Liu *et al. Globalization and Health* (2025) 21:25
https://doi.org/10.1186/s12992-025-01114-7

Globalization and Health

REVIEW

Open Access

Transition in care interventions for Refugee, Immigrant and other Migrant (RIM) populations: a health equity-oriented scoping review

Amy Liu[1], Yasaman Yazdani[2], Manahel Elias[3], Krisha Patel[4], Divine Budzi[5], Ammar Saad[6] and Kevin Pottie[5*]

Abstract

Background Transition in care involves the transfer of responsibility for aspects of patient and public health care among providers, institutions, and health and social sectors. Indeed, health systems increasingly require individuals to interact with a number of providers, in a number of health settings, and across multiple points of time. Refugees, immigrants, and migrant (RIM) individuals face several precarious transitions, language and cultural barriers, and unfamiliarity with public health systems, which may result in health inequities. A greater understanding of the interventions that facilitate effective transitions in care for RIM populations is needed to improve health outcomes in this vulnerable group.

Methods This health equity-oriented scoping review aimed to report the characteristics of Transition in Care (TiC) interventions for RIM populations and identify which equity-relevant characteristics of RIM populations were targeted by these interventions. We searched MEDLINE, Embase, and Scopus for eligible studies published in English from the year 2000 onward. Two independent reviewers screened search records and extracted relevant data from included studies. We used a public health and health equity lens to identify the social determinants of health that were addressed by TiC interventions.

Results Our systematic search identified a total of 42 studies, evaluating the impact of 38 unique interventions or public health programs. The delivery of interventions involved various healthcare sectors and professionals. Additionally, some programs enlisted non-medical personnel to provide health-related education and support. The most promising programs for health outcomes involved health navigation or providing public health education for RIM populations. The most common equity-relevant characteristics considered in these studies were language, cultural background, and education level.

Conclusion This novel scoping review reveals a diverse range of public health interventions that are being implemented to improve national and international transitions in care for RIM populations, with the most promising from healthcare navigation and health education. Future research should target transitions to digital health technologies, public health, hospital-to-home, and pediatric to adult care gaps to ensure smoother transitions in care for equity-deserving populations navigating new healthcare systems.

Keywords Transition in care, Public health, Global health, Health equity, Social Determinants of Health, Civil society, Refugees, Immigrants

*Correspondence:
Kevin Pottie
kpottie@dal.ca
Full list of author information is available at the end of the article

Introduction

Transitions in care refer to the handover of responsibility and accountability for various aspects of public health and patient care as it moves between different providers, institutions, sectors or even digital run services [1, 2]. Most health systems are structured such that individuals need to seek health services from various care providers across different locations, resulting in multiple local and international transitions in care. This is particularly evident for individuals undergoing changes in health status, aging, social shifts in care needs, or changes in their care location [2]. Additionally, the increased prevalence of chronic illness and regulations within healthcare systems necessitate engaging with multiple providers in various locations over time [3].

Patients face risks for adverse events as they transition into and across various parts of the healthcare system. These transitions in care introduce the potential for patient and public health safety concerns, as it heightens the risk of losing vital clinical data and necessitates a greater level of care coordination [1]. Diseases such as hepatitis C and HIV are now very treatable, but only if they succeed in transitions in care. Interventions have begun to emerge to mitigate risks within coordination and continuity challenges [4, 5]. A comprehensive approach to transitions in care should encompass logistical measures, thorough patient and family education, as well as seamless collaboration among the healthcare practitioners [6–8]. Four pillars of transitional care activities suggested by Coleman et al. include medication management, patient-centered health records, follow-up visits with providers and specialists, and patient knowledge about red flags and adverse medical and drug effects [8].

Refugees, immigrants, and migrant (RIM) populations are among the most susceptible groups during healthcare transitions [9]. This vulnerability arises from several factors, including linguistic and cultural barriers and unfamiliarity with healthcare systems, resulting in health inequities [10]. RIM individuals often experience a series of transitions that begin in their country of origin, continue through transit countries, and culminate in the destination country. These international transitions often involve handoffs of care between healthcare systems with differing standards, protocols, and resources [11]. Moreover, once settled in the destination country, RIM populations often navigate additional transitions within the local healthcare system. For example, many refugees may initially receive specialized care in dedicated refugee health clinics, but later transition to community-based primary care providers or specialized medical services [12]. Challenges are frequently encountered during these transitions, including gaps in communication, inconsistent care coordination, and systemic barriers to accessing services. Additionally, RIM populations often have complex health needs, such as untreated chronic conditions or trauma-related mental health issues, which require coordinated, multidisciplinary care that may not be readily available or well-integrated across different healthcare settings [11]. Without targeted interventions, these transitions exacerbate health inequities and can lead to unsafe and costly outcomes [13, 14].

Despite early progress in the field, there is still a limited understanding of the current transition in care interventions for RIM populations, particularly regarding how these interventions address equity-relevant characteristics such as language barriers, cultural differences, and systemic inequities. There is a lack of consensus among studies focused on migrant populations concerning the definition of transitions in care and the associated terminology. Although RIM populations face several distinct transitions in care, existing literature has traditionally framed these challenges within the context of interventions aimed at improving access to care, quality of care, or continuity of care. However, there is a growing recognition of the unique nature of these transitions, which include international transitions, shifts from refugee clinics to community clinics, and movements from primary care to specialized medical services. Our scoping review aims to characterize transition in care interventions for RIM populations, and to identify the equity-relevant characteristics of RIM populations targeted by these interventions.

Methods

This scoping review was developed based on the approaches established by Arksey and O'Malley [15] as well as the scoping review methodology by the Joanna Briggs Institute (JBI) [16]. We ensured that the reporting of our review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Extension for Scoping Reviews (PRISMA-ScR) framework [17]. The reported studies were not assessed for methodological quality. The protocol for this study was registered in OSF Registry [18].

Eligibility criteria

We targeted studies that evaluate a transition in care intervention for RIM populations, with migrant populations including asylum seekers, migrant workers, and international students. The intervention in the studies may have targeted patients, healthcare providers, public health or health systems. We included experimental studies (e.g., randomized and non-randomized controlled trials), quasi-experimental studies, observational studies, and qualitative evaluation studies of TiC interventions

written in English and published in the year 2000 and onward. We excluded publications that did not evaluate an intervention, such as opinion pieces, commentaries, and editorials.

Search strategy

We used a focused search strategy (Appendix 1) developed in consultation with a health sciences librarian at Western University (London, ON) to search the following databases: Medline (via OVID), Embase (via OVID), Scopus, Cumulative Index of Nursing and Allied Health Literature (CINAHL) (via EBSCO), and the Cochrane Library (via OVID). We also contacted experts in the refugee and migrant health field, who provided insights into key studies or resources that might be relevant for our scoping review. While transition in care is not a new research domain, there is a lack of consensus on the definition of transition in care and related terms among migrant populations. However, given our discussion with members of the Canadian Collaboration for Immigrant and Refugee Health and the Western University research librarian, we decided to include overlapping terms that may signify transition in care, such as access to care, continuity of care, care coordination and health care navigation.

Screening and study selection

All records yielded by our search were uploaded to Covidence [19], a web-based platform designed for managing systematic review data, to facilitate the identification and removal of duplicates and screening of records. Two independent reviewers conducted title and abstract and full-text screening. Any screening conflicts were resolved through discussion in team meetings and through the consultation of a third senior team member.

Data extraction and management

Two reviewers independently extracted relevant data from included studies using a piloted data extraction sheet (Appendix 2). The two lead investigators reviewed the collected information to identify any inconsistencies and resolved discrepancies through team discussions. We extracted data on the interventions' theory, rationale, and activities. Furthermore, we analyzed which equity-relevant characteristics (also known as a social determinant of health) of RIM populations were targeted by these interventions and identified the approaches employed to address them.

To facilitate this process, we utilized the PROGRESS + framework."PROGRESS-Plus is an acronym used to identify characteristics that stratify health opportunities and outcomes [20]" In our study we examined the equity-relevant characteristics across 11 domains: Place of residence, religion, occupation, gender, race and/or ethnicity, cultural background, language, education, socioeconomic status, social capital, and other characteristics (" + ") that refers to age, disability, and time-dependent relationships.

Synthesis of the results

We described in narrative form, and using counts and percentages, the characteristics of included TiC interventions, including their target populations, activities, and modes of delivery (e.g., facilitators), and barriers and motivators to implementation. Whenever possible, we tabulated the counts and percentages. Furthermore, we descriptively analyzed the number and percentage of TiC interventions that addressed the equity characteristics of their intended recipients by PROGRESS + domain, visually presented them in a bar chart, and tabulated the most common approaches to address each of the PROGRESS + domains.

Limitations of scoping reviews

Scoping reviews aim to map and characterize existing research. They also are useful to identify potentially new and useful interventions, existing best practices, and to document and change specific health outcomes. To be inclusive and comprehensive, different study designs are included. Thus, critical appraisals and study quality assessments are not included in scoping review methods. Without high quality critical appraisals of studies, we are not able to statistically synthesize outcome results, and we must also be cautious and precise when reporting the certainty of finding around efficacy and effectiveness.

Results

Search findings

Our systematic search yielded 5976 records. After removal of duplicates, 3356 records remained. Two additional studies were obtained by consultation with experts in the field. After title and abstract and full-text screening, 42 studies were included, evaluating the effect of 38 unique TiC interventions/programs (Fig. 1).

Characteristics of included studies

Table 1 displays the summarized characteristics of included studies. Most studies used a pre-post intervention design [21–33], while nine studies were randomized clinical trials [13, 34–41], four of which had a cluster-randomized design [38–41]. Most studies were conducted in high-income countries, mainly the United States, Australia, and Germany.

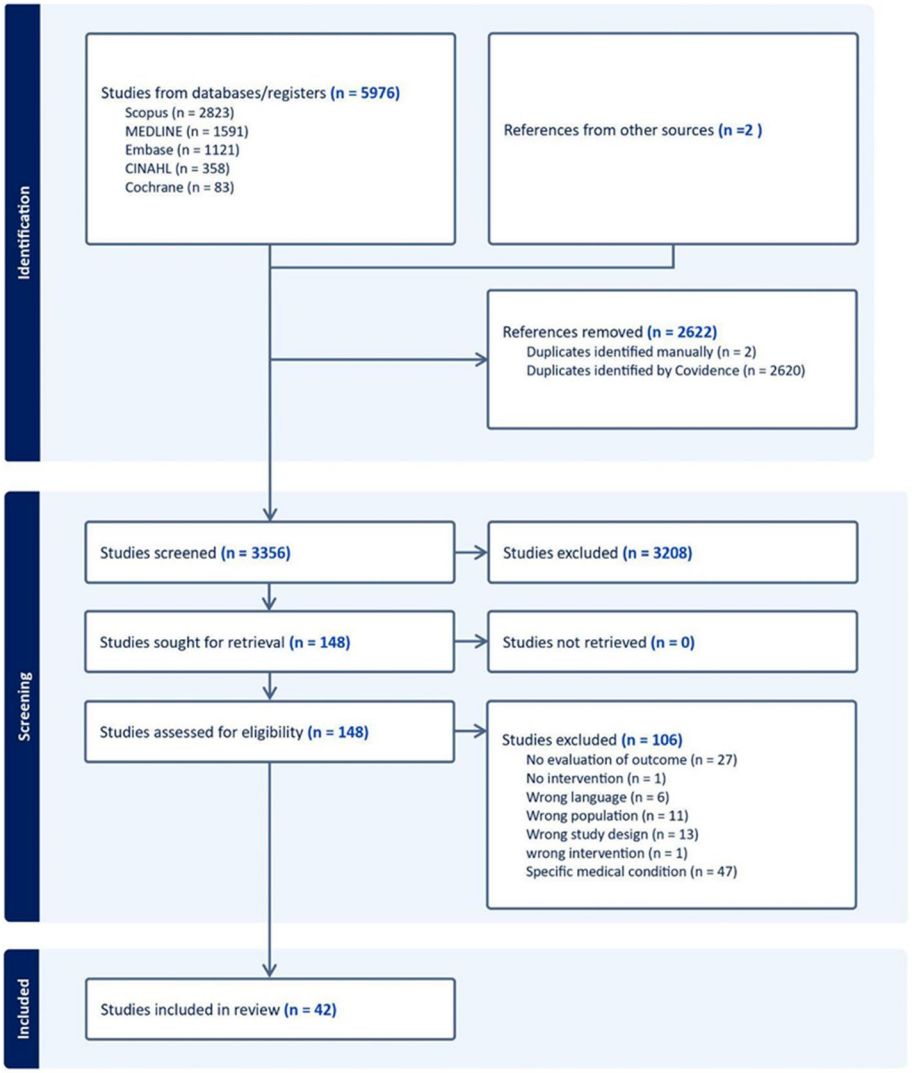

Fig. 1 PRISMA-ScR flow diagram

Types of TiC interventions

Detailed descriptions of the included TiC interventions are shown in Table 2. There exists a range of TiC activities reported as part of the included programs and interventions. Many interventions aimed to support the RIM population in navigating the healthcare systems of host countries. These interventions typically followed one of two approaches: training community members about the healthcare system, available services, and pathways [27, 31, 37, 42–44] or utilizing culturally sensitive mediators who guided patients and their families to access appropriate services upon referral by healthcare providers [26, 41, 44–49]. Examples of the first approach include educating immigrants about the Danish healthcare system, training community members in the United States about available healthcare services, enhancing healthcare navigation skills among South-East Asian women in Taiwan, educating immigrants in Ontario, Canada about navigating the healthcare system and available services, and training Bhutanese refugee community members to navigate healthcare systems effectively. Examples of the second approach include involving facilitators to provide tailored action plans for refugees in Australia, coordinating care for immigrants in the United States through caseworkers and cultural mediators, supporting immigrant children with cancer and their families through various stages of their disease in Spain, utilizing caseworkers to provide culturally appropriate primary care for refugees in Canada, improving patient flow for refugees and asylum seekers in emergency departments in Australia with

Table 1 Summarized characteristics of included studies

Study Characteristic	n (%)
Host country	
Canada	3 (7.1%)
US	15 (35.7%)
Australia	8 (19.0%)
Germany	4 (9.5%)
Other	12 (28.6%)
Type of TiC intervention	
Patient navigation	11 (26.2%)
Education	8 (19.1%)
Combination intervention	12 (28.6%)
Patient held records	2 (4.8%)
Medication management	2 (4.8%)
Programs	4 (9.5%)
Other	3 (7.1%)
Target recipients of the intervention	
Health care providers	2 (4.8%)
RIM	32 (76.2%)
Both	7 (16.7%)
Other	1 (2.4%)
RIM sub-populations	
Refugees	17 (40.5%)
Immigrants	12 (28.6%)
Other Migrants	9 (21.4%)
Mixed	4 (9.5%)
Duration of program	
Less than 6 months	12 (28.6%)
6 months- 1 year	8 (19.05%)
More than 1 year	11 (26.2%)
Unclear	11 (26.2%)
Study design	
Randomized controlled trials	9 (16.7%)
Pre-post intervention	13 (31.0%)
Quasi-experimental study	3 (7.1%)
Observational study	5 (7.1%)
Other	12 (38.1%)
Type of outcome(s) reported	
Clinical	21 (50.0%)
Knowledge	15 (35.7%)
Qualitative	15 (35.7%)
Quality of life	7 (16.7%)

the help of nurses experienced in immigrant care, and addressing treatment-related cultural issues through transcultural mediation for families of immigrant children in France. Navigators, or interventions that train individuals to navigate the healthcare system, were among the most studied and effective TiC interventions to improve health outcomes.

Educating and improving RIM populations' health literacy was another significant activity of many TiC interventions. Some examples of health literacy areas that were targeted by TiC interventions included palliative and end of life care, oral health, mental health, vaccine acceptance, and pediatric health [21, 22, 28, 48, 56, 57]. Few studies showed the effectiveness of improving health literacy; these interventions demand considerable time, resources and patient engagement and health education skills.

There were programs and interventions that provided a combination of services and activities for RIM population, such as comprehensive health assessment and screening, consultation, primary care visit, referrals to other social and medical sectors, providing professional interpreters and culturally adapted and accessible services in specific fields such as mental health, chronic conditions, antenatal care, oral health, cancer and rehabilitation [20, 32, 44, 49–51, 55, 60, 61]. Examples of these programs offering a range of services to facilitate the smooth transition of RIM care in host countries include the Healthy Fit Program targeting general health among the Hispanic population in the United States [51], the multi-disciplinary management of non-communicable diseases among refugees in Jordan by Médecins Sans Frontières [50], physical assessments and referrals for newly arrived Latino immigrants in Charlotte, USA [52], the Healthy Kids Outreach Program targeting uninsured immigrant children [49], the AMOR program providing comprehensive care for immigrant children with cancer in Spain, an antenatal care program for immigrant women in Australia [44], a free mental health program for Palestinian refugees in Lebanon [60], and the "Bridging the Gap" initiative focusing on women's health among refugee women in Australia [61]. These promising, population-focused interventions enhance health outcomes, but they require intensive community collaboration, organizational trust, and time to show TiC improvement.

Target recipients of TiC interventions

The majority of TiC interventions targeted patients and/or their families [13, 21, 22, 25, 26, 28–37, 42–44, 46, 48–59, 61], whereas some interventions targeted both the patient and the provider (Table 1) [23, 24, 39, 45, 47, 50, 60]. For example, in the "Transcultural Mediation Program" which has been conducted in a pediatric hospital in France, both medical staff involved in the care of children as well as immigrant patient's family were part of the transcultural mediation activities to decide the best management plan that fits the families cultural lived experiences and world views [45]. Similarly, a cultural mediator that was played by a case manager/case worker, facilitated

Table 2 Description of TiC interventions

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Al Alawneh, 2019 [34]	Randomized controlled trial	Home medication management review by pharmacists	Jordan	Syrian refugees	109	< 6 months	Pharmacists, physicians	Treatment-related problems, medication knowledge and adherence	Information documented during home visit; questionnaires
Alalawneh, 2022 [36]	Randomized controlled trial	Home medication management review by pharmacists	Jordan	Syrian refugees	109	< 6 months	Pharmacists, physicians	Treatment-related problems, medication knowledge and adherence	Information documented during home visit; questionnaires
Ahmad, 2022 [35]	Randomized controlled trial	Screening for mental health conditions through Interactive Computer-Assisted Client Assessment Survey (ICCAS) and sending the point-of-care reports to the clinician that summarize risks, local resources, and recommendations	Canada	Chinese immigrants	50	Not described	Nurse practitioners, Nurses, Dietitian, Social worker, and Health Promoter, physicians, professional interpreters	Mental health symptoms, referrals and discussions	Exit surveys and chart review of visit
Ansbro, 2021 [50]	Retrospective cohort	Multidisciplinary primary care model for management of Non-Communicable Diseases (NCD) by Medecins Sans Frontieres (MSF), offering medical consultation, health education, counseling, psychosocial support, home visit service, social work, and physiotherapy	Jordan	Vulnerable populations including refugees	4044	> 1 year	Non-specialist doctors, family medicine specialist, nurses, trained health educators, psychosocial counselors, pharmacists, physiotherapists, social worker, and a home care team	Health-condition improvement	Measurement of blood pressure (BP) and HbA1c or capillary fasting blood glucose (FBG)

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Brown, 2018 [51]	Longitudinal observational study	Healthy Fit program: a baseline health screening with referrals to clinical and community resources, followed by periodic telephone interviews and distribution of cancer screening vouchers, vaccines, heart health resources, and culturally appropriate health education materials, with community health workers promoting physical activity and social engagement	USA	Hispanic populations	514	6 months to 1 year	Community health workers (CHWs)	Screening, immunization, lifestyle changes. medication adherence	Scripted follow-up telephone interview
Coffman, 2017 [52]	Mixed method	Community health intervention which included education, physical assessment, referrals from primary care providers, data collection, and access to healthcare services	USA	Recently arrived Latino immigrants	216	6 months to 1 year	Primary care providers, community organizations that offered education on wellness and behavior change, professional interpreters	Primary care visits, health encounters, emergency department visits and access to social and health services	Focus groups and phone surveys, examining medical records
De Voogd, 2020 [48]	Mixed method	Interactive sessions, designed for community education on palliative care, focusing on quality of life, patient autonomy, care shaping, and end-of-life priorities	Netherlands	Immigrants	136	< 6 months	Ethnic-matched community educators from migrant network organizations	Knowledge and attitude to palliative care	Questionnaires, observations, interviews with educators, interviews with participants

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Documet, 2020 [21]	Pre-post	De la Mano con la Salud program: A participatory initiative, training 11 Latino immigrants as community promotores, collaboratively developing action plans, and referring participants to services and community resources, to enhance perceived social support	USA	Latino immigrant men	182	6 months to 1 year	Community health workers (promotores)	Having a usual source of care, doctor and dentist visits, social support, health insurance, binge drinking and depression symptoms	Questionnaires (administered face-to-face)
Dougherty, 2021 [22]	Pre-post	Delivering culturally modified new parent sessions to grandmothers and new moms not connected to health services	Australia	Bangla or Mandarin speaking women	30	< 6 months	Family Health Nurses (CFHNs) with an interpreter and Bilingual Community Researchers (BCRs)	Health literacy	Questionnaires
Farokhi, 2018 [23]	Pre-post	An oral health literacy presentation using an illustrated booklet, followed by a dental team demonstration on brushing and flossing techniques	USA	Refugees, medical and nursing students and community members	151 refugees, 38 medical students, 34 nursing student and 17 community member	< 6 months	Dental and dental hygiene students and faculty, certified interpreters	Oral health literacy	Questionnaires

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Ghahari, 2020 [53]	Mixed-method	ACHIEVE program: A healthcare access intervention, covering topics like the Ontario healthcare system, family doctors, healthcare and symptoms communication, overcoming barriers, and where to receive mental health and sexual health care	Canada	Immigrants	46	< 6 months	Program facilitators who had first-hand experience as Canadian immigrants	Health navigation score	Health Education Impact Questionnaire (heiQ) and"Confidence in Health Access"questionnaire
Hill, 2008 [49]	Quasi-experimental	Healthy Kids program: community outreach, offering comprehensive capitated medical, dental, and behavioral health services provided by the Los Angeles (LA) Care health plan. Features sliding-scale monthly premiums and co-payments for a selection of services, and a three-month wait period for kids with employer-sponsored insurance	USA	Uninsured children including undocumented migrant children	1082	> 1 year	Outreach workers	Having a usual source of care, medical and dental care services, having a preventive care and ambulatory care visit, confidence in access to care, financial burden of family	focused group with parents, administrative data, surveys
Hsu, 2015 [24]	Pre-post	Lay Health Advisor (LHA) trainees underwent 15 weeks of training, with the goal of teaching immigrant women basic oral hygiene	Taiwan	Vietnamese or Indonesian Women	37	Not described	Team of oral health-care experts and licensed dentists	Oral health literacy and health behavior	Immigrant Women's Oral Health questionnaire

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Jahn, 2018 [39]	Cluster randomized design-Qualitative evaluation	Patient-held Health Record (PHR) program: Using a small booklet including patient information about the PHR in ten languages, physician instructions, document pocket, chronic disease records, medication plan, consultation documentation, test results, and upcoming appointments	Germany	Physician and nurses providing care to asylum seekers	11 physicians, 6 nurses	> 1 year	The PHR was developed by the Department of General Practice and Health Services Research at the University Hospital Heidelberg	Transfer of medical history and health-related information	Interviews
Jervelund, 2017 [37]	Randomized controlled trial	Providing a booklet (translated into the eight most commonly spoken languages) and a course about the Danish healthcare system including topics like system organization, provider access, confidentiality, interpreter use, prescriptions, preventive services, and system culture and visit by GP to discuss healthcare system	Denmark	Immigrants	1044	6 months to 1 year	Professional Danish language teachers, teaching assistants and the project leader and GPs	Healthcare-seeking behavior and health care utilization	Healthcare-seeking case-based questionnaire

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Jervelund, 2018 [13]	Randomized controlled trial	Providing a booklet (translated into the eight most commonly spoken languages) and a course about the Danish healthcare system including topics like system organization, provider access, confidentiality, interpreter use, prescriptions, preventive services, and system culture and visit by GP to discuss healthcare system	Denmark	Immigrants	1044	6 months to 1 year	Professional Danish language teachers, teaching assistants and the project leader and GPs	Healthcare-seeking behavior and health care utilization	Healthcare-seeking case-based questionnaire
Lachal, 2019 [45]	Mixed method	Transcultural mediation consultations: Scheduled by doctors to address treatment-related cultural issues with patients and families	France	Families of immigrant children	21	Not described	Mediation team: Physician–mediator with training in transcultural care, and transcultural mediator from the same culture as the patient's parents	Physician access to health-related information, understanding of the disease, communication, hospital service use	Data from the hospitals discharge database and semi directive interviews
Lambert, 2018 [54]	Cross-sectional study	Personal Assistance Program: Oral health checks and professional reference letter as well as a dental goody bag, containing a toothbrush and toothpaste which could be renewed along with a course on oral health development and disease prevention	Belgium	Undocumented immigrants	204	> 1 year	Trained dentists and community oral health workers	Number of missed appointments	Appointment data in registration system

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Lichtl, 2019 [25]	Pre-post	On-site walk-in clinic which offered consultations to address acute illnesses and provide preventive check-ups for asylum seekers	Germany	Asylum seekers	1376	> 1 year	Hospital staff	Ambulatory care sensitive hospitalization	Medical records
Long, 2021 [42]	Mixed method	An education forum for education sector staff working with refugee-like families included presentations on services, eligibility, and access, along with case discussions, migration stories, networking, and small group discussions	Australia	People from refugee-like background	11	< 6 months	Refugee Focused Health services (RFHS) representatives	Knowledge of RFHS organization and referrals to this organization	Surveys
McBride, 2016 [47]	Mixed method	Refugee Health Nurse Liaison: evaluation of mental, physical, and social health of asylum seeker or refugee patients that presented to the Emergency Department. Capacity building, staff education and training, and the creation of cooperative networks to improve patient flow both within and between services	Australia	Asylum seekers and refugees	946	6 months to 1 year	Registered nurses with experience in refugee health	Experience of patient care	Record keeping, patient feedback survey

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
McMurray, 2014 [26]	Pre-post	Integrated primary care: The refugee health clinic alongside reception house, offers culturally appropriate primary care which involves partnerships with case workers, translation services, comprehensive assessments, and international medical graduates'input	Canada	Government-assisted refugees	872	Not described	Clinic staff including family physicians, IMGs, case workers, nurses, residents	Wait time, referral to specialists and non-physician specialist health care provider, Knowledge of mental health care system	Intake and management logs and exit interviews
Michael, 2019 [27]	Pre-post	An algorithm to streamline refugee care coordination, which involved overseas medical examinations, additional screenings, appointment scheduling, Medicaid assignment, and initial office visits with patient-centered medical home (PCMH) providers within 30 days of refugees'arrivals, facilitated by information sharing among the Refugee Resettlement Agency (RRA), department of public health (DPH) and PCMH	USA	Refugees	285	Not described	Local RRA, DPH and DPH nurses, PCMH providers	Time required to establish health care in PMCH, emergency department visit, provider knowledge of refugee status	EMR chart review

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Miner, 2017 [32]	Pre-post	Home healthcare services which aimed to support patients and caregivers by assisting with illness management and knowledge	USA	Refugees	40	Not described	The Home health care (HHC) team worked with prominent refugee community groups, advocacy organization, and health care providers	Anxiety and depressive symptoms, pain level, medication management, activities of daily living management	Chart review
Nacif-Gomera, 2013 [44]	Retrospective cohort	AMOR II program: offering comprehensive care and support to pediatric cancer patients and their families across all stages of illness, focusing on diagnosis, orientation, information, special needs, and ongoing assistance	Spain	Immigrant children with cancer	114	> 1 year	Medical team, psychological, and social workers	Cancer survival and knowledge of disease and emotional support	Examining medical records; interviews, charts, constant evaluation
Owens, 2016 [55]	Qualitative study	Up until eight months gestation, pregnant women received care at a community-based antenatal care program that specialized in providing maternity care to multicultural and non- English-speaking women	Australia	Immigrant pregnant women	12	> 1 year	Midwives, doctors, interpreters	Knowledge of pregnancy and confidence of asking questions	Semi-structured interviews

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Pacheco, 2012 [28]	Pre-post	Development and implementation of a training module for current Promotoras (community health workers), following with participant recruitment and intervention phase of participant follow-up calls or visits and referrals	USA	Legal and undocumented Latino immigrants	20 promotoras, 423 community member	< 6 months	Promotoras, faculty members in the Department of Health Sciences (developed the training curriculum)	Enrollment in health insurance, Having a regular source of care, age-appropriate preventive care, self-efficacy	Surveys (measuring healthcare access indicators), interviews
Robertson, 2019 [56]	Non-randomized trial	The Somali Health Realization intervention: A culturally sensitive, community-based educational program that uses role-playing, storytelling, and interactive sessions to reduce psychological problems brought on by trauma and address issues related to refugee migration and acculturation	USA	Somali refugee women	65	< 6 months	Not mentioned	Positive coping subscales of distancing, self-control, seeking social support, positive appraisal and depression symptoms	Questionnaire
Salt, 2017 [29]	Pre-post	The initiative used the RHS- 15 screening instrument to identify mental health conditions among refugees and provided the Positive Wellness (PW) intervention, which included support group sessions aimed at healing, stigma reduction, symptom detection, and empowerment	USA	Refugee women	12	Not described	The Center for Refugee Services (CRS) director and interpreters	Mental health screening	Surveys

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Sharma, 2023 [46]	Mixed method	Caseworker-Cultural Mediators (CCM) program: providing linguistically and culturally appropriate care, assisted by bilingual caseworker-cultural mediators. This includes facilitating care coordination, aiding in the understanding of medical information, patient advocacy, and community engagement	USA	Immigrants	7 patients, 1 family member, 6 caseworker, 5 physicians, 3 nurses and 1 social worker	< 6 months	CCMs (who are certified medical interpreters), managed by a nurse manager	Experience of patient care	Semi-structured interviews
Sheikh, 2009 [33]	Pre-post	A health promotion campaign aimed at Sub-Saharan African refugee parents used ethnic media and social networks to promote a new clinical service for refugee children	Australia	Newly resettled refugee children	112 children	6 months to 1 year	The health promotion leaflet was designed in consultation with stakeholders and interest groups	Clinical attendance, Knowledge, attitude and belief towards infectious diseases and immunization	Interviews: measuring attendance and utilization rates of new service among targeted and non-targeted refugee parents
Straßner 2019 [38]	Cluster stepped-wedge randomized trial	Patient-held Health Record (PHR) program: Using a small booklet including patient information about the PHR in ten languages, physician instructions, document pocket, chronic disease records, medication plan, consultation documentation, test results, and upcoming appointments	Germany	Physicians providing care to asylum seekers	55 physicians	Not described	The PHR was developed by the Department of General Practice and Health Services Research at the University Hospital Heidelberg	Prevalence of missing information, availability of health-related information, satisfaction of physician with health-related information	Questionnaire

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Streuli, 2021 [57]	Qualitative study	SHIFA (Arabic for 'healing'): A community innovation program that involves community-based participation to address healthcare access barriers, specifically pediatric vaccination, through the creation of a culturally sensitive video animation available in Somali and English languages, with the goal of providing appropriate health education by involving the community in design and content	USA	Somali refugees	60	Not described	Utilizing a Co-Design Approach with Somali Community Members: Focus groups were facilitated by individuals holding Master of Public Health (MPH) degrees and PhDs in anthropology	Acceptance of vaccine	Focus group discussions, interviews, and surveys
Tsai, 2018 [43]	Quasi-experimental	Over a 5-month period, a problem-based learning (PBL) approach was used with 10 sessions aimed at enhancing health competences of access and proper utilization of health services through self-directed group learning, empowering participants with critical reasoning and lifelong skills	Taiwan	South-East Asian women	156	< 6 months	Faculty tutors/coaches who were health educators experienced in PBL medical education. Coaches were South-Asian immigrant women trained as medical translators	Health literacy, sense of health control, navigation efficacy, hospitalization	Questionnaires; surveys

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Vais, 2020 [30]	Pre-post	Over a nine-month period, women who exhibited transportation insecurity for upcoming medical appointments were provided with free round-trip Uber Health trips	USA	Refugee women	78	6 months to 1 year	Transportation Network Companies, telephone interpreters (or staff fluent in the patient's preferred language)	No show rates	Clinic no-show rates
Wenner, 2020 [58]	Natural quasi-experimental	Evaluating healthcare access between two health care models in Germany: healthcare voucher (HcV) model, in which refugees obtain paper-based vouchers from the local social welfare office for quarterly access to healthcare, and the newer model, the electronic health card (eHC) model, which is issued by some regions and allows access to healthcare services similar to the standard health insurance card without becoming members of the statutory health insurance	Germany	Newly-arrived refugees	55,452	> 1 year	Healthcare providers	Specialist service use, emergency service use, hospitalization rates for ambulatory care sensitive condition	Claims data

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Yang, 2021 [59]	Longitudinal observational study	APA Health CARE (APAHC): A collaborative project that aims to improve the health status and literacy of the Asian Pacific Islander American community through health fairs that provide health assessments, education on relevant topics, lifestyle recommendations, and referrals to healthcare resources in participants'native languages and in culturally sensitive ways	USA	Asian and Pacific Islander Americans with a significant proportion of immigrants	5635	> 1 year	Client navigators (UCLA undergraduate students of APIA (Asian and Pacific Islander American) descent, medical and nursing students) under the guidance of attending physicians	Lifestyle modification, Obtaining health insurance, doctor visit and referral	Follow-up phone calls
Yassin, 2018 [60]	Qualitative study	Providing residents with free mental health care services over a three-year period	Lebanon	Palestinian refugees and their providers	28 providers' group	> 1 year	Social workers, clinical assistants, nurses, psychotherapists, and psychiatrists	Stigma and misconception about mental health, mental health treatment seeking	Focus groups

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Yelland, 2020 [61]	Longitudinal observational study	The"Bridging the Gap"initiative: A comprehensive approach to improve care, implementing iterative strategies such as data system reforms for identifying refugee women, a community-informed group pregnancy care model, enhanced interpreter engagement, and data collection through the Birthing Outcome System	Australia	Women of refugee-background	24,794	> 1 year	GPs, maternity hospital clinicians and staff, interpreters	number of patients attending antenatal visit, number of patients that have their first antenatal visit after 16 gestational week	Information in the"Birthing Outcome System (BOS)"
Yun, 2016 [31]	Pre-post	The Health Focal Point initiative: A patient navigator model employing trained community members serving as health educators	USA	Bhutanese refugees	35	6 months to 1 year	Patient navigators ("Health Focal Points") who were bilingual adult refugees	Missing care, Health system knowledge, patient activation level, Post migration living difficulties, physical and mental health measure	Interviews

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Russel, 2021 [40]	Pragmatic, cluster stepped-wedge randomized trial	The OPTIMISE initiative concentrated on four areas: health assessments, refugee identification, the employment of interpreters, and health referral pathways. Over the course of six months, facilitators made at least three 60- to 90-min visits and up to three follow-up calls, partnering with practice teams to enhance healthcare for refugees by developing action plans suited to each practice's requirements and employing local resource materials	Australia	Patients from refugee background	31 practices, 55 physicians, 14,633 patients	> 1 year	Outreach facilitators (GPs and nurses with refugee health experience)	Proportion of patients who underwent a health assessment, Use of interpreting services, level of difficulty for referrals, awareness of language barrier, perceived barrier by physicians	Medicare billing, surveys, patients' EMR, interviews

Table 2 (continued)

Study ID (Author, year)	Study type	Summary of intervention	Intervention setting	Target population	Number of study participants	Duration of intervention	Intervention delivery team	Outcome(s) measured	Outcome measurement(s)
Saito, 2021 [41]	Pragmatic, cluster stepped-wedge randomized trial	The OPTIMISE initiative concentrated on four areas: health assessments, refugee identification, the employment of interpreters, and health referral pathways. Over the course of six months, facilitators made at least three 60- to 90-min visits and up to three follow-up calls, partnering with practice teams to enhance healthcare for refugees by developing action plans suited to each practice's requirements and employing local resource materials	Australia	Patients from refugee background	31 practices, 55 physicians, 14,633 patients	> 1 year	Outreach facilitators (GPs and nurses with refugee health experience)	Proportion of patients who underwent a health assessment, Use of interpreting services, level of difficulty for referrals, awareness of language barrier, perceived barrier by physicians	Medicare billing, surveys, patients' EMR, interviews

care coordination of patients with limited English language proficiency across outpatient, inpatient, and community settings in United States, by ensuring a mutual understanding of medical information and the values of the patient among the clinical staff and the patients and their families [46]. Another nurse-led initiative aimed at supporting refugee and asylum seeker patients in navigating the health care system in Australia, upon presenting to the emergency department, and improving cultural competency of ED staff [47]. Furthermore, some TiC interventions targeted individuals in the patients' social network, such as *promotoras* (i.e., community health workers, belonging to the community they serve) in the United States, who facilitated access to care for Latino immigrants [28] and education sector staff in Australia, who supported refugee families in navigating the healthcare system [42]. Only one intervention focused on providing training to medical staff in Australia to ensure continuity of care for patients from refugee backgrounds across different care settings [40, 41]. Most population-targeted interventions showed improvement in healthcare process outcomes, such as attending appointments and improving communication, but long-term health outcomes were rarely included in studies.

Delivery of intervention

Different health sectors and health workforce staff were involved in the delivery of TiC interventions including physicians, nurses, pharmacists, dentists, midwives, psychotherapists, students in the health science field, community health workers and other medical staff. One intervention involved international medical graduates in the delivery of responsive and culturally appropriate primary care to refugees [26]. Some interventions engaged non-medical members to provide health-related support for RIM populations, such as language teachers [13, 37]. Communication support, engagement of lay community health workers, and training healthcare providers enhanced patient visits, but coordination is a challenging factor.

Delivery took place in various settings, such as reception centers [19, 37–39] refugee clinics [26, 29, 58, 60], walk-in clinics [25, 35, 40, 41], hospitals [27, 44–47, 61], or outside health care settings (i.e., within the community or even at patient homes) [21–24, 28, 30–34, 36, 42, 43, 48–57, 59].

Although some studies did not specify the duration of the intervention, the majority were conducted over a relatively short period, typically ranging from 6 months to a year.

Outcome evaluation and outcomes assessed

Included studies used a plethora of health, public health, and social outcomes to ascertain the impact of TiC interventions among RIM populations, including but not limited to changes in symptom severity [21, 32, 35, 56], health literacy or health knowledge [22–24, 26, 33, 34, 36, 42–44, 48, 55, 57, 60], patient activation or engagement levels [13, 28, 29, 32, 33, 37, 40, 41, 43, 45–47, 51, 53, 59, 60], or confidence in health access [28, 43, 53, 55]. Some studies analyzed medical record data from hospitals or clinics to ascertain change in access to health and social services, such as the number of emergency department visits [21, 25–28, 30, 31, 38–41, 43, 44, 49, 49, 52, 54, 59, 61]. Again, most interventions had limited measurement of long-term, patient-important health outcomes.

Addressing the health equity of RIM populations

While nineteen studies reported social barriers and/or facilitators to implementing TiC interventions (Appendix 3), a significant number did not address these aspects. Financial issues were the most common barrier, whereas the use of community health workers as advocates and professional interpreter services in the delivery of the intervention were the most common facilitator, most useful approaches.

Almost all interventions (37 of 38; 97.4%) targeted at least one equity-relevant characteristic of their intended recipients. Out of 11 equity characteristic domains of PROGRESS +(Fig. 2), interventions targeted a median of 4 characteristics (range 0–7; IQR =2). Language (65.8%), education (60.5%), and cultural background (57.9%) were the most common equity-relevant characteristic targeted, with more than half of the interventions implementing activities to cater to their recipients' native language, health literacy levels, and culture, whereas religion and occupation were rarely considered (5.5%, each). Table 3 summarizes the most common approach to address each of the PROGRESS +domains. The range of these influences varied from major impacts, such as improving access to healthcare for vulnerable age groups by providing uninsured immigrant children with health coverage, to addressing logistical barriers by providing transportation to health visits for individuals [29, 49].

Discussion

Our study provides a broad overview of evaluated interventions focusing on improving transitions in care for RIM populations. A variety of often illness-focused programs and population-focused interventions improve safe and effective transition of care and safeguard the continuity of care for vulnerable RIM populations. The most promising studies focused on health care navigation

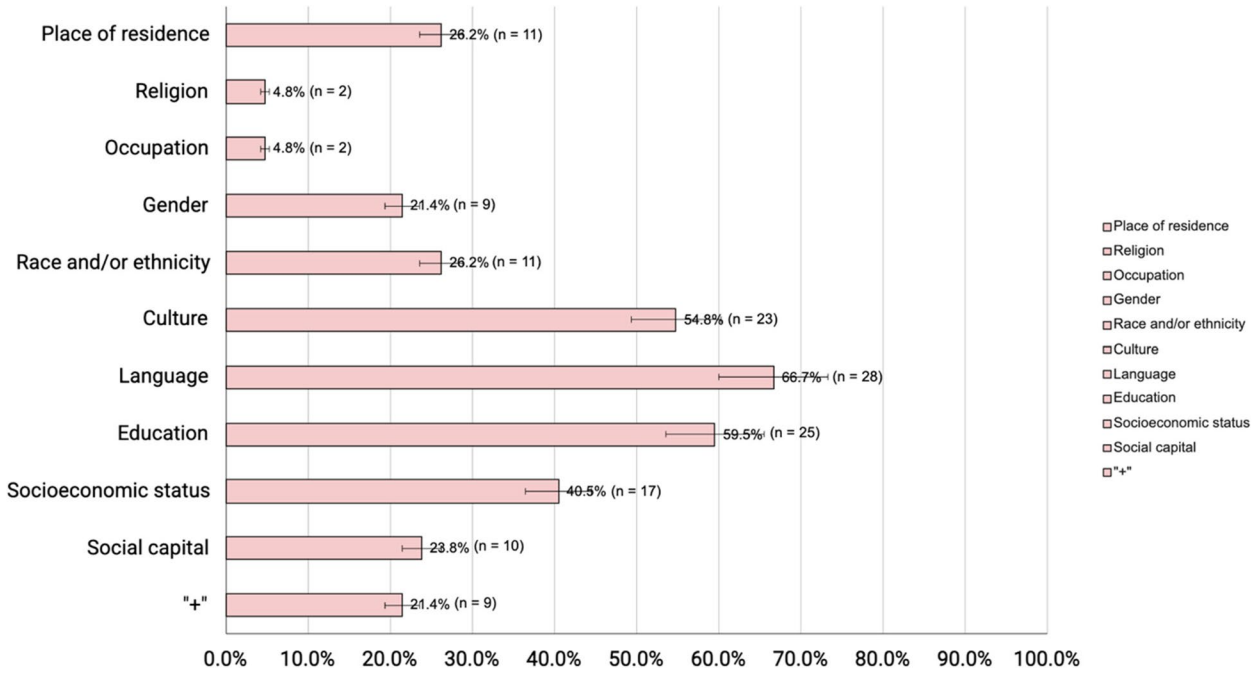

Fig. 2 Percentage of TiC interventions addressing the PROGRESS + equity characteristic domains

support or education for these populations. The healthcare workforce has also been the focus of some studies, primarily aimed at providing training and enhancing their capabilities in culturally sensitive care delivery and care coordination. This, in turn, contributes to ensuring a safe transition for the RIM population. Evaluating patient-important health outcomes and cost-effectiveness will require robust clinical trials, and more research is needed in this area.

Three types of continuity of care have been identified by Haggerty et al. including informational, management, and relational. Informational continuity of care is defined as "The use of information on past events and personal circumstances to make current care appropriate for each individual" [62]. Patient-held record initiatives, interpretation services, screening, and referral programs were among the range of activities aimed at mitigating fragmented healthcare resulting from missing health-related information. A systematic review and meta-analysis conducted for WHO guidelines found that patient-held records reduced clinical pregnancy complications, improved childhood vaccination rates, and enhanced cognitive outcomes for young children [63]. Furthermore, a systematic review of transitional care models in patients with stroke showed that sharing information with patients'primary care providers, including a discharge summary with details about medications, test results, risk factors, discharge plans, and baseline assessment data, reduces adverse health outcomes and hospital readmissions [64].

Information can be oriented either towards the disease or the individual. While documented information often emphasizes the medical condition, it is crucial to recognize that knowledge regarding the patient's preferences, values, and context is equally vital for connecting various aspects of care and ensuring that services are tailored to meet their needs, especially among culturally diverse populations [62]. Migrants living in precarious social situations have significant challenges in maintaining informational continuity of care due to various factors, including limited access to health insurance, difficulties in securing a consistent family doctor, navigating the health system, and encountering language and cultural barriers [65, 66]. These are perhaps the most important targets for TiC communication and navigation interventions.

Management continuity is defined as "a consistent and coherent approach to the management of a health condition that is responsive to a patient's changing needs." [62]. Our review shows that patient navigation services, resettlement algorithms, and coordination between reception centers and refugee clinics enhance patients' health literacy, and medication management programs were efforts to facilitate management continuity of care. A systematic review of interventional approaches to improve primary health care quality for refugees and asylum seekers emphasizes intersectoral

Table 3 Most common approaches to address the health equity of RIM populations

PROGRESS + characteristic	Most common approaches among TiC interventions	Study ID (author, year) of relevant TiC interventions
Place of residence	Home visits to save travel times; Planning activities in neighbourhoods where RIM populations usually reside; Offering transportation services to clinics	Alalawneh, 2019 [34] Alalawneh 2022 [36] Ansbro, 2021 [50] Dougherty, 2021 [22] Lambert, 2018 [54] Miner, 2017 [32] Nacif-Gomera, 2013 [44] Salt, 2017 [29] Vais, 2020 [30] Yang, 2021 [59] Yun, 2016 [31]
Religion	Faith-based representatives in the design and implementation of the intervention; Addressing any religious concerns or considerations of patients	Michael, 2019 [27] Sharma, 2023 [46]
Occupation	Flexible intervention hours (e.g., weekends, evenings) to accommodate work schedules	Nacif-Gomera, 2013 [44] Yun, 2016 [31]
Gender	Using gender-safe environments and communities (e.g., sewing groups) to hold intervention activities; matching intervention facilitator to the gender of the patient; designing the intervention around gender-specific health services (e.g., antenatal and perinatal care)	Documet, 2020 [21] Dougherty, 2021 [22] Hsu, 2015 [24] Owens, 2016 [55] Robertson, 2019 [56] Salt, 2017 [29] Tsai, 2018 [43] Vais, 2020 [30] Yelland, 2020 [61]
Race and/or ethnicity	Ethnic-matched intervention facilitators and navigators; Designing the intervention around ethnic-specific needs (e.g., Somalis and war trauma)	Ahmad, 2022 [35] De Voogd, 2020 [48] Documet, 2020 [21] Hsu, 2015 [24] Pacheco, 2012 [28] Robertson, 2019 [56] Sheikh, 2009 [33] Streuli, 2021 [57] Tsai, 2018 [43] Yang, 2021 [59] Yun, 2016 [31]
Culture	Employing and training intervention facilitators to deliver culturally-tailored services; Co-designing and refining intervention elements by pilot-testing materials and processes with cultural community leaders	Ahmad, 2022 [35] Brown, 2018 [51] Dougherty, 2021 [22] Ghahari, 2020 [53] Hill, 2008 [49] Hsu, 2015 [24] Jervelund, 2017 [37] Jervelund, 2018 [13] Lachal, 2019 [45] McBride, 2016 [47] McMurray, 2014 [26] Michael, 2019 [27] Miner, 2017 [32] Nacif-Gomera, 2013 [44] Owens, 2016 [55] Pacheco, 2012 [28] Robertson, 2019 [56] Salt, 2017 [29] Sharma, 2023 [46] Sheikh, 2009 [33] Streuli, 2021 [57] Tsai, 2018 [43] Yang, 2021 [59]

Table 3 (continued)

PROGRESS + characteristic	Most common approaches among TiC interventions	Study ID (author, year) of relevant TiC interventions
Language	Using interpreters and translators at the time of intervention delivery; translating intervention materials to the native language of the intended RIM populations	Ahmad, 2022 [35] Coffman, 2017 [52] De Voogd, 2020 [48] Dougherty, 2021 [22] Farokhi, 2018 [23] Ghahari, 2020 [53] Hsu, 2015 [24] Jahn, 2018 [39] Jervelund, 2017 [37] Jervelund, 2018 [13] Lachal, 2019 [45] Lambert, 2018 [54] Long, 2021 [42] McBride, 2016 [47] McMurray, 2014 [26] Pacheco, 2012 [28] Russel, 2021 [40] Saito, 2021 [41] Salt, 2017 [29] Sharma, 2023 [46] Sheikh, 2009 [33] Straßner 2019 [38] Streuli, 2021 [57] Tsai, 2018 [43] Vais, 2020 [30] Yang, 2021 [59] Yelland, 2020 [61] Yun, 2016 [31]
Education	Educating patients on their health, health behaviours, and the healthcare system; Designing the intervention to specifically address the dimensions of health literacy (e.g., knowledge and access to information); facilitating bilateral (i.e., provider-patient) health information sharing through health records and the presence of intervention facilitators/mediators during consultations	Ahmad, 2022 [35] Alalawneh, 2019 [34] Alalawneh 2022 [36] Ansbro, 2021 [50] Brown, 2018 [51] Coffman, 2017 [52] De Voogd, 2020 [48] Dougherty, 2021 [22] Farokhi, 2018 [23] Ghahari, 2020 [53] Hsu, 2015 [24] Jervelund, 2017 [37] Jervelund, 2018 [13] Lambert, 2018 [54] Michael, 2019 [27] Miner, 2017 [32] Nacif-Gomera, 2013 [44] Pacheco, 2012 [28] Robertson, 2019 [56] Salt, 2017 [29] Sharma, 2023 [46] Sheikh, 2009 [33] Streuli, 2021 [57] Tsai, 2018 [43] Yang, 2021 [59]

Table 3 (continued)

PROGRESS + characteristic	Most common approaches among TiC interventions	Study ID (author, year) of relevant TiC interventions
Socioeconomic status	Providing free-of-charge health and social services to uninsured individuals; reimbursing patients for health expenses not covered by their insurance; Offering health-related vouchers and materials (e.g., toothbrushes); Assisting patients in understanding and working with insurance providers	Brown, 2018 [51] Hill, 2008 [49] Hsu, 2015 [24] Lambert, 2018 [54] Long, 2021 [42] McBride, 2016 [47] McMurray, 2014 [26] Michael, 2019 [27] Miner, 2017 [32] Nacif-Gomera, 2013 [44] Pacheco, 2012 [28] Russel, 2021 [40] Saito, 2021 [41] Vais, 2020 [30] Wenner, 2020 [58] Yang, 2021 [59] Yassin, 2018 [60]
Social capital	Creating local social networks to address social isolation; Delivering the intervention in a community setting where individuals could bring friends and family; Expanding individuals' social network by hiring peers and community health workers as intervention facilitators	Brown, 2018 [51] Coffman, 2017 [52] De Voogd, 2020 [48] Documet, 2020 [21] Ghahari, 2020 [53] Nacif-Gomera, 2013 [44] Robertson, 2019 [56] Salt, 2017 [29] Sharma, 2023 [46] Yun, 2016 [31]
+	**Age:** Designing interventions to cater to the health needs of older immigrants (e.g., assistance with activities of daily living) as well as children (e.g., childhood cancer, dental caries, immunization)	Hill, 2008 [49] Hsu, 2015 [24] Miner, 2017 [32] Nacif-Gomera, 2013 [44] Sheikh, 2009 [33]
	Disability: Delivering care at home for house-bound patients	Ansbro, 2021 [50]
	Time-dependent relationships: Designing interventions to cater to patients at times of high health needs (e.g., pregnant and postpartum women)	Dougherty, 2021 [22] Owens, 2016 [55] Yelland, 2020 [61]

and multidisciplinary work to promote effective health care delivery for these populations [67].

Continuity of management is significant in chronic or complex clinical conditions that require coordinated and timely care from multiple providers, who may have conflicting approaches [62]. Although our findings show various screening interventions, mostly in mental health and public health, few of them focused on evaluating interventions aimed at identifying and supporting medically complex patients. A program called Refugee Health Promotion offers clinical aid, triage services, and guidance in navigation to refugees with complex medical needs upon their arrival in King County, Washington, USA. The objective of this initiative was to establish a process for smoothly moving medically complex refugees from one phase to another in a manner that is safe, efficient, informed and economically mindful, while complying with existing standards of care transitions in medical practice [68]. Evaluations of this program intervention are not yet available.

The Global Evidence Review on Health and Migration (GEHM) by WHO summarized the available evidence regarding the Continuum of care for noncommunicable disease management during the migration cycle. The GEHM highlighted notable gaps in the available research on migration and non-communicable diseases (NCDs), particularly the absence of comprehensive data collection and analysis regarding NCD prevalence and risk factors among refugees and migrants, hindering the ability to discern and design targeted interventions [69].

Relational continuity is defined by "An ongoing therapeutic relationship between a patient and one or more providers" [62]. Research shows clear communication and nurturing trust with patients correlated with improved patient-reported results during the process of transition in care [70]. Lack of cross-cultural

communication skills results in substantial obstacles between healthcare providers and migrant communities, potentially impeding migrants'ability to access appropriate healthcare services [67]. A qualitative study by Graham et al. explored the unmet needs of ethnic minorities, patients with limited English proficiency, and recent immigrants during their transition from hospital to home. This study reveals that these populations and their caregivers face unique challenges due to lower levels of social support and a lack of linguistically and culturally appropriate information and services [9]. Activities such as upskilling and enhancing healthcare providers' cultural competencies, using facilitators or cultural mediators and bilingual and cultural health care navigators were strategies used to build trust and supporting continuity of RIM populations' care.

The relatively short duration of most interventions raises questions about their long-term sustainability, especially given that a significant number of studies identified financial barriers as a major challenge. This highlights the critical importance of involving decision-makers and funders from the earliest stages of intervention design. Their involvement ensures that financial feasibility and sustainability are prioritized, and that the intervention aligns with their desired outcomes, increasing the likelihood of securing long-term support and achieving meaningful, lasting impact. Additionally, a substantial number of studies did not mention facilitators and barriers, feasibility, acceptability, and cost, even though such information could be invaluable for policy-makers and decision-makers in designing feasible and sustainable interventions.

Within the existing literature, several research gaps exist. Currently, there is a paucity of studies focused on certain subgroups of migrant populations such as children, individuals with disabilities, and seniors. Additionally, there were very few studies that focused on other migrant groups such as temporary residents and international students. Furthermore, despite the challenges and significance of transitioning from refugee and asylum seeker-specific health services to mainstream primary care, there is limited research conducted on care transitions in this particular context. We also did not find interventions that focused on transition in care from hospital discharge to the community or from pediatric to adult care. Furthermore, many studies lack detailed explanations of the facilitators and barriers to implementation, the duration and sustainability of the programs. This gap in information makes it challenging to fully understand the context and feasibility of the interventions.

This scoping review has potential limitations. The definition of transition in care is still variable and multifaceted in nature and not clearly stated and defined in the evidence pertaining to immigrants and refugees. The process of transitioning care within the same facility presents distinct challenges and requires a unique approach, differing from transitions involving the transfer of care between different locations. These variations must be considered when interpreting the review's findings. Additionally, assessing the quality of evidence across the included studies is crucial but was not within the scope of this review. Future research ought to focus on evaluating the effectiveness of these interventions. Clinical trials focusing on effectiveness and economics would shed light on whether TiC interventions lead to health and/or social improvements among RIM populations. As well, researchers should explore the equity impact of these interventions and evaluate equity-specific outcomes through an equity lens (i.e., equity-focused systematic reviews).

This novel scoping review underscores the diversity of interventions designed to enhance care transition for RIM populations, with perhaps the most health impact from healthcare navigation and health education. While the studies reviewed provide valuable insights into the development and implementation of transitional care interventions for RIM populations, it is crucial to acknowledge that these populations are not homogenous and come from diverse backgrounds and face distinct challenges influenced by factors such as migration status, socioeconomic conditions, and cultural contexts. Consequently, the applicability of these interventions may be limited to certain subgroups or specific settings. Treating RIM populations as a single, uniform category risks overlooking critical differences that can significantly shape health-related outcomes. Strategies and interventions should be designed with a nuanced understanding of the diverse needs within the broader migrant population, ensuring they are contextually appropriate and responsive to the specific challenges faced by different subgroups during their transition.

Appendix 1

Search strategy

Search strategy.

Appendix 2

Data extraction items

Data extraction sheet.

Appendix 3

Table 4 Barriers and facilitators of implementation of TiC interventions

Study ID (Author-year)	Title	Barriers and Facilitators of Implementation
Alawneh, 2019 [34]	Pharmacists in humanitarian crisis settings: Assessing the impact of pharmacist-delivered home medication management review service to Syrian refugees in Jordan	**Barriers:** Limited ability of some patients to reach physicians because of financial and health related issues, Limited financial ability to cope with the medication change, Physicians were not financially compensated
Ahmad, 2022 [35]	Interactive mental health assessments for Chinese Canadians: A pilot randomized controlled trial in nurse practitioner-led primary care clinic.	**Barriers:** Consultation duration constraints, stigma around mental health, accuracy concerns due to family members acting as interpreters
Alawneh, 2022 [36]	Improving Syrian refugees'knowledge of medications and adherence following a randomized control trial assessing the effect of a medication management review service.	**Barriers:** Cost was the reason for non-adherence to the medication in one third of patients
Ansbro, 2021 [50]	Clinical outcomes in a primary-level noncommunicable disease programme for Syrian refugees and the host population in Jordan: A cohort analysis using routine data	**Facilitator:** The services were free of charge
Brown, 2018 [51]	Evaluation of Healthy Fit: A Community Health Worker Model to Address Hispanic Health Disparities.	None described
Coffman, 2017 [52]	Using CBPR to Decrease Health Disparities in a Suburban Latino Neighborhood.	**Barriers:** Lack of health insurance and documentation status of patients; agencies and free clinics were sometimes not accepting new patients or did not have staff that spoke Spanish; lack of accessible mental health services, dental care, and vision services; the dominating role of policy and structural constraints in limiting health care access for newly arrived immigrants **Facilitator:** Accessibility of one of the schools by public transportation
De Voogd, 2020 [48]	Community education for a dignified last phase of life for migrants: A community engagement, mixed methods study among Moroccan, Surinamese and Turkish migrants	**Barrier:** Longer sessions with those with lower education; different ability and experience of educators in steering the discussion **Facilitator:** by using examples and videos, the importance of the subject became clearer, and the participants were inclined to start talking about the subject themselves.
Documet, 2020 [21]	Outcomes from a Male-to-Male Promotores Intervention in an Emerging Latino Community.	None described
Doughert, 2021 [22]	Supporting Newly Arrived Migrant Mothers: A Pilot Health Literacy Intervention.	**Facilitator:** Enhancing Session Accessibility for Mothers with Limited English Proficiency through the Inclusion of Interpreters.
Farokhi, 2018 [23]	Using Interprofessional Education to Promote Oral Health Literacy in a Faculty-Student Collaborative Practice.	None described
Ghahari, 2020 [53]	Development and pilot testing of a health education program to improve immigrants'access to Canadian health services.	**Facilitator:** Consultation with stakeholders (immigrants, settlement workers, and teachers) attempted to make the program as inclusive as possible
Hill, 2008 [49]	Improving coverage and access for immigrant Latino children: the Los Angeles healthy kids program.	**Barriers:** Financial sustainability challenges; lack of sufficient specialty and behavioral health providers; long wait times; shortage of dentists and specialists; confusion of participants with regard to the services and covered drugs
Hsu, 2015 [24]	Evaluating the effect of a community-based lay health advisor training curriculum to address immigrant children's caries disparities.	**Barriers:** Challenges in understanding of dental concepts and terms by lay people **Facilitators:** careful consideration of the learning obstacles faced by immigrant women, encompassing challenges related to professional terms and concepts in the dental field, cultural appropriateness, and their lower socioeconomic background

Study ID (Author-year)	Title	Barriers and Facilitators of Implementation
Jahn, 2018 [39]	Early evaluation of experiences of health care providers in reception centers with a patient-held personal health record for asylum seekers: a multi-sited qualitative study in a German federal state.	**Barrier:** Insufficient information about the PHR before its introduction; stressful working conditions in the reception centers; insufficient resources; increased workload
Jervelund, 2018 [13]	Know where to go: evidence from a controlled trial of a healthcare system information intervention among immigrants.	**Facilitator**: The instructor modified the material according to the participants'abilities and tailored it to align with their needs and interests.
Jervelund, 2017 [37]	Ignorance is not bliss: The effect of systematic information on immigrants'knowledge of and satisfaction with the Danish healthcare system.	None described
Lachal, 2019 [45]	Transcultural mediation programme in a paediatric hospital in France: qualitative and quantitative study of participants'experience and impact on hospital costs.	None described
Lambert, 2018 [54]	Dental Attendance in Undocumented Immigrants before and after the Implementation of a Personal Assistance Program: A Cross-Sectional Observational Study.	None described
Lichtl, 2019 [25]	Effects of introducing a walk-in clinic on ambulatory care sensitive hospitalisations among asylum seekers in Germany: a single-centre pre-post intervention study using medical records.	None described
Long, 2021 [42]	Improving access to refugee-focused health services for people from refugee-like backgrounds in south-eastern Melbourne through the education sector	None described
McBride, 2016 [47]	The Refugee Health Nurse Liaison: a nurse led initiative to improve healthcare for asylum seekers and refugees.	None described
McMurray, 2014 [26]	Integrated primary care improves access to healthcare for newly arrived refugees in Canada.	None described
Michael, 2019 [27]	Connecting Refugees to Medical Homes Through Multi-Sector Collaboration.	**Barriers:** Structural barriers to information exchange; family no-show rates for follow-up appointments; limited care coordination after Refugee Resettlement Agency (RRA) support services wane; limited health literacy.
Miner, 2017 [32]	Meeting the Needs of Older Adult Refugee Populations With Home Health Services.	None described
Nacif-Gomera, 2013 [44]	AMOR II: An effort to eradicate psychosocial barriers induced by immigration phenomenon in children with cancer	None described
Owens, 2016 [55]	Perceptions of pregnancy experiences when using a community-based antenatal service: A qualitative study of refugee and migrant women in Perth, Western Australia.	None described
Pacheco, 2012 [28]	Policy barriers to health care access fuel discriminatory treatment: the role of Promotoras in overcoming malos tratos.	None described
Robertson, 2019 [56]	Health Realization Community Coping Intervention for Somali Refugee Women	None described
Salt, 2017 [29]	"You Are Not Alone"Strategies for Addressing Mental Health and Health Promotion with a Refugee Women's Sewing Group.	**Barriers:** Need for additional interpreter services because of low literacy level of participants; lack of funds **Facilitator:** The pathway to wellness intervention sessions took place immediately after the women finished their sewing group to remove transportation barriers
Sharma, 2023 [46]	Understanding the Role of Caseworker-Cultural Mediators in Addressing Healthcare Inequities for Patients with Limited-English Proficiency: a Qualitative Study.	None described
Sheikh, 2009 [33]	The impact of intensive health promotion to a targeted refugee population on utilisation of a new refugee paediatric clinic at the children's hospital at Westmead.	**Barrier:** Language issues (translation and interpretations did not always convey the accurate meaning)

Study ID (Author-year)	Title	Barriers and Facilitators of Implementation
Strasner, 2019 [38]	The impact of patient-held health records on continuity of care among asylum seekers in reception centres: a cluster-randomised stepped wedge trial in Germany.	None described
Streuli, 2021 [57]	Development of a culturally and linguistically sensitive virtual reality educational platform to improve vaccine acceptance within a refugee population: The SHIFA community engagement-public health innovation programme	None described
Tsai, 2018 [43]	Impact of a Problem-Based Learning (PBL) Health Literacy Program on Immigrant Women's Health Literacy, Health Empowerment, Navigation Efficacy, and Health Care Utilization	**Barrier:** Personal life events and familial responsibilities of participants
Vais, 2020 [30]	Rides for Refugees: A Transportation Assistance Pilot for Women's Health.	**Barrier:** Sustainability issues due to financial costs
Wenner, 2020 [58]	Differences in realized access to healthcare among newly arrived refugees in Germany: results from a natural quasi-experiment.	None described
Yang, 2021 [59]	APA Health CARE: A Student-Led Initiative Addressing Health Care Barriers Faced by the Asian and Pacific Islander American Immigrant Population in Los Angeles	None described
Yassin, 2018 [60]	Evaluating a Mental Health Program for Palestinian Refugees in Lebanon.	**Barrier:** Financial Sustainability: Challenges stem from inadequate planning for sustainability and insufficient procedures for the program's smooth handover to the community. **Facilitator:** Support from community healthcare professionals
Yelland, 2020 [61]	Evaluation of systems reform in public hospitals, Victoria, Australia, to improve access to antenatal care for women of refugee background: An interrupted time series design.	None described
Yun, 2016 [31]	Help-Seeking Behavior and Health Care Navigation by Bhutanese Refugees.	**Facilitator:** Accessible location and accessible hours.
Russel, 2021 [40]	OPTIMISE: a pragmatic stepped wedge cluster randomised trial of an intervention to improve primary care for refugees in Australia	None described
Saito, 2021 [41]	Response to language barriers with patients from refugee background in general practice in Australia: findings from the OPTIMISE study	None described

Acknowledgements
We would like to thank Ms. Maren Goodman, research and scholarly communication librarian at Western University, for her helpful guidance in developing this study's search strategy.

Authors' contributions
All authors were actively involved in discussing and refining the research questions. K Pottie acquired funding and provided expertise in designing research objectives, defining the inclusion and exclusion criteria and search strategy as well as manuscript revision. AL and YY contributed to background literature review, defining the search strategy, conducting the literature search, and screening articles for inclusion, data extraction, synthesizing the findings, and drafting the manuscript. ME and K Patel contributed to the screening process and data extraction, interpretation of the results and manuscript revision. AS and DB contributed to data extraction and analysis. All authors reviewed and approved the final manuscript for publication.

Funding
The study was financially supported by CIHR Meeting Grant #478924. The funders had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Data availability
No datasets were generated or analysed during the current study.

Declarations

Competing interests
The authors declare no competing interests.

Author details
[1]Department of Interdisciplinary Medical Sciences, Western University, London, ON, Canada. [2]Department of Epidemiology and Biostatistics, Western University, London, ON, Canada. [3]Schulich School of Medicine and Dentistry, Western University, London, ON, Canada. [4]Cumming School of Medicine, University of Calgary, Calgary, AB, Canada. [5]Department of Family Medicine, Dalhousie University, Halifax, NS, Canada. [6]School of Epidemiology and Public Health, University of Ottawa, Ottawa, ON, Canada.

Received: 3 September 2024 Accepted: 28 March 2025
Published online: 30 April 2025

References

1. World Health Organization. Transitions of care. World Health Organization; 2016. [cited 2024 Sep 2]. Available from: https://iris.who.int/handle/10665/252272.

2. Government of Canada CI of HR. Transitions in care: overview - CIHR. 2018. [cited 2024 Feb 18]. Available from: https://cihr-irsc.gc.ca/e/50972.html.
3. De Regge M, De Pourcq K, Meijboom B, Trybou J, Mortier E, Eeckloo K. The role of hospitals in bridging the care continuum: a systematic review of coordination of care and follow-up for adults with chronic conditions. BMC Health Serv Res. 2017;17(1):550.
4. Phatak A, Prusi R, Ward B, Hansen LO, Williams MV, Vetter E, et al. Impact of pharmacist involvement in the transitional care of high-risk patients through medication reconciliation, medication education, and postdischarge call-backs (IPITCH Study). J Hosp Med. 2016;11(1):39–44.
5. Finlayson K, Chang AM, Courtney MD, Edwards HE, Parker AW, Hamilton K, et al. Transitional care interventions reduce unplanned hospital readmissions in high-risk older adults. BMC Health Serv Res. 2018;18(1):956.
6. Coleman EA, Boult C. Improving the Quality of Transitional Care for Persons with Complex Care Needs. J Am Geriatr Soc. 2003;51(4):556–7.
7. Hirschman KB, Shaid E, McCauley K, Pauly MV, Naylor MD. Continuity of Care: The Transitional Care Model. Online J Issues Nurs. 2015;20(3):1.
8. Coleman EA, Parry C, Chalmers S, Min SJ. The care transitions intervention: results of a randomized controlled trial. Arch Intern Med. 2006;166(17):1822–8.
9. Graham CL, Ivey SL, Neuhauser L. From hospital to home: assessing the transitional care needs of vulnerable seniors. Gerontologist. 2009;49(1):23–33.
10. Pottie K, Greenaway C, Feightner J, Welch V, Swinkels H, Rashid M, et al. Evidence-based clinical guidelines for immigrants and refugees. CMAJ. 2011;183(12):E824-925.
11. Pottie K, Gruner D. Community-based care for refugees to overcome health disparities. Nat Rev Dis Primers. 2023;9(1):1–2.
12. Woodman M. More countries are including refugees in national health systems, and development partnerships are key to the process | UNHCR Blog. 2022. [cited 2024 Sep 2]. Available from: https://www.unhcr.org/blogs/more-countries-are-including-refugees-in-national-health-systems-development-partnerships-are-key/.
13. Jervelund SS, Maltesen T, Wimmelmann CL, Petersen JH, Krasnik A. Know where to go: evidence from a controlled trial of a healthcare system information intervention among immigrants. BMC Public Health. 2018;11(18):863.
14. Chauhan A, Walton M, Manias E, Walpola RL, Seale H, Latanik M, et al. The safety of health care for ethnic minority patients: a systematic review. International Journal for Equity in Health. 2020;19(1):118.
15. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 2005;8(1):19–32.
16. Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, et al. Updated methodological guidance for the conduct of scoping reviews. JBI Evid Synth. 2020;18(10):2119–26.
17. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Ann Intern Med. 2018;169(7):467–73.
18. Liu A, Elias M, Yazdani Y, Patel K, Pottie K. Transition in care interventions for refugees, immigrants and other migrants (RIM populations): a scoping review protocol. 2023. [cited 2024 Sep 2]; Available from: https://osf.io/mgdc5.
19. Covidence. [cited 2024 Sep 3]. Covidence - Better systematic review management. Available from: https://www.covidence.org/.
20. O'Neill J, Tabish H, Welch V, Petticrew M, Pottie K, Clarke M, et al. Applying an equity lens to interventions: using PROGRESS ensures consideration of socially stratifying factors to illuminate inequities in health. J Clin Epidemiol. 2014;67(1):56–64.
21. Documet PI, Macia L, Boyzo R, Thompson AF, Amruthapuri R. Outcomes from a Male-to-Male Promotores Intervention in an Emerging Latino Community. J Immigr Minor Health. 2020;22(4):717–26.
22. Dougherty L, Riley A, Caffrey P, Wallbank A, Milne M, Harris MF, et al. Supporting Newly Arrived Migrant Mothers: A Pilot Health Literacy Intervention. Health Lit Res Pract. 2021;5(3):e201-7.
23. Farokhi MR, Muck A, Lozano-Pineda J, Boone SL, Worabo H. Using Interprofessional Education to Promote Oral Health Literacy in a Faculty-Student Collaborative Practice. J Dent Educ. 2018;82(10):1091–7.
24. Hsu YJ, Peng WD, Chen JH, Lin YC, Chang CS, Chen T, et al. Evaluating the effect of a community-based lay health advisor training curriculum to address immigrant children's caries disparities. Caries Res. 2015;49(2):147–56.
25. Lichtl C, Bozorgmehr K. Effects of introducing a walk-in clinic on ambulatory care sensitive hospitalisations among asylum seekers in Germany: a single-centre pre-post intervention study using medical records. BMJ Open. 2019;9(12): e027945.
26. McMurray J, Breward K, Breward M, Alder R, Arya N. Integrated primary care improves access to healthcare for newly arrived refugees in Canada. J Immigr Minor Health. 2014;16(4):576–85.
27. Michael L, Brady A, Russell G, Rhodes S, Namak S, Cody L, et al. Connecting Refugees to Medical Homes Through Multi-Sector Collaboration. J Immigr Minor Health. 2019;21(1):198–203.
28. Pacheco TL, Ramirez MA, Capitman JA. Policy barriers to health care access fuel discriminatory treatment: the role of Promotoras in overcoming malos tratos. J Ambul Care Manage. 2012;35(1):2–14.
29. Salt RJ, Costantino ME, Dotson EL, Paper BM. "You Are Not Alone" Strategies for Addressing Mental Health and Health Promotion with a Refugee Women's Sewing Group. Issues Ment Health Nurs. 2017;38(4):337–43.
30. Vais S, Siu J, Maru S, Abbott J, St Hill I, Achilike C, et al. Rides for Refugees: A Transportation Assistance Pilot for Women's Health. J Immigr Minor Health. 2020;22(1):74–81.
31. Yun K, Paul P, Subedi P, Kuikel L, Nguyen GT, Barg FK. Help-Seeking Behavior and Health Care Navigation by Bhutanese Refugees. J Community Health. 2016;41(3):526–34.
32. Miner SM, Liebel D, Wilde MH, Carroll JK, Zicari E, Chalupa S. Meeting the Needs of Older Adult Refugee Populations With Home Health Services. J Transcult Nurs. 2017;28(2):128–36.
33. Sheikh M, MacIntyre CR. The impact of intensive health promotion to a targeted refugee population on utilisation of a new refugee paediatric clinic at the children's hospital at Westmead. Ethn Health. 2009;14(4):393–405.
34. Al Alawneh M, Nuaimi N, Basheti IA. Pharmacists in humanitarian crisis settings: Assessing the impact of pharmacist-delivered home medication management review service to Syrian refugees in Jordan. Res Social Adm Pharm. 2019;15(2):164–72.
35. Ahmad F, Wang J, Wong B, Fung WLA. Interactive mental health assessments for Chinese Canadians: A pilot randomized controlled trial in nurse practitioner-led primary care clinic. Asia Pac Psychiatry. 2022;14(1): e12400.
36. Alalawneh M, Berardi A, Nuaimi N, Basheti IA. Improving Syrian refugees' knowledge of medications and adherence following a randomized control trial assessing the effect of a medication management review service. PLoS ONE. 2022;17(10): e0276304.
37. Jervelund SS, Maltesen T, Wimmelmann CL, Petersen JH, Krasnik A. Ignorance is not bliss: The effect of systematic information on immigrants' knowledge of and satisfaction with the Danish healthcare system. Scand J Public Health. 2017;45(2):161–74.
38. Straßner C, Noest S, Preussler S, Jahn R, Ziegler S, Wahedi K, et al. The impact of patient-held health records on continuity of care among asylum seekers in reception centres: a cluster-randomised stepped wedge trial in Germany. BMJ Glob Health. 2019;4(4): e001610.
39. Jahn R, Ziegler S, Nöst S, Gewalt SC, Straßner C, Bozorgmehr K. Early evaluation of experiences of health care providers in reception centers with a patient-held personal health record for asylum seekers: a multi-sited qualitative study in a German federal state. Glob Health. 2018;14(1):71.
40. Russell GM, Long K, Lewis V, Enticott JC, Gunatillaka N, Cheng I, et al. OPTIMISE: a pragmatic stepped wedge cluster randomised trial of an intervention to improve primary care for refugees in Australia. Med J Aust. 2021;215(9):420–6.
41. Saito S, Harris MF, Long KM, Lewis V, Casey S, Hogg W, et al. Response to language barriers with patients from refugee background in general practice in Australia: findings from the OPTIMISE study. BMC Health Serv Res. 2021;21(1):921.
42. Long KM, Vasi S, Westbury S, Shergill S, Guilbert-Savary C, Whitelaw A, et al. Improving access to refugee-focused health services for people from refugee-like backgrounds in south-eastern Melbourne through the education sector. Aust J Prim Health. 2021;27:93–101.
43. Tsai TI, Lee SYD, Yu WR. Impact of a Problem-Based Learning (PBL) Health Literacy Program on Immigrant Women's Health Literacy, Health Empowerment, Navigation Efficacy, and Health Care Utilization. J Health Commun. 2018;23(4):340–9.

44. Nacif-Gomera ML, Lorenzo-González R, Hernández M, Pérez-Martínez A. AMOR II: an effort to eradicate psychosocial barriers induced by immigration phenomenon in children with cancer. J Pediatr Hematol Oncol. 2013;35(2):118–23.
45. Lachal J, Escaich M, Bouznah S, Rousselle C, Lonlay PD, Canoui P, et al. Transcultural mediation programme in a paediatric hospital in France: qualitative and quantitative study of participants' experience and impact on hospital costs. BMJ Open. 2019;9(11): e032498.
46. Sharma RK, Cowan A, Gill H, Miyagawa LA. Understanding the Role of Caseworker-Cultural Mediators in Addressing Healthcare Inequities for Patients with Limited-English Proficiency: a Qualitative Study. J GEN INTERN MED. 2023;38(5):1190–9.
47. McBride J, Russo A, Block A. The Refugee Health Nurse Liaison: a nurse led initiative to improve healthcare for asylum seekers and refugees. Contemp Nurse. 2016;52(6):710–21.
48. de Voogd X, Willems DL, Onwuteaka-Philipsen B, Torensma M, Suurmond JL. Community Education for a Dignified Last Phase of Life for Migrants: A Community Engagement, Mixed Methods Study among Moroccan, Surinamese and Turkish Migrants. Int J Environ Res Public Health. 2020;17(21):7797.
49. Hill I, Dubay L, Kenney GM, Howell EM, Courtot B, Palmer L. Improving coverage and access for immigrant Latino children: the Los Angeles healthy kids program. Health Aff (Millwood). 2008;27(2):550–9.
50. Ansbro É, Homan T, Prieto Merino D, Jobanputra K, Qasem J, Muhammad S, et al. Clinical outcomes in a primary-level non-communicable disease programme for Syrian refugees and the host population in Jordan: A cohort analysis using routine data. PLoS Med. 2021;18(1): e1003279.
51. Brown L, Vasquez D, Salinas J, Tang X, Balcazar H. Evaluation of healthy fit: a community health worker model to address hispanic health disparities. Prev Chronic Dis. 2018;15.
52. Coffman MJ, de Hernandez BU, Smith HA, McWilliams A, Taylor YJ, Tapp H, et al. Using CBPR to Decrease Health Disparities in a Suburban Latino Neighborhood. Hisp Health Care Int. 2017;15(3):121–9.
53. Ghahari S, Burnett S, Alexander L. Development and pilot testing of a health education program to improve immigrants' access to Canadian health services. BMC Health Serv Res. 2020;20(1):321.
54. Lambert M. Dental Attendance in Undocumented Immigrants before and after the Implementation of a Personal Assistance Program: A Cross-Sectional Observational Study. Dent J (Basel). 2018;6(4):73.
55. Owens C, Dandy J, Hancock P. Perceptions of pregnancy experiences when using a community-based antenatal service: A qualitative study of refugee and migrant women in Perth. Western Australia Women Birth. 2016;29(2):128–37.
56. Robertson CL, Halcon L, Hoffman SJ, Osman N, Mohamed A, Areba E, et al. Health Realization Community Coping Intervention for Somali Refugee Women. J Immigr Minor Health. 2019;21(5):1077–84.
57. Streuli S, Ibrahim N, Mohamed A, Sharma M, Esmailian M, Sezan I, et al. Development of a culturally and linguistically sensitive virtual reality educational platform to improve vaccine acceptance within a refugee population: the SHIFA community engagement-public health innovation programme. BMJ Open. 2021;11(9): e051184.
58. Wenner J, Bozorgmehr K, Duwendag S, Rolke K, Razum O. Differences in realized access to healthcare among newly arrived refugees in Germany: results from a natural quasi-experiment. BMC Public Health. 2020;20(1):846.
59. Yang HH, Chwa WJ, Yuen SB, Huynh JD, Chan JS, Kumar A, et al. APA Health CARE: A Student-Led Initiative Addressing Health Care Barriers Faced by the Asian and Pacific Islander American Immigrant Population in Los Angeles. J Community Health. 2021;46(2):367–79.
60. Yassin N, Taha AA, Ghantous Z, Atoui MM, Forgione F. Evaluating a Mental Health Program for Palestinian Refugees in Lebanon. J Immigr Minor Health. 2018;20(2):388–98.
61. Yelland J, Mensah F, Riggs E, McDonald E, Szwarc J, Dawson W, et al. Evaluation of systems reform in public hospitals, Victoria, Australia, to improve access to antenatal care for women of refugee background: An interrupted time series design. PLoS Med. 2020;17(7): e1003089.
62. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKendry R. Continuity of care: a multidisciplinary review. BMJ. 2003;327(7425):1219–21.
63. Magwood O, Kpadé V, Thavorn K, Oliver S, Mayhew AD, Pottie K. Correction: Effectiveness of home-based records on maternal, newborn and child health outcomes: A systematic review and meta-analysis. PLoS ONE. 2019;14(2): e0212698.
64. Puhr MI, Thompson HJ. The Use of Transitional Care Models in Patients With Stroke. J Neurosci Nurs. 2015;47(4):223–34.
65. Ravichandiran N, Mathews M, Ryan BL. Utilization of healthcare by immigrants in Canada: a cross-sectional analysis of the Canadian Community Health Survey. BMC Primary Care. 2022;23(1):69.
66. Romey A, Vaysse M, Jouault C, Letrilliart L. Perception of barriers and facilitators in the continuity of care for precarious migrants in general practice. Sante Publique. 2023;35(2):171–81.
67. Iqbal MP, Walpola R, Harris-Roxas B, Li J, Mears S, Hall J, et al. Improving primary health care quality for refugees and asylum seekers: A systematic review of interventional approaches. Health Expect. 2022;25(5):2065–94.
68. Jackson JC, Ahrenholz NC, Burkhalter H, Dawson-Hahn E, Ibrahim A, Pak-Gorstein S, et al. Enhanced Transitions of Care for Medically Complex Refugees. J Immigr Minor Health. 2021;23(6):1359–63.
69. World Health Organization. Continuum of care for noncommunicable disease management during the migration cycle. World Health Organization; 2022. [cited 2024 Sep 3]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK580104/.
70. Li J, Clouser JM, Brock J, Davis T, Jack B, Levine C, et al. Effects of Different Transitional Care Strategies on Outcomes after Hospital Discharge-Trust Matters, Too. Jt Comm J Qual Patient Saf. 2022;48(1):40–52.

Publisher's Note