Do you know how to contact a doctor or other healthcare professional if you need help?

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway, results per age group weighted by sex.

When analysed by month of arrival, there was a trend that the more recently the person had arrived, the less they reported knowing how to contact health services (Figure 21). When respondents were split into two groups according to period of arrival, among those who arrived in January to June 2022, 54% answered 'Yes', 41% answered 'To some extent' and 5% answered 'No'. Corresponding proportions for those who arrived in July to December 2022 were 37%, 46% and 17%.



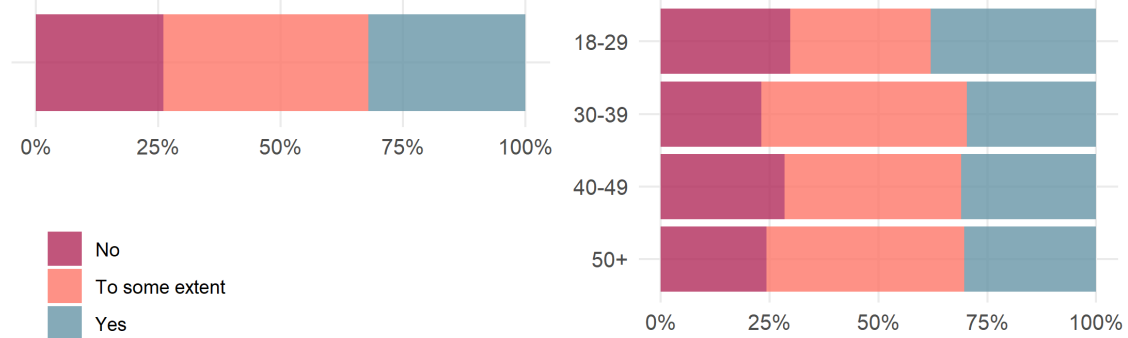
**Figure 21** Do you know how to contact a doctor or other healthcare professional if you need help? Responses by month of arrival

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway, results per age group weighted by sex.

Finally, respondents to the UKR-R survey were asked if they had received the health care that they felt they had needed while in Norway. Eighty-six percent of the respondents answered that they had needed health care while in Norway. Among these, 32% responded that they had received the health care they needed, 42% answered 'To some extent', and 26% answered 'No' (Figure 22). The responses did not differ much across age groups.

### Q5.3

UKR-R survey (n = 627)

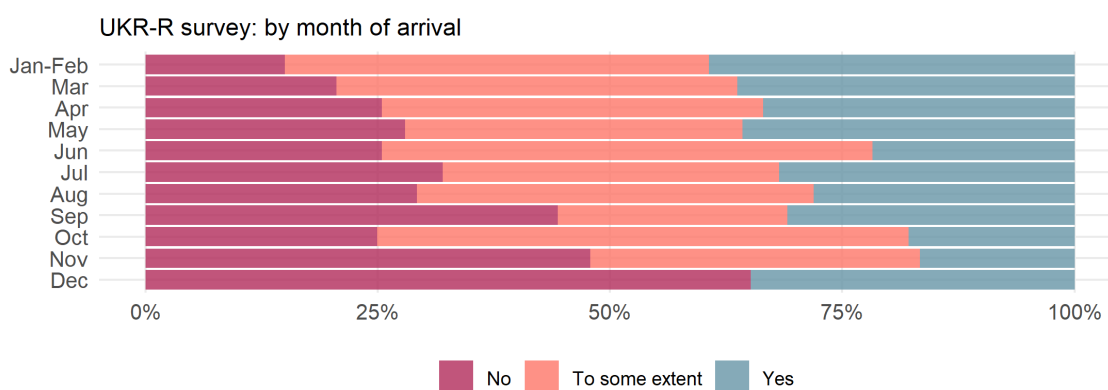


**Figure 22 . Have you received the health care you feel you have needed while in Norway? (a)**

*UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway, results per age group weighted by sex.*

(a) Respondents who answered 'Have not needed health care' (n=100), are not included in the figure.

When analysed by month of arrival, there was again a trend that the more recently the person had arrived, the less likely they reported having received the health care they felt they had needed (Figure 23). Whereas respondents who arrived earlier reported more often that they had, fully or to some extent, received the health care that they needed. When respondents were split into two groups according to period of arrival, among those who arrived in January to June 2022, 34% answered 'Yes', 43% answered 'To some extent' and 23% answered 'No'. Corresponding proportions for those who arrived in July to December 2022 were 28%, 39% and 34%.



**Figure 23** Have you received the health care you feel you have needed while in Norway? <sup>(a)</sup> Responses by month of arrival

UKR-R survey = digital questionnaire among adult refugees from Ukraine in Norway, weighted by age and sex against all registered adult refugees from Ukraine in Norway, results per age group weighted by sex.

(a) Respondents who answered 'Have not needed health care' ( $n=100$ ), are not included in the figure.



## Discussion

This survey found that refugees from Ukraine, compared to the Norwegian population, rated their overall health and dental health as poorer, and reported more symptoms of psychological distress. A higher proportion reported having long-term illnesses or health problems, and a similar proportion having disabilities or problems due to injury.

Most respondents who had needed health services during the last 12 months had had a consultation, either in Norway or prior to arrival, but still there were some indications of unmet or only partially met healthcare needs. Information about health services in Norway was fully or to some extent understandable for most respondents, with especially recent arrivals indicating a need for better information. A quarter of the respondents who had needed health services in Norway reported that they had not received adequate health care which, considered together with information on health services and the health system in Norway, indicates an area for improvement.

There seems to be a time trend for whether the refugees felt they had received information about health services in Norway in a way that they understand, and whether they had received the health services they felt they had needed. Health status and healthcare needs among refugees are not static and may differ according to the timing and conditions of their flight, and the current situation in the homeland. The health status of the refugees leaving the country in the early phases may differ from those leaving later, and after being exposed to the consequences of ongoing war for longer. This has not been explored further in the current report, but analyses on differences in health-related outcomes by month of arrival are planned and will be published separately.

The refugees from Ukraine differ demographically from other refugee groups in Norway and have had a relatively shorter and less arduous journey; both relevant factors for their overall health and healthcare needs compared to other refugees. The majority of respondents to UKR-R survey were female, aged between 30-49 years old and had completed higher education. Just over half had responsibility for at least one child under the age of 18 years, and most were already resettled in a municipality. Respondents to existing surveys among refugees from Ukraine in Europe and Norway, are also predominantly highly educated females. Although there are many women among those who have fled from Ukraine to Norway, they are still over-represented among the UKR-R survey respondents. We do not have a systematic overview of the education level among all refugees from Ukraine, but we suspect that higher-educated persons are also overrepresented among UKR-R survey respondents compared to the group as a whole. We used weighting to adjust for differences in sex and age distribution but are not able to adjust for potential differences in educational level, which is known to be positively associated with health. Therefore, it is possible that poor health, and healthcare needs, are to a degree underestimated in the UKR-R survey. The representativeness of the survey sample and other limitations are discussed in more detail under Study limitations.

## Self-reported health

### *Overall health*

Just under half of the respondents (48%) in the UKR-R survey rated their overall health as good or very good, compared to just under three quarters (73%) in NOR surveys after weighting. As expected, lower proportions reported good or very good health in the older age groups.

Global self-rated health is widely used as a health indicator in research. It has been shown to be valid and reliably associated with more objective health measures, most commonly mortality (DeSalvo, Bloser, Reynolds, He, & Muntner, 2006; Idler & Benyamini, 1997), but also morbidity including mental health (Ambresin, Chondros, Dowrick, Herrman, & Gunn, 2014; Baćak & Olafsdottir, 2017; Goldberg, Guéguen, Schmaus, Nakache, & Goldberg, 2001; Wu et al., 2013). Associations between self-rated health and mortality/morbidity appear to be consistent across different ethnicities (Baćak & Olafsdottir, 2017; Chandola & Jenkinson, 2000) and socioeconomic groups (Holseter, Dalen, Krokstad, & Eikemo, 2015).

A strength of measuring overall self-rated health is that it may encompass multiple dimensions of health, both physical and mental health, as well as potentially encompassing social aspects. In this survey we have measured self-rated health in a group of recently arrived refugees from Ukraine following a full-scale invasion of their country. Ratings of psychological distress were high among respondents to UKR-R survey and may be a reason for the lower levels of self-rated health compared to in NOR surveys. Additionally, higher proportions reported having long-term illnesses, health problems or disabilities compared to in NOR surveys.

Ukrainians in general may rate their health more poorly. The Ukraine World Health Survey, a population health survey from 2002-03 initiated by the World Health Organisation, found that among Ukrainian adults, only 28% of respondents rated their health as good or very good (Karhina, Ng, Ghazinour, & Eriksson, 2016). This is much lower than in UKR-R survey (48%). The question in World Health Survey was 'In general, how would you rate your health today?'. The sample in the survey was randomly selected and intended to be representative for the Ukrainian general adult population, while the UKR-R survey sample is highly educated and is weighted to represent refugees from Ukraine in Norway, who are predominately young/middle-aged women. In comparison, the Ukraine World Health Survey had a higher proportion of respondents 60 years or older and with lower education. Both older age and lower education are known to be associated with poorer self-rated health (and objective health) (Gallo et al., 2012; Subramanian, Huijts, & Avendano, 2010; Wu et al., 2013), which makes direct comparisons difficult. Nonetheless, a higher proportion of adult Ukrainians rated their health as poor compared to most other countries in the World Health Survey, which includes countries from all continents and income classes (Subramanian et al., 2010).

Overall self-rated health among refugees from Ukraine also appears to be lower than among Syrian refugees resettled in Norway in 2017/2018, where a study found that 58% rated their health as good/very good prior to resettlement, and 63% rated the same one year after resettlement in Norway (Haj-Younes et al., 2020). It should be noted that Syrian refugees coming to Norway differed from refugees from Ukraine in that they were predominantly young men without higher education (Statistics Norway, 2018).

Other immigrants in Norway appear to also report higher levels of self-rated health. In 2016, a large population-based study among immigrants in Norway from 12 different

lands representing some of the largest immigrant groups in Norway and a range of reasons from immigration, including protection, was carried out by Statistics Norway (Vrålstad & Wiggen, 2017). Immigrants participating in the survey were from Poland, Turkey, Bosnia-Herzegovina, Kosovo, Eritrea, Somalia, Afghanistan, Sri Lanka, Iraq, Iran, Pakistan or Vietnam, and had been living in Norway for at least two years. The Survey on living conditions (Levekårsundersøkelsen) includes several of the same survey items as the Norwegian County Public Health Surveys, including self-rated health and the HSCL-5. Compared to UKR-R survey participants, the Survey on living conditions found higher levels of good/very good self-rated health among its participants, and this applied to immigrants from all of the countries included (Kjøllestad et al., 2019).

The general health status of Ukraine's population, its public health programs and health system will have an influence on the general health and use of health services also among the refugees leaving Ukraine. Compared to most other refugee groups, a shorter geographical distance and fewer practical and legal hindrances would make it easier for Ukrainians with some form of health challenge to seek refuge in Norway, thus making the 'healthy migrant effect' less prominent. The possible result being poorer health compared to the general Norwegian population and other refugee groups, but better health than the general Ukrainian population.

### *Dental health*

Dental and oral health was rated significantly lower among respondents to UKR-R survey compared to NOR surveys, despite most respondents of UKR-R survey reporting that they had been to a dentist or dental hygienist in the last two years. This is a cause of concern and indicates a potentially large healthcare need in this group, even though we do not know the proportion reporting poor dental health in need of acute treatment. Poor oral health among refugees from Ukraine fits with anecdotal reports given by municipalities providing health care at asylum reception centres in Norway, and is in keeping with findings in another European survey where one third of the Ukrainian refugees rated their oral health as poor or very poor (Head et al., 2022).

Disparities in access and quality of oral health care in Ukraine are reported, especially between rural and urban areas (Bindi et al., 2012; Lekhan & Rudiy, 2015). There is an increasing number of modern, private clinics, predominately in major cities, but treatment is unaffordable for many. Children and certain other groups receive free dental care at public clinics, but others must pay out-of-pocket fees also here. Reports suggest that limited quality control of dental services means that public facilities often use outdated techniques and equipment in poor condition (Lekhan & Rudiy, 2015). Furthermore, there is a high prevalence of caries in Ukraine, especially in areas with low fluoride content in the drinking water and in radiation-contaminated areas (Bindi et al., 2012).

Dental and oral health care therefore represents an important healthcare need among refugees from Ukraine. Refugees granted protection in Norway have the same rights to dental care in the public system as the rest of the population. The majority of adults in Norway, must pay for dental treatment themselves, and are usually treated outside of the public system (some exemptions apply). Asylum seekers and refugees living in asylum reception centres can apply for coverage of acute dental care. Some specified groups, such as intellectually disabled and elderly living in nursing homes or receiving home care, are also entitled to necessary dental treatment for free in the public system. Children receive

free public dental treatment, with the exception of braces, and young adults pay reduced fees.

### *Psychological distress during the last week*

In this report, the HSCL-5 was used to measure self-reported symptoms of anxiety and depression during the last week. On a group level, the refugees from Ukraine had a mean score above the threshold that can indicate psychological distress. The Norwegian sample scored on average below this threshold. Across the different questions, the UKR-R respondents reported having experienced more psychological distress during the last week than the Norwegian sample, including being bothered by nervousness or shakiness inside, feeling fearful, hopeless about the future, blue or sad, and worrying too much about things. It should be noted that while the HSCL-5 may be used to predict or screen for depression and anxiety, a high mean score is not equivalent to a clinical diagnosis, which would require a broader assessment of the respondent. Furthermore, the questions only give a snapshot of the symptom load during the last week.

The observed higher mental health burden among the refugees compared to the general population is to be expected. Mental health problems are common among refugees and asylum seekers, especially depression and post-traumatic stress disorder (PTSD) (Blackmore et al., 2020; Steel et al., 2009). Prevalence rates among refugees and asylum seekers have been found to be around 30% for depression and PTSD, while around 11% for anxiety (Blackmore et al., 2020; Steel et al., 2009).

Reports about mental health in Ukraine before the full-scale invasion in 2022, have estimated that about one in eight had symptoms of depression (World Health Organization, 2020a). This was reported twice as much by women than men. The suicide rate among men in Ukraine, was the highest in the WHO European Region, with 57 deaths per 100 000 in 2019 (Eriksen et al., 2021). However, only 0.4% of the population had been treated for depression (World Health Organization, 2020a). It has been suggested that barriers to accessing mental health care could be related to stigma and shame, lack of information and awareness, lack of trust, and high costs of treatment (Quirke, Klymchuk, Suvalo, Bakolis, & Thornicroft, 2021; Weissbecker, Khan, Kondakova, Poole, & Cohen, 2017). However, it should be noted that these reports are all from after 2014, and thus from after the invasion in Ukraine in 2014. This may have influenced the mental health status and access to care.

Experiences from a pilot study in Norway exploring attitudes among newly arrived refugees from Ukraine to the assessment of mental health in the early phase indicate that there is some stigma among this group, and that questions based on specific symptoms were better received rather than labelling the topic 'mental health' or similar (Michelsen et al., 2023). In the present survey, questions pertaining to mental health were symptom-specific, and within the general health section without a 'mental health' subheading. This could have increased response-willingness to these questions. Considering that there is a lack of knowledge about mental health problems and that they are associated with stigma among many people from Ukraine (Quirke et al., 2021; Weissbecker et al., 2017), this is something future studies should bear in mind.

To date, there is a scarcity of surveys about the mental health among refugees from Ukraine specifically. One report from 12 European countries, found that depression or anxiety was one of the most common chronic diseases, accounting for 38% among those

reporting having a chronic disease (Head et al., 2022), which is comparable to the present survey. Among the respondents in the survey, 95% reported having felt anxious, and nearly half described that they had experienced anxiety every day during the last two weeks (Head et al., 2022). In a survey from Poland, refugees from Ukraine described that stress and emotions were causing difficulties with their daily functioning, and more than half of them reported that they would benefit from mental health support (Scott, 2022). A study on refugees from Ukraine in Germany, described that almost half of the female participants reported experiencing severe psychological distress (46%) while 20% of the male participants reported the same (Buchcik et al., 2023).

Several studies have investigated anxiety and depression among Syrian refugees after the Syrian civil war broke out. A review suggests prevalence rates of 41% for depression, 27% for anxiety, and 43% for PTSD in adult Syrian refugees, based on studies from 10 countries (Peconga & Thøgersen, 2020). In two studies conducted in Norway (one of them also in Lebanon), 34-38% of the respondents reported to have symptoms of depression and anxiety, which is in line with the results in the present survey (Fjeld-Solberg, Nissen, Cauley, & Andersen, 2020; Strømme et al., 2020).

Another refugee population which has been studied, is refugees from the former Yugoslavian Republic, after the dissolution of the republic and the subsequent wars. One study from Norway that studied refugees from different countries, with an emphasis on Bosnian and Kosovo-Albanian, reported that 48% displayed symptoms of depression and anxiety (Lie, Lavik, & Laake, 2001). Studies from Sweden reported that among Bosnian refugees, 18-33% showed signs of suffering from PTSD (Thulesius & Håkansson, 1999) and there were higher proportions of symptoms of depression and anxiety among female refugees compared to Swedish women (Sundquist, Behmen-Vincevic, & Johansson, 1998).

### *Long-term illnesses, health problems or disabilities*

Several municipalities and health services treating refugees from Ukraine have reported anecdotally that a seemingly large proportion of the refugees have had poor health with serious chronic diseases requiring follow-up such as cancer. In this section of the UKR-R survey we aimed to investigate long-term illnesses and disabilities, based on existing questions from county health surveys. These items included several specific non-communicable diseases, which represent a large part of the disease burden both in Norway and Ukraine (World Health Organization, 2020b).

A higher proportion of the respondents to UKR-R survey (58%) reported having long-term illnesses or health problems compared to in NOR surveys (43%), however the extent to which the long-term illnesses or health problems affected respondents' daily lives was very similar in both surveys. The proportion with long-term illnesses in UKR-R survey is lower than the approximately 70% reported across all countries in the previously mentioned survey in 12 European countries (Head et al., 2022). The same survey reports proportions with at least one chronic disease of 63% in Spain and 64% in the United Kingdom.

Around one fifth of respondents in both UKR-R and NOR surveys reported having any disabilities or problems due to injury. However, respondents to UKR-R survey with disabilities or problems due to injury reported that they affected their daily lives to a greater extent than in NOR surveys. In both surveys, higher proportions reported long-

term illnesses, health problems or disabilities in the older age groups. The extent to which UKR-R survey respondents' daily lives were affected also increased with age.

Refugees coming to Norway from Ukraine may have a higher prevalence of disabilities, compared to other refugee groups who have a relatively longer and more arduous journey, and therefore higher needs in this regard. The disabilities or problems due to injury may pertain to war-related injuries, however this was not assessed in the survey. The prevalence of disabilities among forcibly displaced persons in general is uncertain (United Nations High Commissioner for Refugees, 2019). In a survey among Syrian refugees in Norway, predominantly men under 50 years, 35% reported that their daily activities were hampered by 'any longstanding illness, or disability, infirmity or mental health problem' to some or a great extent (Nissen, Hynek, Scales, Hilden, & Straiton, 2022). This is a broad definition and encompasses both of the questions about long-term illnesses and about disabilities in the current survey.

When asked about specified long-term illnesses or health problems during the last 12 months, common responses in both the UKR-R survey and county survey in Vestfold & Telemark included back disorders, allergy, and depression. There were, however, significant differences between the surveys in the proportion reporting these conditions, with back disorders and depression being more common among UKR-R survey respondents. Additionally, UKR-R survey respondents more often reported having angina, hypertension, and/or chronic bronchitis/COPD/emphysema. Relatively high proportions of cardiovascular risk factors and chronic respiratory diseases is in keeping with public health reports from Ukraine (World Health Organization, 2020b).

Asthma, allergy, and osteoarthritis were relatively less common among UKR-R survey respondents than in the Norwegian county survey. A similar proportion in both surveys reported having cancer and diabetes. Although we have noted that several municipalities report anecdotally a seemingly high number of refugees with cancer, we have not found this in the UKR-R survey where only a small number reported having cancer. It is of course possible that a few respondents failed to select this box, do not know their diagnosis, or those with cancer have not responded, and this could influence the proportion with cancer for the group as a whole.

In the survey in 12 European countries, the most common long-term health problems among the Ukrainian refugees also included back pain, hypertension, and allergy, with even higher proportions than among UKR-R survey respondents (Head et al., 2022). The Survey on living conditions from 2016 among 12 immigrant populations in Norway reports a similar proportion of self-reported diabetes among all immigrants as a group (5–6%), with large variation between countries. However, all groups represented in the Survey on living conditions had much lower proportions with self-reported hypertension (2–12%) compared to UKR-R survey respondents (19%) (Kjøllesdal et al., 2019). Most studies among refugees in Norway have focused on mental health, and knowledge on the prevalence of other long-term illnesses are lacking.

Ukraine has a high prevalence of communicable diseases such as tuberculosis, HIV and hepatitis B and C compared to other European countries, and these may also be prevalent among the refugees leaving Ukraine (Eriksen et al., 2021; Murphy et al., 2022). However, communicable diseases were not specifically included in the UKR-R survey other than screening for tuberculosis. Screening for tuberculosis is mandatory for refugees coming to

Norway, must be completed within 14 days of arrival, and all cases are notified to the Norwegian Surveillance System for Communicable Diseases (MSIS) (Lovdata, 2022c). Ninety-three percent of respondents to UKR-R survey reported that they had been screened for tuberculosis since arriving in Norway, although those who had arrived more recently were less likely to have been screened. We find a higher rate of tuberculosis screening than in a survey conducted earlier on in Norway among refugees from Ukraine, during June 2022, where 86% of the respondents reported having been screened for tuberculosis (Hernes et al., 2022).

In response to the sharp increase in arrivals, the time limit of 14 days for tuberculosis screening was temporarily extended to four weeks, during the period 8<sup>th</sup> April until 1<sup>st</sup> October, 2022, after which the original time limit of 14 days was again applicable (Lovdata, 2022b). It is uncertain what proportion in this survey were screened within the applicable time limit. Challenges remain regarding information flow, including whether mandatory screening has been completed, a problem that has been exacerbated by the upscaling of the asylum reception system, temporary solutions, and more frequent moving of persons between different centres and accommodations.

Although non-communicable diseases represent a major part of the disease burden in Ukraine, accounting for 91% of deaths (World Health Organization, 2020b), communicable diseases are also prevalent and represent an important part of refugees' healthcare needs. Future surveys should therefore also include information on relevant communicable diseases.

## Self-assessed healthcare needs, information about, and access to health services in Norway

Nearly half of the respondents in the UKR-R survey reported that they usually needed health services 2-4 times per year (48%) for their long-term illnesses/health problems, or disabilities/problems due to injury, while 30% answered '0-1', and 22% answered '5 or more'. Although not directly comparable, the average number of consultations with a general practitioner per capita in Norway in 2021 was 3 times per year, across all ages (Statistics Norway, 2022). Over two thirds of the UKR-R survey respondents (70%) reported that they had needed to see a doctor, psychologist, or other health professional during the last 12 months, where most of them had needed to see one both prior to and since arrival in Norway (40%). Older respondents generally reported a greater need for health services compared to younger respondents, and there was a decreasing trend by decreasing age. The NIPH plans to update its report on scenarios of healthcare needs and usage among refugees from Ukraine (Gjefsen et al., 2022) and will analyse these findings further in a separate publication.

Among those who had needed to see a doctor, psychologist, or other health professional during the last 12 months, 81% reported having had such a consultation, either in or outside of Norway, or both. Also here, there was an age gradient, where having had a consultation was more frequent in the eldest age group. Although the majority of those who needed a consultation reported having had one, still one in five reported that they had not, and one in four among respondents aged 18 to 29 years.

Respondents were asked whether they had received the health care that they felt they had needed while in Norway specifically. Among those who had a self-assessed need, 32% responded that they had received the health care they felt they had needed, 42% answered 'To some extent', and 26% answered that they had not. There was a trend that the more recently the person had arrived, the less likely they reported having received the health care they felt they had needed in Norway. The fact that the majority answered either 'No' or 'To some extent', and that this was more prevalent among the most recently arrived, could indicate barriers to access or inadequate information about the Norwegian healthcare system.

There are several differences between the Norwegian and the Ukrainian healthcare system which may play a role in healthcare seeking behaviour as well as whether respondents reported having received the health care that they felt they had needed while in Norway. The governmental spending on health is lower in Ukraine compared to Norway and other WHO European region countries (Eriksen et al., 2021). There are out-of-pocket payments in Ukraine, as well as regional differences providing various access to health services for the population (Eriksen et al., 2021). There is also a large use of, and more direct access to, specialist health services in Ukraine, which differs from Norway (Lekhan & Rudiy, 2015). Additionally, antibiotics are usually available without a prescription (Lekhan & Rudiy, 2015). In a report on the experiences of the refugees from Ukraine during the first phase in Norway, the respondents reported various cultural differences when they were in contact with the Norwegian healthcare services, which the authors termed a medical 'culture crash' (Hernes et al., 2022). The respondents described differences in the threshold for seeking medical help or taking medicine for mild diseases, with a lower threshold in Ukraine compared to the practice in Norway (Hernes et al., 2022).



Unmet health needs may also be seen in relation to respondents' knowledge of the health system in Norway and whether they know how to contact and access health care if they have a need. There are many factors that influence refugees' and migrants' access to and usage of health care. Communication, continuity of care, affordability, sociocultural norms, confidence/trust, and interaction between health professionals and the patient are among factors that have been highlighted to impact migrants' and refugees' access to health care in high-income countries (Brandenberger, Tylleskär, Sontag, Peterhans, & Ritz, 2019; Haj-Younes, Abildsnes, Kumar, & Diaz, 2022). Additionally, it may be that the healthcare services are not rigged for the refugee population that is coming from Ukraine, which has a different demography than other refugees. With the larger number of women, children, and elderly refugees, the health needs will indeed be different.

In a beforementioned report from 12 European countries, 58% of the refugees from Ukraine reported difficulties in accessing healthcare (Head et al., 2022). The difficulties consisted of not having access to healthcare facilities and not knowing where they were in the community, knowing where healthcare facilities were but not having access to them, and having access to healthcare facilities but not knowing where they were (Head et al., 2022).

The UKR-R survey also asked respondents if they had received understandable information about health services in Norway, and if they knew how to contact health services if they needed to. Most of the respondents in the survey reported that they either fully or to some extent had received information about the available Norwegian health services in a way they could understand, although more respondents answered 'To some extent' (49%) rather than 'Yes' (39%). The more recently arrived were less likely to report that they had received understandable information. This indicates that there is room for improvement in how information is distributed or presented, especially during the early phase. It is, however, uncertain from this survey which factors have contributed to respondents reporting not having received fully understandable information. Therefore, it is not clear whether this could reflect that they received poor information, that the information was not adapted to their language, that they did not receive any information at all, or something else. If the answers had been on, for example, a five-point Likert-scale, as opposed to only three options, the answers could perhaps have been more nuanced. Qualitative interviews would also provide more knowledge on what information, or lack of information, the refugees received.

In terms of whether respondents knew how to contact a doctor or other health professional if they needed help, the majority answered that they either fully or to some extent knew how to. Overall, there were few differences across the age groups, but the youngest respondents (18-29 years) reported slightly more that they knew how to make contact if they needed help. When analysed by month of arrival, there was the same trend as described above, where the more recently the person had arrived, the less they reported knowing how to contact health services.

How information about health, rights to health, and healthcare services is provided to asylum seekers in Norway, has been explored previously (Bergh et al., 2017). In that study they interviewed residents, reception staff, and health personnel at arrival and at transit centres. The residents reported that they received limited general information (Bergh et al., 2017). Some of them also expressed that they learned about their rights and access through other residents. There was also a difference between those who had been in

contact with the health services and those who had not, where the latter group knew less about their rights and access to services. The report recommended a comprehensive strategy for information about health, health rights, and health services in the arrival and transit centres (Bergh et al., 2017).

As previously described in the present report, the information supplied by the different reception centres and accommodations across the country may have varied in content, form, and quality. In addition to time since arrival, this could possibly help explain differences in ratings of information about and access to health services. This would have been interesting to explore further, by analysing whether these ratings varied by geographical location in Norway.

## Study limitations

There are two main limitations to the interpretation of the findings of this survey among refugees from Ukraine in Norway. The first is how representative the study participants are for the target population, and the second pertains to the design and content of the survey questions and answer alternatives, and how these may be interpreted. Additionally, the survey was cross-sectional, and the findings therefore represent the status among refugees arriving during 2022, which may change over time and may not be representative of future arrivals.

### *Representativeness*

This survey among refugees from Ukraine in Norway uses a digital questionnaire and self-selection sampling, rather than random sampling directly from the population of interest. We targeted multiple potential contact points nationally, however recruitment was relatively passive. Dissemination of information about the study and recruitment of study participants relied on the goodwill and cooperation of multiple intermediary collaborators. Potential study participants needed to notice posters, brochures or social media posts, to actively decide to participate, be able to access the digital survey, and to give consent and complete the questionnaire. This requires an adequate level of digital competence. There is therefore a risk that non-response is not random, and that there is selection bias in who has chosen to participate.

In terms of demographics and educational-level, the UKR-R sample has a higher proportion of females and is somewhat younger than in the target population based on UDIs official statistics. We have compensated for the demographic differences by weighting the results against the age and sex distribution of all adult refugees from Ukraine registered with collective protection by UDI. A large proportion of the study participants have higher education. Because of a lack of systematic information on the educational level of all refugees from Ukraine registered in Norway, we have not been able to adjust for potential differences in educational attainment. The survey respondents probably have a higher educational level than the target population as a whole. Higher education is known to be associated with better health, and this has not been controlled for in our study. A pilot study in Norway among refugees from Ukraine indicates that venue-based recruitment with on-site research staff who can actively give information and assist participants, can result in a broader representation of participants, specifically persons with lower levels of education, compared to recruitment via social media (Michelsen et al., 2023).

There may also be other differences between those who choose to participate and those who do not. Some studies have for example found that participants in population-based health surveys have better health than those who do not participate (Knudsen et al., 2010). Participants may differ from non-participants in motivation, attitude and/or lifestyle. For some, likely only a few, there may be a purposeful intent to their participation, e.g., people with a particularly negative or positive experience might have higher motivation to answer the survey.

Other surveys among refugees from Ukraine have also had predominantly highly educated, female respondents. There is a relatively high proportion of women among the adults who have fled from Ukraine, as expected, yet studies have an even higher proportion among their participants. The UNHCR note in their survey in 43 European

countries that there was a higher proportion with higher levels of education among the refugees hosted in countries not neighbouring Ukraine, although this could be partly due to different sampling approaches used (United Nations High Commissioner for Refugees, 2022).

The study sample therefore most likely represents a somewhat healthier sub-group among the refugees from Ukraine in Norway, and our findings may underestimate the overall health needs of the group as a whole. However, this also applies to NOR surveys, and should therefore have limited impact on comparisons between the two groups.

### *Survey design*

The survey relies on self-report and self-ratings of health, healthcare needs and access, and on the quality of information on health services received. Participants accessed the questionnaire online and did not give any identifiers such that it would be possible for the same person to submit multiple responses, however we do not consider that this is likely to be a significant problem. We do not have the means to control respondents' answers with diagnoses given by medical professionals, and there may therefore be some inaccuracy in the information provided. The wording of questions and answer alternatives may differ slightly between Ukrainian, Russian, Norwegian and English versions, and impact on participants' interpretation and how they answer the same survey item. The use of experienced translators and independent quality controls should minimize this uncertainty. Response bias may also be an issue, for example if there are systematic differences in how Ukrainians and Norwegians interpret and respond to the same question, without reflecting an objective difference in disease burden or need. The UKR-R survey utilizes several established health indicators and instruments, which have been tested and validated in different populations, and should reduce the risk of response bias (Bačák & Olafsdottir, 2017; Bowling, 2005; Chandola & Jenkinson, 2000; Ekbäck & Ordell, 2015; Strand et al., 2003).

Some survey items, however, were unique to UKR-R survey and have not been previously validated, and findings based on these items may be more uncertain. This applies particularly for the questions about healthcare needs and information about and access to healthcare services in Norway. The three questions regarding information about and access to healthcare services in Norway each had three levels of answer alternatives: 'Yes', 'To some extent' and 'No' (to the question about whether adequate health services had been received in Norway, respondents could also answer 'Have not needed health care'). In the analysis and interpretation of these results we see that it would have been advantageous to have given additional options/levels to better differentiate and understand the results.

Not all elements of health, and only some specific health problems, have been investigated in this survey, as well as only a brief overview of participants' self-assessed health service needs. This was decided in preference to keeping the survey as brief as possible. Furthermore, we have not collected information about the location of the refugees in Norway, nor origin from within Ukraine, in favour of reducing the possibility of identifying participants, and we can therefore not assess differences in health, healthcare needs or access to health services according to geography.

Survey items pertaining to somatic and mental health are taken from existing public health surveys in Norway, to allow comparisons and a context for the findings, and the

focus of the survey items was largely determined thereafter. Therefore, we have limited or no information on several other important indicators of health or healthcare needs in this population, such as communicable diseases and immunisation needs. Other relevant and related themes might also be explored in the future, such as satisfaction with information and health services received. The design of future surveys should be further improved and address these limitations. Additionally, other study designs and methods such as register studies and qualitative interviews may compliment, and supplement knowledge gained from survey-based studies.

Finally, we have chosen not to include results pertaining to children's health and healthcare needs in the final report since there were several challenges with the analysis and subsequent interpretation of these results. The current survey design meant that for respondents with responsibility for more than one child, it was not always possible to determine which child, or number of children, who had health problems or higher healthcare needs, or which age group(s) these children belonged to. As the age and sex of each child were not collected, results could not be weighted to better represent the population of children arriving in Norway from Ukraine. Finally, the UKR-R survey focuses on long-term illnesses, health problems and disabilities, and healthcare needs in relation to these. Children's healthcare needs, however, generally relate to acute illnesses and, especially among the youngest, health and developmental checks, and routine immunisations. The content of the survey should therefore be better tailored for this population to give more meaningful results. Almost one third of the refugees from Ukraine in 2022 were children (The Norwegian Directorate of Immigration, 2023c), and the healthcare needs of this large group remains an important topic to be investigated.

## Conclusion

This survey has provided more systematic information on the health and healthcare needs of refugees from Ukraine in Norway. Overall, the refugees reported poorer overall health, dental health, and more psychological distress than the Norwegian population sample. A large majority had a self-assessed need for health care since arrival in Norway. There were indications of unmet or only partially met healthcare and information needs, especially among more recently arrived persons. Health status and healthcare needs are not static and may change over time, however the results may contribute to planning and ensuring appropriate health services for this group.

Ensuring follow-up and continuity of treatment for long-term illnesses or health problems among the refugees, as well as support for psychological distress and mental health care, represent important healthcare needs. Further, dental health services may also be a considerable need among the refugees. The expected large numbers of refugees through 2023, and high share of children and women in reproductive age, should also be taken into account when planning and scaling health services for this group of refugees.

### *Implications for future research*

Questions in this brief digital survey were largely based on existing survey items in Norwegian public health surveys, which has allowed comparison with a general population. Future surveys may be improved and more tailored for a refugee population, for example with additional items on communicable diseases and immunisation needs. The health and healthcare needs of the children should also be investigated.

The NIPH is working to update scenarios for healthcare needs and usage among refugees from Ukraine, based in part on findings in the current survey, and findings on health-related quality of life (EQ-5D) which will be published separately. Also, further studies on differences in health status by month of arrival are planned.

Other methods including register-based studies and qualitative interviews will complement and build on the current findings. For example, register studies examining actual use of health services among Ukrainian refugees in Norway should be carried out. Access to health care and information on healthcare services should be further explored with qualitative methods. Future studies should also include other refugees in Norway, not only from Ukraine, as there is a general need for more information on refugees' health and healthcare needs.

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## **Appendix A – Copy of the digital questionnaire from UKR-R survey**

# Ukraina

Obligatoriske felter er merket med stjerne \*

## Språk

Velg språk

Choose your language

Виберіть мову

Выберите язык

Norsk

English

Українська

Русский

Obligatoriske felter er merket med stjerne \*

Mandatory fields are marked with a star \*

Обов'язкові для заповнення поля позначені зірочкою \*

Обязательные для заполнения поля отмечены звездочкой \*

 Dette elementet vises kun dersom alternativet «Norsk» er valgt i spørsmålet «»

Takk. Trykk på "Send" for å komme videre til spørreskjemaet.

 Dette elementet vises kun dersom alternativet «English» er valgt i spørsmålet «»

Thank you, press the Send button to continue in the form

 Dette elementet vises kun dersom alternativet «Українська» er valgt i spørsmålet «»

Спасибі. Натисніть «Send» щоб перейти до анкети

 Dette elementet vises kun dersom alternativet «Русский» er valgt i spørsmålet «»

Спасибо. Спасибо. Нажмите «Send», чтобы перейти к анкете



VILKÅR

[Personvern og vilkår for bruk](#)  
[Nettskjema bruker informasjonskapsler](#)  
[Tilgjengelighetserklæring](#)

HJELP OG KONTAKT

[Veiledning for Nettskjema](#)  
[Kontaktinformasjon](#)

NETTSKJEMA ER UTVIKLET OG DESIGNET AV

[Universitetet i Oslo](#)

# Ukraina - english consent form

Page 1

Mandatory fields are marked with a star \*


## Consent

The Norwegian Institute of Public Health would like to know more about the health and healthcare needs of refugees in Norway. The questionnaire is for people 18 years or older who have recently come to Norway from Ukraine. Your answers can help to plan and improve healthcare services for others coming to Norway. That's why we hope that you will answer this short questionnaire about your health and healthcare needs, and those of your children.

If you would like to read more about the project you will find information at <http://www.fhi.no/UKR-survey>.

The questionnaire takes approximately 10 minutes.

Click the "Next page" button to go to the consent form and questionnaire.

 Page break

Page 2

Mandatory fields are marked with a star \*

Your consent applies to this survey from the Norwegian Institute of Public Health. The survey involves you filling out a questionnaire. You will be asked about you and your children's health and healthcare needs in Norway. The main purpose of this survey is to obtain results that can be used at a national level to estimate healthcare needs among Ukrainian refugees who have come to Norway.

Participation is voluntary. You will not be asked to provide your name, or any other information that can directly identify you. Your answers will not be used to meet your personal healthcare needs. If you need acute health services, please contact your local health service provider.

How will we process your data?

The information you provide in the questionnaire will be stored and processed in accordance with applicable data protection regulations. No information that can directly identify you will be collected.

It will not be possible to change or delete your answers after the questionnaire has been submitted.

All research will follow applicable research regulations, and will be carried out by the Norwegian Institute of Public Health or other approved institutions.

Information from this survey will be included in an overall assessment of health and healthcare needs among refugees in Norway. The results from this survey will be compared with previous surveys among the general population in Norway. Results will only be published at a group level and never on an individual level. It will not be possible to recognize individual persons in any statistics or research published from this survey. All results and research based on this survey will be published or presented on the Norwegian Institute of Public Health's website. All individual level data will be deleted at the end of the project or at the latest 31 December 2023. You will not receive individual feedback about the results from this survey. The Norwegian Institute of Public Health is responsible for processing data from this survey. The Data Protection Office can be contacted by sending an email to [personvernombud@fhi.no](mailto:personvernombud@fhi.no)


You can find information about your rights on the Norwegian Institute of Public Health's website: [www.fhi.no](http://www.fhi.no)

If you wish to complain about the processing of your data, you can contact Norwegian Data Protection Authority via their website: <https://www.datatilsynet.no/en/about-us/contact-us/how-to-complain-to-the-norwegian-dpa/>


I consent/agree that the information I provide may be used in accordance with the above. \*

Yes

No

 This element is only shown when the option "Yes" is selected in the question "I consent/agree that the information I provide may be used in accordance with the above."

Thank you. Press the "Send" button to continue.

 This element is only shown when the option "No" is selected in the question "I consent/agree that the information I provide may be used in accordance with the above."

Thank you. Press the "Send" button and you won't have to answer any more questions.



## About your status in Norway

1. In which month in 2022 did you arrive in Norway?

Choose an answer from the drop-down menu:

Press the Next page button to get to the next question


Page break

*People who have fled Ukraine can receive temporary collective protection in Norway. Ukrainian citizens applying for protection can register at several places in the country. You can contact the police to apply for protection.*


1.2 Will you apply, or have you applied, for protection or another type of residence permit/visa in Norway?

- Yes, protection
- Yes, another type of residence permit/visa
- No, I will not be applying for protection or another type of residence permit/visa

1.2a What is the status of your application for protection in Norway?

 This element is only shown when the option "Yes, protection" is selected in the question "1.2 Will you apply, or have you applied, for protection or another type of residence permit/visa <u>in Norway</u>?"

- I am waiting to register my application
- I have applied and am waiting for a decision from UDI (The Norwegian Directorate of Immigration)
- I have been granted protection, and am waiting to be settled in a municipality by IMDi (The Directorate of Integration and Diversity)
- I have been settled in a municipality by IMDi (The Directorate of Integration and Diversity)

 This element is only shown when the option "I am waiting to register my application", "I have been granted protection, and am waiting to be settled in a municipality by IMDi (The Directorate of Integration and Diversity)" or "I have applied and am waiting for a decision



from UDI (The Norwegian Directorate of Immigration)" is selected in the question "1.2a What is the status of your application for protection in Norway?"

*When you come to Norway as a refugee, you are allocated accommodation by the Norwegian authorities, (for example The Norwegian Directorate of Immigration/UDI, the municipality). Some Ukrainians have a network in Norway and choose to find accommodation themselves, privately.*

### 1.2b How did you find the accommodation you live in now?

**i** This element is only shown when the option "I am waiting to register my application", "I have been granted protection, and am waiting to be settled in a municipality by IMDi (The Directorate of Integration and Diversity)" or "I have applied and am waiting for a decision from UDI (The Norwegian Directorate of Immigration)" is selected in the question "1.2a What is the status of your application for protection in Norway?"

- I was allocated accommodation by the Norwegian authorities
- I found my accommodation myself

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### 1.3 Have you been screened for tuberculosis (chest x-ray) since arriving in Norway?

- Yes
- No
- I do not know

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## Your health and healthcare needs

### 2.1 How do you rate **your own health**, all in all?

Would you say it is ...

- Very good
- Good
- Fair
- Poor
- Very poor

### 2.2 How do you rate your **dental health**?

Would you say it is ...

- Very good
- Good
- Fair
- Poor
- Very poor

### 2.3 When did you **last** go to the dentist/dental hygienist?

- 0-2 years ago (in Norway)
- 0-2 years ago (outside of Norway)
- 3-5 years ago
- More than 5 years ago

2.4 To what extent have you been bothered by **nervousness** or **shakiness inside** during the last week?

- Not at all
- A little
- Quite a bit
- Extremely

2.5 To what extent have you been bothered by **feeling fearful** during the last week?

- Not at all
- A little
- Quite a bit
- Extremely

2.6 To what extent have you been bothered by **feeling hopeless** about the future during the last week?

- Not at all
- A little
- Quite a bit
- Extremely

2.7 To what extent have you been bothered by **feeling blue** or sad during the last week?

- Not at all
- A little
- Quite a bit
- Extremely

2.8 To what extent have you been bothered by **worrying too much** about things during the last week?

- Not at all
- A little
- Quite a bit
- Extremely

2.9 Do you have any long-term **illnesses** or **health problems**? Please also include illnesses or problems that are seasonal or come and go.

*By long-term we mean physical or mental illnesses/health problems that have lasted, or are expected to last, at least six months.*

- Yes
- No

2.9a How do these illnesses/health problems affect your daily life?

**i** This element is only shown when the option "Yes" is selected in the question "2.9 Do you have any long-term **illnesses** or **health problems**? Please also include illnesses or problems that are seasonal or come and go."

- To a great extent
- To some extent
- To a small extent
- Not at all

2.10 Do you have any **disabilities** or do you have **problems due to injury** ?

*We mean physical or mental disabilities or problems that have lasted, or are expected to last, at least six months. We also mean problems that come and go.*

- Yes
- No

2.10a How do these disabilities (problems) affect your daily life?

**i** This element is only shown when the option "Yes" is selected in the question "2.10 Do you have any <b> disabilities </b> or do you have <b> problems due to injury </b>?"

- To a great extent
- To some extent
- To a small extent
- Not at all

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2.11 The following is a list of long-term illnesses and health problems. Have you had any of these long-term illnesses / health problems during the last 12 months?

*You may tick multiple boxes.*

- Asthma, including allergic asthma
- Chronic bronchitis, COPD or emphysema
- Heart attack or persistent symptoms after heart attack
- Angina
- Hypertension/high blood pressure
- Stroke or persistent symptoms after stroke
- Arthritis (not including inflammatory arthritis)
- Back problems such as low back pain/lumbago, sciatica, or prolapse
- Neck problems
- Diabetes
- Pollen allergy, hay fever, allergic rashes or food allergy (not including food intolerance or allergic asthma)
- Chronic liver failure, cirrhosis
- Urinary incontinence/leaking of urine
- Chronic kidney failure (not including kidney stones)
- Cancer
- Depression

2.12 How many times per year do you usually need health services due to your long-term illnesses/health problems or disabilities/problems?

*If you do not have any long-term illnesses/health problems or disabilities, please answer "Not applicable".*

- 0-1
- 2-4
- 5 or more
- Not applicable

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2.13 Have you needed to see a doctor, psychologist or other health professional during the last 12 months?

- Yes, prior to arrival in Norway
- Yes, both prior to and since arrival in Norway
- Yes, since arrival in Norway
- No, have not needed to

2.13 Have you had a consultation with a doctor, psychologist or other health professional during the last 12 months?

**i** This element is only shown when the option "Yes, since arrival in Norway", "Yes, both prior to and since arrival in Norway" or "Yes, prior to arrival in Norway" is selected in the question "2.13 Have you needed to see a doctor, psychologist or other health professional during the last 12 months?"

- Yes, in Norway
- Yes, both in Norway and outside of Norway
- Yes, outside of Norway
- No

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## Children's health and healthcare needs

3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?

3.1a How old is the child/How old are the children?

**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

You may tick multiple boxes.

- 0-1 years
- 2-5 years
- 6-9 years
- 10-12 years
- 13-15 years
- 16-17 years

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**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

The following questions apply to the children under the age of 18 for whom you care/have responsibility for in Norway.

3.2 Do any of the children have long-term **illnesses** or **health problems** ? Please also include illnesses or problems that are seasonal or come and go.

**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

By long-term we mean physical or mental illnesses/health problems that have lasted, or are expected to last, at least six months.


- Yes
- No
- Do not know

3.2a In your experience, how do these illnesses/health problems affect the child's daily life?

**i** This element is only shown when the option "Yes" is selected in the question "3.2 Do any of the children have long-term <b> illnesses </b> or <b> health problems </b> ? Please also include illnesses or problems that are seasonal or come and go."

If you have several children with long-term physical or mental illnesses/health problems, please answer on behalf of the child with the greatest health challenges.

- To a great extent
- To some extent
- To a small extent
- Not at all

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3.3 Do any of the children have **disabilities**, or **problems due to injury** ?

**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

We mean physical or mental disabilities or problems that have lasted, or are expected to last at least six months. We also mean problems that come and go.

- Yes
- No
- Do not know

3.3a In your experience, how do these disabilities or problems affect the child's daily life?

**i** This element is only shown when the option "Yes" is selected in the question "3.3 Do any of the children have <b> disabilities</b>, or <b> problems due to injury </b> ?"

If you have several children with impairments/ailments due to injury, please answer on behalf of the child with the greatest challenges.

- To a great extent
- To some extent
- To a small extent
- Not at all


3.4 Overall, how many times per year do you usually need health services due to the children's long-term

## illnesses/health problems or disabilities/problems?

**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

If none of the children have any long-term illnesses/health problems or disabilities, please answer "Not applicable".

- 0-1
- 2-4
- 5 or more
- Not applicable

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### 3.5 Have any of your children needed to see a doctor, psychologist or other health professional during the last 12 months?


**i** This element is only shown when the option "3", "2", "5 or more", "4" or "1" is selected in the question "3.1 How many children under the age of 18 do you care for/have responsibility for here in Norway?"

- Yes, prior to arrival in Norway
- Yes, both prior to and since arrival in Norway
- Yes, since arrival in Norway
- No, have not needed to

### 3.5a Has the child/children had a consultation with a doctor, psychologist or other health professional during the last 12 months?

**i** This element is only shown when the option "Yes, prior to arrival in Norway", "Yes, since arrival in Norway" or "Yes, both prior to and since arrival in Norway" is selected in the question "3.5 Have any of your children needed to see a doctor, psychologist or other health professional during the last 12 months?"

- Yes, in Norway
- Yes, both in Norway and outside of Norway
- Yes, outside of Norway
- No

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## Health-related quality of life

Please tap the ONE box that best describes your health TODAY.

### MOBILITY

- I have no problems walking
- I have slight problems walking
- I have moderate problems walking
- I have severe problems walking
- I am unable to walk

### SELF-CARE

- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)

- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

PAIN/DISCOMFORT

- I have no pain or discomfort
- I have slight pain or discomfort
- I have moderate pain or discomfort
- I have severe pain or discomfort
- I have extreme pain or discomfort

ANXIETY/DEPRESSION

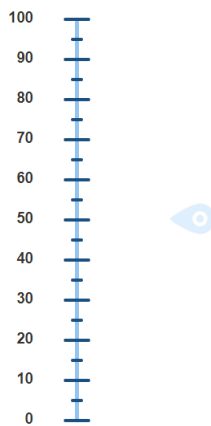
- I am not anxious or depressed
- I am slightly anxious or depressed
- I am moderately anxious or depressed
- I am severely anxious or depressed
- I am extremely anxious or depressed

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We would like to know how good or bad your health is TODAY.

This scale is numbered from 0 to 100.  
100 means the best health you can imagine.  
0 means the worst health you can imagine.

Please tap on the scale to indicate how your health is TODAY.



Verdi

### Information about health care and health services

5.1 Have you received information in a way that you understand about health services in Norway?

- Yes
- To some extent
- No

5.2 Do you know how to contact a doctor or other healthcare professional if you need help?

- Yes
- To some extent
- No

5.3 Have you received the health care you feel you have needed while in Norway?

- Yes
- To some extent
- No
- Have not needed health care

### Your background

6.1 Gender

- Male
- Female
- Other

6.2 How old are you?

6.3 Which country were you born in?

6.3a State which country you were born in:

**i** This element is only shown when the option "Other" is selected in the question "6.3 Which country were you born in?"

6.4 What is your **highest completed level** of education?

- Primary and lower secondary school (compulsory schooling)



Upper secondary school/vocational training

Higher education (Bachelor/Master/Doctorate or equivalent)

No completed education



## Appendix B – Crude and weighted proportions for UKR-R survey and NOR surveys

Results per survey item for UKR-R survey (all respondents and per age group) and NOR surveys

Crude proportions % (n)							Weighted proportions %					
<b>2.1</b>	<b>How do you rate your own health, all in all?</b>											
	Very Poor	Poor	Fair	Good	Very good	<i>n</i>		Very Poor	Poor	Fair	Good	Very good
UKR-R	1.1 (8)	10.3 (75)	38.7 (283)	43.5 (318)	6.4 (47)	731	UKR-R	1.6	12.1	38.0	41.6	6.6
NOR	0.8 (2006)	7.3 (18722)	20.0 (51116)	52.6 (134524)	19.3 (49256)	255 624	NOR	0.9	7.3	19.0	52.4	20.4
18-29	0.0 (0)	10.8 (14)	29.2 (38)	50.0 (65)	10.0 (13)	130	18-29	0.0	10.5	28.7	49.9	10.9
30-39	0.4 (1)	5.7 (15)	37.7 (100)	47.2 (125)	9.1 (24)	265	30-39	0.3	5.9	36.6	48.5	8.8
40-49	0.5 (1)	7.1 (15)	41.0 (86)	47.1 (99)	4.3 (9)	210	40-49	0.4	6.9	40.4	46.5	5.7
50+	4.8 (6)	24.8 (31)	47.2 (59)	22.4 (28)	0.8 (1)	125	50+	4.9	25.0	44.7	23.8	1.5
<b>2.2</b>	<b>How do you rate your dental health?</b>											
	Very Poor	Poor	Fair	Good	Very good	<i>n</i>		Very Poor	Poor	Fair	Good	Very good
UKR-R	7.3 (53)	23.9 (175)	36.7 (268)	29.4 (215)	2.7 (20)	731	UKR-R	8.5	25.4	35.1	28.4	2.7
NOR	1.7 (4355)	6.7 (17216)	17.2 (44039)	52.4 (133956)	21.9 (56044)	255 610	NOR	1.8	7.1	17.0	51.3	22.7
18-29	5.4 (7)	23.1 (30)	31.5 (41)	33.8 (44)	6.2 (8)	130	18-29	6.9	23.8	29.6	33.8	5.9
30-39	6.4 (17)	19.6 (52)	38.5 (102)	32.5 (86)	3.0 (8)	265	30-39	7.5	19.5	37.3	32.5	3.3
40-49	5.7 (12)	23.3 (49)	38.1 (80)	31.0 (65)	1.9 (4)	210	40-49	5.7	22.4	38.0	32.2	1.6
50+	13.6 (17)	35.2 (44)	36.0 (45)	15.2 (19)	0.0 (0)	125	50+	12.3	34.6	36.1	16.9	0.0

## 2.3

## Crude proportions % (n)

## When did you last go to the dentist/dental hygienist?

	0-2 years ago	3-5 years ago	More than 5 years ago	<i>n</i>	
UKR-R	87.2 (634)	9.8 (71)	3.0 (22)	727	
NOR	4.4 (11347)	7.0 (17987)	88.5 (226144)	255 478	
18-29	82.3 (107)	10.8 (14)	6.9 (9)	130	
30-39	90.2 (238)	9.1 (24)	0.8 (2)	264	
40-49	87.0 (181)	11.1 (23)	1.9 (4)	208	
50+	86.3 (107)	8.1 (10)	5.6 (7)	124	
	0-2 years ago (in Norway)	0-2 years ago (outside of Norway)	3-5 years ago	More than 5 years ago	<i>n</i>
UKR-R	26.7 (194)	60.5 (440)	9.8 (71)	3.0 (22)	727
18-29	26.9 (35)	55.4 (72)	10.8 (14)	6.9 (9)	130
30-39	23.5 (62)	66.7 (176)	9.1 (24)	0.8 (2)	264
40-49	30.8 (64)	56.2 (117)	11.1 (23)	1.9 (4)	208
50+	26.6 (33)	59.7 (74)	8.1 (10)	5.6 (7)	124

## Weighted proportions %

	0-2 years ago	3-5 years ago	More than 5 years ago	
UKR-R	84.4	11.2	4.4	
NOR	86.0	9.0	4.9	
18-29	80.3	12.6	7.1	
30-39	88.9	9.7	1.3	
40-49	85.4	12.2	2.5	
50+	82.2	10.7	7.1	
	0-2 years ago (in Norway)	0-2 years ago (outside of Norway)	3-5 years ago	More than 5 years ago
UKR-R	25.5	58.9	11.2	4.4
18-29	24.4	56.0	12.6	7.1
30-39	22.7	66.2	9.7	1.3
40-49	29.1	56.2	12.2	2.5
50+	26.8	55.4	10.7	7.1

**Crude proportions % (n)****2.4 To what extent have you been bothered by nervousness or shakiness inside during the last week?**

	Not at all	A little	Quite a bit	Extremely	<i>n</i>
UKR-R	14.7 (107)	47.5 (346)	28.1 (205)	9.7 (71)	729
NOR	57.6 (147195)	31.6 (80631)	8.0 (20506)	2.8 (7177)	255 509
18-29	12.3 (16)	48.5 (63)	25.4 (33)	13.8 (18)	130
30-39	16.7 (44)	43.9 (116)	29.2 (77)	10.2 (27)	264
40-49	12.9 (27)	53.6 (112)	27.8 (58)	5.7 (12)	209
50+	16.0 (20)	43.2 (54)	29.6 (37)	11.2 (14)	125

**Weighted proportions %**

	Not at all	A little	Quite a bit	Extremely
UKR-R	16.3	47.2	26.5	9.9
NOR	49.6	35.4	10.8	4.3
18-29	11.8	50.4	24.1	13.7
30-39	18.1	43.8	28.4	9.8
40-49	14.8	53.3	26.2	5.7
50+	18.4	44.7	26.6	10.3

**2.5 To what extent have you been bothered by feeling fearful during the last week?**

	Not at all	A little	Quite a bit	Extremely	<i>n</i>
UKR-R	21.8 (159)	46.1 (336)	24.3 (177)	7.8 (57)	729
NOR	71.6 (182884)	22.0 (56078)	4.7 (12094)	1.7 (4269)	255 325
18-29	25.4 (33)	42.3 (55)	23.1 (30)	9.2 (12)	130
30-39	18.3 (48)	47.5 (125)	26.2 (69)	8.0 (21)	263
40-49	22.9 (48)	50.5 (106)	21.9 (46)	4.8 (10)	210
50+	24.0 (30)	39.2 (49)	25.6 (32)	11.2 (14)	125

	Not at all	A little	Quite a bit	Extremely
UKR-R	24.9	45.2	21.8	8.1
NOR	65.4	25.5	6.5	2.6
18-29	26.5	43.8	21.2	8.6
30-39	19.4	48.9	23.5	8.2
40-49	24.5	49.8	20.8	4.9
50+	28.5	37.2	24.1	10.3

**2.6 To what extent have you been bothered by feeling hopeless about the future during the last week?**

	Not at all	A little	Quite a bit	Extremely	<i>n</i>
UKR-R	18.2 (132)	40.6 (295)	29.6 (215)	11.7 (85)	727
NOR	63.5 (162203)	27.0 (68802)	6.7 (17166)	2.8 (7087)	255258
18-29	20.9 (27)	40.3 (52)	23.3 (30)	15.5 (20)	129
30-39	19.4 (51)	35.7 (94)	32.3 (85)	12.5 (33)	263
40-49	15.7 (33)	49.5 (104)	26.7 (56)	8.1 (17)	210
50+	16.8 (21)	36.0 (45)	35.2 (44)	12.0 (15)	125

	Not at all	A little	Quite a bit	Extremely
UKR-R	20.4	40.3	27.8	11.4
NOR	58.0	29.1	8.8	4.2
18-29	21.5	40.4	23.5	14.6
30-39	19.3	38.2	31.1	11.4
40-49	16.3	50.2	24.5	9.0
50+	21.6	34.5	33.0	10.9

**Crude proportions % (n)****2.7 To what extent have you been bothered by feeling blue or sad during the last week?**

	Not at all	A little	Quite a bit	Extremely	<i>n</i>
UKR-R	18.2 (133)	45.6 (333)	27.0 (197)	9.2 (67)	730
NOR	63.5 (162091)	28.3 (72257)	6.1 (15515)	2.1 (5282)	255 145
18-29	14.6 (19)	43.8 (57)	30.0 (39)	11.5 (15)	130
30-39	20.8 (55)	41.1 (109)	26.8 (71)	11.3 (30)	265
40-49	15.8 (33)	53.6 (112)	26.3 (55)	4.3 (9)	209
50+	20.8 (26)	43.2 (54)	25.6 (32)	10.4 (13)	125

**Weighted proportions %**

	Not at all	A little	Quite a bit	Extremely
UKR-R	21.5	44.6	25.2	8.7
NOR	58.7	30.4	7.8	3.0
18-29	17.1	43.6	28.2	11.1
30-39	23.2	40.6	25.9	10.3
40-49	16.8	53.7	25.4	4.1
50+	24.1	42.2	24.9	8.8

**2.8 To what extent have you been bothered by worrying too much about things during the last week?**

	Not at all	A little	Quite a bit	Extremely	<i>n</i>
UKR-R	14.1 (103)	50.3 (367)	26.3 (192)	9.3 (68)	730
NOR	45.9 (117345)	43.2 (110317)	8.2 (20937)	2.7 (6788)	255 387
18-29	13.1 (17)	44.6 (58)	27.7 (36)	14.6 (19)	130
30-39	14.0 (37)	50.2 (133)	24.9 (66)	10.9 (29)	265
40-49	13.8 (29)	55.2 (116)	26.7 (56)	4.3 (9)	210
50+	16.1 (20)	47.6 (59)	27.4 (34)	8.9 (11)	124

	Not at all	A little	Quite a bit	Extremely
UKR-R	15.8	50.3	24.7	9.1
NOR	40.0	45.1	10.8	4.0
18-29	14.1	44.7	26.8	14.4
30-39	15.0	50.4	24.6	10.0
40-49	15.1	55.5	24.9	4.5
50+	18.6	48.4	25.6	7.5

		Crude proportions % (n)				Weighted proportions %								
2.9	<b>Do you have any long-term illnesses or health problems?</b>					<i>n</i>								
		Yes	No		Yes				No					
	UKR-R	57.4 (418)	42.6 (310)	728	UKR-R				58.1	41.9				
	NOR	46.4	53.6	255088	NOR				43.6	56.4				
		(118398)	(136690)											
	18-29	44.6 (58)	55.4 (72)	130	18-29				45.1	54.9				
	30-39	52.3 (138)	47.7 (126)	264	30-39				50.9	49.1				
	40-49	59.0 (124)	41.0 (86)	210	40-49				57.2	42.8				
50+	78.9 (97)	21.1 (26)	123	50+	78.6	21.4								
2.9a	<b>How do these illnesses/health problems affect your daily life?</b>					<i>n</i>								
		Not at all	To a small extent	To some extent	To a great extent				Not at all	To a small extent	To some extent	To a great extent		
	UKR-R	2.4 (10)	25.8 (109)	51.1 (216)	20.8 (88)				423	UKR-R	3.4	24.0	48.0	24.6
	NOR	3.9 (4652)	24.3	47.0	24.8				118148	NOR	3.6	23.3	46.7	26.4
			(28653)	(55549)	(29294)									
	18-29	6.6 (4)	23.0 (14)	54.1 (33)	16.4 (10)				61	18-29	8.0	24.4	51.2	16.4
	30-39	2.2 (3)	33.3 (46)	51.4 (71)	13.0 (18)				138	30-39	1.9	35.6	48.6	14.0
	40-49	0.8 (1)	26.2 (33)	55.6 (70)	17.5 (22)				126	40-49	0.7	25.7	55.6	18.1
50+	2.1 (2)	16.5 (16)	42.3 (41)	39.2 (38)	97	50+	2.9	16.5	42.2	38.4				

		Crude proportions % (n)					Weighted proportions %				
<b>2.10</b>	<b>Do you have any disabilities, or do you have problems due to injury?</b>										
		Yes	No		<i>n</i>		Yes	No			
	UKR-R	16.8 (122)	83.2 (604)		726	UKR-R	19.1	80.9			
	NOR	25.2 (64359)	74.8 (190914)		255 273	NOR	21.9	78.1			
	18-29	10.2 (13)	89.8 (115)		128	18-29	10.5	89.5			
	30-39	15.2 (40)	84.8 (224)		264	30-39	16.4	83.6			
	40-49	15.9 (33)	84.1 (175)		208	40-49	17.3	82.7			
	50+	28.0 (35)	72.0 (90)		125	50+	29.4	70.6			
<b>2.10a</b>	<b>How do these disabilities (problems) affect your daily life?</b>										
		Not at all	To a small extent	To some extent	To a great extent	<i>n</i>	Not at all	To a small extent	To some extent	To a great extent	
	UKR-R	3.3 (4)	19.8 (24)	40.5 (49)	36.4 (44)	121	UKR-R	4.5	18.2	36.8	40.5
	NOR	1.6 (1027)	24.1 (15513)	52.0 (33437)	22.2 (14265)	64 242	NOR	2.1	25.0	50.1	22.9
	18-29	7.7 (1)	46.2 (6)	15.4 (2)	30.8 (4)	13	18-29	11.8	44.1	12.9	31.2
	30-39	2.4 (1)	19.0 (8)	45.2 (19)	33.3 (14)	42	30-39	3.9	21.3	42.1	32.7
	40-49	3.0 (1)	18.2 (6)	51.5 (17)	27.3 (9)	33	40-49	2.4	21.4	52.4	23.8
	50+	3.1 (1)	12.5 (4)	31.2 (10)	53.1 (17)	32	50+	2.5	10.2	31.6	55.7
<b>2.12</b>	<b>How many times per year do you usually need health services for long-term health problems or disabilities?</b>										
		0-1	2-4	5 or more	<i>n</i>		0-1	2-4	5 or more		
	UKR-R	31.5 (167)	49.3 (262)	19.2 (102)	531	UKR-R	30.0	47.8	22.3		
	18-29	36.9 (31)	42.9 (36)	20.2 (17)	84	18-29	36.1	43.0	20.9		
	30-39	36.6 (68)	49.5 (92)	14.0 (26)	186	30-39	38.8	46.2	15.1		
	40-49	30.3 (47)	51.0 (79)	18.7 (29)	155	40-49	32.1	49.3	18.7		
	50+	20.0 (21)	51.4 (54)	28.6 (30)	105	50+	16.2	51.2	32.6		

Crude proportions % ( <i>n</i> )						Weighted proportions %				
<b>2.13</b>	<b>Have you needed to see a doctor, psychologist, or other health professional during the last 12 months?</b>									
	Yes, prior to arrival in Norway	Yes, both prior to and since arrival in Norway	Yes, since arrival in Norway	No, have not needed to	<i>n</i>		Yes, prior to arrival in Norway	Yes, both prior to and since arrival in Norway	Yes, since arrival in Norway	No, have not needed to
UKR-R	12.1 (88)	39.1 (284)	19.5 (142)	29.3 (213)	727	UKR-R	12.8	39.5	17.8	30.0
18-29	12.4 (16)	39.5 (51)	16.3 (21)	31.8 (41)	129	18-29	14.1	36.4	14.7	34.8
30-39	14.0 (37)	31.4 (83)	23.5 (62)	31.1 (82)	264	30-39	14.0	30.0	22.8	33.2
40-49	10.1 (21)	43.8 (91)	17.3 (36)	28.8 (60)	208	40-49	9.5	43.0	16.5	31.0
50+	10.4 (13)	47.2 (59)	18.4 (23)	24.0 (30)	125	50+	11.2	45.6	18.8	24.4
<b>2.13a</b>	<b>Have you had a consultation with a doctor, psychologist or other health professional during the last 12 months?</b>									
	Yes, in Norway	Yes, both in Norway and outside of Norway	Yes, outside of Norway	No	<i>n</i>		Yes, in Norway	Yes, both in Norway and outside of Norway	Yes, outside of Norway	No
UKR-R	32.9 (168)	26.6 (136)	20.9 (107)	19.6 (100)	511	UKR-R	32.1	27.1	21.9	18.9
18-29	28.4 (25)	22.7 (20)	22.7 (20)	26.1 (23)	88	18-29	27.5	20.7	25.7	26.1
30-39	33.1 (60)	22.1 (40)	23.2 (42)	21.5 (39)	181	30-39	33.9	20.0	24.1	22.1
40-49	34.5 (51)	29.1 (43)	19.6 (29)	16.9 (25)	148	40-49	32.3	30.5	19.8	17.4
50+	34.4 (32)	34.4 (32)	17.2 (16)	14.0 (13)	93	50+	38.0	31.3	17.9	12.9



Crude proportions % (n)					Weighted proportions %					
5.1	<b>Have you received information in a way that you understand about the health services you can use in Norway?</b>									
		Yes	To some extent	No	<i>n</i>		Yes	To some extent	No	
	UKR-R	37.5 (273)	50.4 (367)	12.1 (88)	728	UKR-R	39.3	48.8	11.9	
	18-29	43.8 (57)	44.6 (58)	11.5 (15)	130	18-29	44.2	45.4	10.5	
	30-39	33.0 (87)	52.7 (139)	14.4 (38)	264	30-39	33.0	51.6	15.4	
	40-49	38.1 (80)	50.0 (105)	11.9 (25)	210	40-49	36.3	49.8	13.9	
50+	39.5 (49)	52.4 (65)	8.1 (10)	124	50+	43.3	50.0	6.8		
5.2	<b>Do you know how to contact a doctor or other healthcare professional if you need help?</b>									
		Yes	To some extent	No	<i>n</i>		Yes	To some extent	No	
	UKR-R	48.5 (351)	42.5 (312)	8.9 (65)	728	UKR-R	48.2	42.9	8.9	
	18-29	59.9 (78)	31.7 (40)	8.5 (12)	130	18-29	60.0	30.8	9.2	
	30-39	46.7 (124)	43.1 (114)	10.1 (26)	264	30-39	47.0	43.2	9.8	
	40-49	42.4 (93)	47.8 (100)	9.8 (17)	210	40-49	44.3	47.6	8.1	
50+	46.3 (56)	46.0 (58)	7.6 (10)	124	50+	45.2	46.8	8.1		
5.3	<b>Have you received the health care you feel you have needed while in Norway?</b>									
		Yes	To some extent	No	<i>n</i>		Yes	To some extent	No	
	UKR-R	31.3 (196)	42.7 (268)	26.0 (163)	627	UKR-R	32.1	41.9	26.0	
	18-29	37.4 (43)	33.0 (38)	29.6 (34)	115	18-29	38.2	32.5	29.3	
	30-39	29.4 (67)	47.8 (109)	22.8 (52)	228	30-39	29.3	47.5	23.2	
	40-49	31.0 (53)	41.5 (71)	27.5 (47)	171	40-49	31.3	40.1	28.6	
50+	29.2 (33)	44.2 (50)	26.5 (30)	113	50+	32.0	43.8	24.2		

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