

# Determinants of access to primary healthcare for formerly incarcerated women transitioning into the community: a systematic review of the literature

Nisreen Agbaria , <sup>1,2</sup> Margit Wirth , <sup>3</sup> Volker Winkler , <sup>1</sup> Babak Moazen , <sup>1,2</sup> Marie Claire Van Hout , <sup>4</sup> Heino Stöver

**To cite:** Agbaria N, Wirth M, Winkler V, *et al.* Determinants of access to primary healthcare for formerly incarcerated women transitioning into the community: a systematic review of the literature. *BMJ Public Health* 2024;**2**:e000735. doi:10.1136/bmjph-2023-000735

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi.org/10.1136/bmjph-2023-000735).

Received 7 November 2023 Accepted 21 August 2024



© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. Published by BMJ.

For numbered affiliations see end of article.

**Correspondence to**Dr Nisreen Agbaria;
nigbaria@gmail.com

#### **ABSTRACT**

**Background** Women with a history of incarceration experience significantly poorer health outcomes and encounter barriers to accessing healthcare, both during incarceration and after release. These challenges are more pronounced compared with both their male counterparts and women in the general population. We conducted a systematic literature review to respond to the following research questions: (1) what are the determinants of primary healthcare uptake and retention among formerly incarcerated women transitioning into the community? and (2) what are the barriers and facilitators for their access to primary healthcare postrelease?

Methods Following the 2020 Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines and drawing on Levesques' Patient-Centered Access to Healthcare Model, we searched and identified relevant publications from 2012 onwards in the following databases: PubMed, CINAHL, PsychInfo, Web of Science databases and Google Scholar. Records were included if they reported primary healthcare among formerly incarcerated women. Findings from the included studies were extracted and arranged under relevant themes using convergent-integrated approach.

Findings A total of 3524 records were identified and reviewed, from which 37 publications were included in the review. Five main themes emerged as follows: (1) trends and predisposing factors, (2) barriers and facilitators to care, (3) continuity of care and arrangement between the prison and community health providers, (4) prescriptions and health insurance enrolment and (5) interventions to improve primary healthcare utilisation postrelease. Additional sub-themes, such as perceived discrimination in the healthcare system and delays in cancer screening, were identified and discussed.

Conclusion The findings of the systematic review underscore the ongoing challenges women face in accessing primary care when transitioning from incarceration to the community. Enhancing coordination efforts between prison services and community healthcare providers requires a comprehensive assessment of women's healthcare needs during this transition, alongside evaluating the availability of transitional programmes.

#### WHAT IS ALREADY KNOWN ABOUT THIS TOPIC

- ⇒ Globally, the number of women in prisons is increasing, amidst a backdrop of higher physical and mental health morbidity compared with women in the general population.
- ⇒ The suboptimal provision of healthcare services in prisons and the breakdown of treatment on release further exacerbate healthcare needs, leading to increased use of acute care and hospitalisation.
- ⇒ The experience of seeking and accessing healthcare and fulfilling healthcare needs at the time of re-entry is challenged by competing needs such as secure housing, financial challenges and re-establishing familial and social relationships.

Further research is required to explore the long-term impact of such programmes and to address the gaps in evidence from low- and middle-income countries.

## INTRODUCTION

Women represent a small but a fast-growing proportion of the global prison population, with over 741 000 incarcerated in 2020 alone. This number has more than doubled over the last two decades, compared with an 18% increase in the male prison population during the same period. The incarceration of women is often intertwined with broader social and health disadvantages, characterised by marginalisation, poverty and harsh drug policies that disproportionately affect them.<sup>2</sup> Generally, the health of women in prison (WIP) is underscored by higher levels of physical and mental health issues compared with non-incarcerated women. These disparities include a higher prevalence of substance use disorders (SUDs) and infectious diseases such as hepatitis C virus,<sup>3</sup> and unmet maternal and



#### WHAT DOES THIS STUDY ADD

- This study addresses existing gaps in the literature pertaining to access to and utilisation of primary healthcare services among formerly incarcerated women.
- ⇒ We identify factors affecting access to primary healthcare at different stages of the healthcare-seeking pathway, both at the individual and supplier levels.
- ⇒ We provide a summary of evidence for interventions aimed at enhancing access to and utilisation of primary healthcare for women transitioning into the community.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- ⇒ The review highlights the need to extend universal health coverage, coordinate healthcare services, implement screening and transitional programmes to address gender-specific healthcare needs, and facilitate access to primary healthcare for women re-entering the community.
- ⇒ Applying a gender-responsive, patient-centred approach can support researchers and practitioners identify the healthcare needs of formerly incarcerated women and to understand how national healthcare systems and social factors influence healthcare utilisation among this population.
- Guidelines on the treatment of women in prisons could be updated and expanded to cover the healthcare needs of women on and after release.
- ⇒ Future research should include sex/gender-disaggregated results and address the limited evidence on the topic in low– and middle– income countries, as well as among minority groups, including Indigenous populations and LGBTQ+ individuals.

sexual health needs. 4-6 On release from prison, women face social and structural challenges, including the need to secure housing and employment, and to re-establish social and familial relationships, especially for mothers.<sup>7</sup> Simultaneously, they continue to experience discontinuity of care and barriers to accessing primary healthcare (PHC) on release, 8-10 resulting in poorer health and treatment outcomes, especially for infectious diseases (eg, due to suboptimal adherence to antiretroviral treatments), 11 an increase in self-harm and suicide, 12 and an increase in hospitalisation and utilisation of acute healthcare services. f3 14 As outlined in the Declaration of Alma-Ata, PHC services are designed to offer universally accessible essential healthcare to individuals and families within the community. PHC, therefore, serves as the initial point of contact for care and the first element of a continuing healthcare process. 15 It is also acknowledged that a strong primary care system provides continuous, comprehensive and well-coordinated services, which can reduce unnecessary and unwanted outcomes such as avoidable hospitalisations. 16 In this context, access to healthcare services among formerly incarcerated women has primarily been studied within specialised health services, including mental health, substance use and acute care services. <sup>11 17–19</sup> However, there remains a gap in knowledge regarding PHC access and utilisation among women released from prison. This systematic review is, therefore, conducted to answer the following questions:

(1) what are the determinants of PHC uptake and retention among formerly incarcerated women transitioning into the community? and (2) what are the barriers and facilitators for their access to PHC during the postrelease period?

#### **METHODS**

This systematic review was conducted following a preestablished protocol registered on the PROSPERO portal, the international prospective register of systematic reviews (registration number CRD42022374512). The review is reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 statement. 20 PubMed, CINAHL, PsychInfo and Web of Science databases were searched for all studies from 2012 up to October 2022, without geographical or language restrictions. The Population, Concept, Context framework was applied using variations of the following concepts: prisoners, prison, women, health, health services and postincarceration. An iterative process was used where initially a general search was applied to PubMed database, to identify and inform the targeted search string (see online supplemental appendix 1). This search string was then adapted for the other databases. Google Scholar was searched, and the first 400 hits were screened, followed by screening in groups of 50 hits until no relevant studies were identified. In total, 500 records were screened for eligibility. Reference lists of included studies were additionally screened to identify relevant literature, and authors were contacted for missing full texts.

## **Eligibility criteria**

We included quantitative, qualitative and mixed-method studies, and systematic/scoping reviews that reported PHC use by formerly incarcerated adult women. Studies were included if they reported contact with 'first-providers' (eg, family doctors) and the utilisation of services that are within the context of PHC, such as preventive and screening services. Studies solely reporting the prevalence of health conditions or health behaviours, those not presenting disaggregated findings based on sex/gender, and studies focusing on access to specialised healthcare services beyond the community setting (ie, mental health, treatment for SUD, maternal health, HIV/AIDS, dental care, hospitalisation and emergency care) were excluded. Narrative reviews, opinion papers that did not present original data, and studies conducted in prisons, or with juveniles were also excluded. Two independent reviewers (NA, MW) screened the records, first by title and abstract, followed by full-text screening in the second stage. Any discrepancies were resolved through discussion between the two reviewers, or in consultation with all authors. The outcomes of interest included the utilisation of PHC services by women after release from prison, including time trends, reasons for utilisation and factors affecting the uptake and retention of PHC.



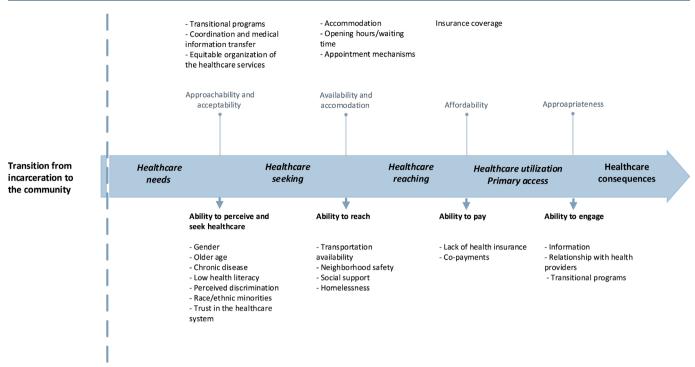


Figure 1 Factors affecting access to primary healthcare among formerly incarcerated women mapped on the Levesque framework of access to healthcare.

When available, data comparing formerly incarcerated women with other demographic groups, such as formerly incarcerated men and/or women from the general non-incarcerated population, were extracted. The web-based systematic reviews software 'Rayyan'<sup>21</sup> was used to facilitate the screening process.

#### Synthesis

Study characteristics are presented in summary tables for each study including country, setting, study design and sample characteristics. Information on time elapsed between release from prison and data collection, and time points of follow-up is also presented. We used the convergent-integrated approach to analyse the findings of the included studies, with results organised under themes.<sup>22</sup> In the discussion, we applied Levesque's Patient-Centered Access to Healthcare Model to map the findings from the included studies<sup>23</sup> (figure 1). The Levesque's framework has previously been used to explore access to healthcare services among disadvantaged groups such as refugees<sup>24</sup> and ethnic minorities<sup>25</sup> and to explore access to contraception and abortion among WIP.<sup>26</sup> The model provides perspectives from both the patient and the supplier healthcare access, represented by the approachability, acceptability, availability, affordability and appropriateness. It also incorporates five corresponding abilities of populations that interact with these dimensions: the ability to perceive, to seek, to reach, to pay and to engage.<sup>23</sup>

## Risk-of-bias assessment

Different tools according to the study design were used to assess the risk of bias in the included studies. The National Institutes of Health quality assessment tools<sup>27</sup> were used for observational cohort and cross-sectional studies. For before–after (pre–post) studies with no control group, the same tools were also employed. For qualitative studies, the critical appraisal skills programme checklist<sup>28</sup> was used.

## Patient and public involvement

Patients or the public were not involved in the design, conduct, reporting or dissemination plans of this study.

#### **RESULTS**

#### Search results

The selection process is summarised in figure 2. The search generated a total of 3524 records without duplicates, which were screened for abstract and title. 191 records were retrieved for full-text screening, and the final dataset consisted of 37 studies published between 2013 and 2022. Nineteen quantitative studies using various methods (ie, data linkage and cohort studies and before–after studies) and 17 qualitative studies were included. A case study that was reported in an opinion paper was included. The studies included in the analysis were exclusively conducted in high-income countries, predominantly originating from the USA (n=25), followed by Canada (n=7) and Australia (n=5). A detailed description of the included studies is presented in tables 1 and 2.

## PHC utilisation: trends and predisposing factors

Women had increased utilisation of PHC services and extended medical consultations during different

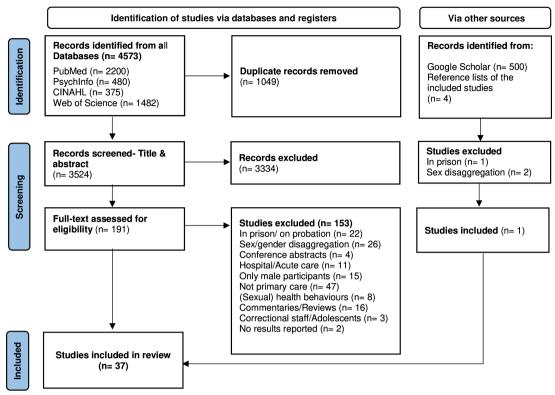


Figure 2 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram of the study selection process.

postrelease timeframes, compared with their male counterparts and women in the general population. In Ontario, Canada, records from correctional facilities showed that formerly incarcerated women were more likely to access PHC at all time periods compared with male prisoners and to women in the general population. <sup>29 30</sup> Similar trends were reported in a prospective cohort study in Queensland, Australia. <sup>31</sup> In Kansas City in the USA, women who were interviewed within 6 months after their release from jail reported regular use of primary and preventive healthcare services, despite facing competing needs after release, such as finding housing and employment. <sup>32</sup>

#### Age and chronic diseases

Data from a multisite impact evaluation study in 14 states across the USA showed that women had 2.8% increase in the odds of seeking out and receive medical treatment in the community compared with men post release, whereas having a chronic disease diagnosis and older age were associated with higher odds of receiving healthcare. 33 In another study that compared younger and older justiceinvolved women (age 18–49, and 50+ years, respectively) in three US cities, women in the older age group were more likely to have personal or primary care doctor or nurse (84.7% vs 51.6%; p<0.001), a medical home (88.5%:78.5%; p=0.004), health insurance (83.4%: 60.6%; p <0.0001), receiving care at a health clinic by appointment (84.1%: 68.3%; p <0.001) and receiving influenza vaccination compared with the younger group.<sup>34</sup> In a qualitative study of 15 mothers released from an urban jail

in mid-Atlanta in the USA, they reported frequent visits to the primary care provider or the child's paediatrician within the first few weeks of release.<sup>35</sup>

#### Barriers and facilitators to PHC utilisation

Financial and other structural factors affected the access to and utilisation of PHC among women after release. For example, women in Kansas City (USA) reported financial constraints and transportation barriers as obstacles to accessing PHC services after release. <sup>32</sup> Costs and copayments also restricted healthcare access for women in the US after release, even with health insurance. Additionally, women reported a lack of knowledge as where to find needed healthcare resources. <sup>36</sup> On the other hand, women in the USA reported that social support, having a medical home, affordable transportation and financial resources facilitated their use of sexual and reproductive health services after release from jail. <sup>37</sup> The same study also reported that neighbourhood safety influenced when the women scheduled doctor appointments.

## Disrupted medical care

Formerly incarcerated women in Sydney, Australia, experienced disruptions in medical care and transient relationships with healthcare providers on transitioning to the community. Some avoided seeking healthcare due to fear of stigma and perceived lack of receptiveness from their healthcare providers. However, they identified facilitators to healthcare access, including having a health condition that was prioritised by their healthcare providers (eg, HIV or schizophrenia), personal capabilities (self-efficacy,

Table 1 Study	Study characteristics of the included quantitative studies	he included quar	ititative studies				
Author, year	Design	City/region, country	Post-release follow-up	Study aim	Female sample size n (%)	Age (years)	Ethnic/race background
Burns e <i>t al</i> , 2021 <sup>56</sup>	Quasi- experimental	Wisconsin, USA	33 months	Medicaid coverage in the month of release and secondary outcome as a proxy measure of coverage on the day of release	8 (10%)	Mean age: 34.6	53.9% White, 41.6% black, 4.5% other
Busen <i>et al</i> , 2014	Pre-post	Houston, USA	1-11 months	Interprofessional education course to address the healthcare needs of women transitioning from prison to the community	12	Mean age: 46.5	41.6% Caucasian, 50% African American, 8.3% Hispanic
Calais-Ferreira et al, 2022 <sup>31</sup>	Prospective cohort study	Queensland, Australia	2 years	Usual provider continuity index, continuity of care index and having at least one extended primary care consultation (>20min)	254 (24%)	Mean age: 31.67*	33.5% Indigenous
Dickson <i>et al</i> , 2018 <sup>58</sup>	Pre-post	Appalachian Kentucky, USA	3 months	Healthcare under the Affordable Care Act (ACA) compared with pre- ACA and whether being insured is associated with having a usual source of care	371	Mean age: 32.6	98.9% White
Emerson <i>et al</i> , 2022 <sup>34</sup>	Cross-sectional	Oakland, Birmingham, and Kansas City, USA	A/A	Health services needs of older adult women compared with younger women	510	Old group mean age: 56.4 Young group mean age: 36.1	30.8% White, 57.3% black, 12% others
Fahmy <i>et al</i> , 2018 <sup>44</sup>	Non-randomised control trial	British Columbia, Canada	N/A	Receiving an appointment at a family doctor for people recently released from prison	250 family doctors	N/A	N/A
Hall <i>et al</i> , 2022 <sup>39</sup>	Cross-sectional	Oakland, Birmingham, and Kansas City, USA	A/A	Knowledge, beliefs and health practices regarding cervical health, healthcare access and use	383	Mean age: 37	51% Black, 35% white, 5% Latina, 9% other
Hughes <i>et al</i> , 2020 <sup>33</sup>	Cross-sectional	14 states in the USA	3, 9 and 15 months	To examine the differences between male and female inmates with regard to chronic illness diagnoses and healthcare receipt during reentry	159 (20.8%)	Mean age: 30.4	42% White
Kouyoumdjian et al, 2018a <sup>29</sup>	Retrospective cohort	Ontario, Canada	0-6days, 7-29days, 30-89days, 90-179days, 180-364days, 365-730days	Utilisation of primary care compared with the general population	6107 (12.5%)	Mean age: 32	58.8% White, 11.4% black, 10.1% aboriginal, 10.4%†
							:

Continue

Table 1 Continued	penu						
Author, year	Design	City/region, country	Post-release follow-up	Study aim	Female sample size n (%)	Age (years)	Ethnic/race background
Kouyoumdjian <i>et al</i> , 2018b <sup>sz</sup>	Retrospective cohort	Ontario, Canada	3 years before and 3 years after the index date‡	Proportion of women who were overdue for cervical cancer	4553	Mean age: 36	57.9% White, 14.5% aboriginal, 6.5% black, 21.2% other
McConnon et al, 2019 <sup>53</sup>	Retrospective cohort	Ontario, Canada	3 years before index date; Index admission; 3 years after index admission§	Whether screen-eligible individuals were overdue for breast and colorectal cancer screening on the index date	317 (8.3%) Colorectal cancer screen-eligible 249 (100%) Breast cancer screen eligible	Colorectal cancer screen-eligible mean age: 39.5†* Breast cancer screen-eligible mean age: 50.45†*	4.4% Aboriginal, 5.8% black, 67.4 white, 6.4% Asian, 0.6% Hispanic, 15.3% other
McLeod et al, 2020	Mixed methods	British Columbia, Canada	First 3 days post release	Access to family doctor post release 172	172	Age range: 31–50	54% Indigenous
Morse <i>et al</i> , 2017 <sup>62</sup>	Pre-post	New York, USA	A 9 months	Having a primary care provider and receipt of recommended testing and treatment	100	Mean age: 38.3	56 Caucasian,10 Hispanic, 32 African-American, 2 other
Norris <i>et al</i> , 2021a	Retrospective cohort	Ontario, Canada	Days 0-6, 7-29, 30-89, 90-179, 180-364 and 365-730	Healthcare use in prison and during the follow-up periods after release, and by type of healthcare compared with age-matched females in the general population	6107	Median age: 33	56.4% White, 16.0% aboriginal, 6.7% black, 5.6% other
Oser <i>et al</i> , 2016 <sup>46</sup>	Cohort	USA	18 months	African American women's use of health services after release from prison	181	Mean age: 36	African-American
Patel <i>et al</i> , 2022 <sup>60</sup>	Pilot	Philadelphia, USA	N/A	To enrol women into Medicaid before release and set up their first doctor's appointments to ensure continuous access to treatment	1292	N/A	N/A
Pickett <i>et al</i> , 2020 <sup>54</sup>	Cross-sectional¶	Kansas City, USA	N/A	STI testing within 1 year post intervention	133	Mean age: 35.1	48% White, 30% black, 8.3% Hispanic, 18.8% other
Puljević <i>et al</i> , 2018 <sup>55</sup>	Cross-sectional¶	Queensland, Australia,	2 years	First dispensing of smoking cessation products after release from prison	221 (22.8%)	N/A	72.8% Not Indigenous†
							Continued

on,	Table 1 Continued					
al,  Cross-sectional USA  Prospective Queensland,	City/region, country	Post-release follow-up	Study aim	Female sample size n (%)	Age (years)	Ethnic/race background
al, Cross-sectional USA Prospective Queensland,			Perceived discrimination and the			18% white, 46% black. 30%
Cross-sectional USA Prospective Queensland,			association between discrimination			Hispanic, 5%
Prospective Queensland,		months	and self-reported physical health	109 (15%)	Mean age: 46	other†
cohort Australia	Queensland, Australia	1, 3 and 6 months	Time-to-event hazard rates of primary care physician contact	189 (22.3%)	Mean age: 34.2	18.8% Indigenous†

\*Mean age calculated by the authors. †Data for the entire sample.

Sindex date is the date of the admission leading to the initial release in 2010 in the corrections group, or July 1/2010 for the general population group (as reported in the original paper). Index date is the date of admission to prison leading to first release in 2010 (as reported in the original paper)

Based on the methodology used in another published paper of the same study.

N/A, not applicable/not available.

assertiveness), family support, overcoming substance use, compliance with health system rules and participation in transitional care programmes. 38 In the USA, many women who lost their insurance on incarceration reported being assigned a primary-care doctor they did not know or trust when re-enrolling in health insurance. <sup>39</sup> Similarly, women who participated in post-release SUD programmes had to switch to a new primary-care doctor affiliated with the same programme. 40 Women in the same study stated that the physical environment of the clinic including accessibility and convenience influenced the doctor-patient relationship.<sup>37</sup> Formerly incarcerated women in the USA who reported not using contraceptives were more likely to lack health insurance and experience food insecurity compared with contraceptive users. 39 Similarly, in a qualitative study with formerly incarcerated women in New York city, participants reported factors that disrupted their contraception use post release, including their incarceration experience, insurance status and relationship with healthcare providers.<sup>41</sup>

## Health literacy

Formerly incarcerated, homeless women who were enrolled in a residential drug treatment programme in Southern California, USA, reported multiple chronic conditions, alongside a lack of knowledge in terms of healthcare needs, not having insurance and long waiting times for medical appointments. <sup>42</sup> For these women, lack of health insurance was also cited as an institutional/societal level factor that affected their reinsertion into the community, in addition to lack of understanding of the changing health insurance policies in the USA. <sup>43</sup>

## Perceived discrimination in the healthcare system

Using patient role to determine if a history of recent imprisonment affects access to PHC in British Columbia, Canada, researchers found that discrimination due to history of incarceration was a barrier to PHC for women released from prison, compared with a control group (women with no history of incarceration), even with universal health insurance. 44 Formerly incarcerated Latina mothers in Texas who experienced sexual violence during incarceration, reported underutilisation of PHC after release. Despite their elevated healthcare needs due to high-risk sexual activity including commercial sex work, they avoided seeking essential PHC due to fear of discrimination. 45 For African-American women, visits to the ambulatory services after release were often characterised by experiences of gendered racism. 46 In contrast, participants in a cross-sectional survey in three US cities, which evaluated perceived healthcare quality post release, reported positive interactions with healthcare providers and satisfaction with care, without extensive experience of discrimination.<sup>39</sup> Women with a history of incarceration, however, were less likely to report perceived discrimination in healthcare settings compared with their male counterparts (16% and 84%, respectively). 47 Women with a history of sexual violence

Table 2 Stud	Study characteristics of the included qualitative studies	he included qualitativ	e studies				
Author, year	Design	City/region, country	Post release follow-up	Study aim	Female sample size n (%)	Age (years)	Ethnic/race background
Abbott <i>et al.</i> , 2017a <sup>38</sup>	Phone interviews	New South Wales, Australia	1–6 months	To examine the ways in which women in contact with the prison system experience access to healthcare in the community	29 (72.5%)	Mean age: 44.65*	55.1% Aboriginal, 3.4% Torres Strait Islander, 20.6% Culturally diverse†
Abbott <i>et al.</i> , 2017b <sup>49</sup>	Retrospective review of medical records of women released from New South Wales prisons in 2013–2014	New South Wales, Australia	Z/A	Health information transfer and continuity of care arrangements between prison and community providers for women in prison	210	Mean age: 35.74*	11% Culturally diverse, 36% Aboriginal and Torres Strait Islander
Barnert e <i>t al.</i> , 2022 <sup>59</sup>	Semistructured interviews	USA	N/A	To identify challenges and solutions to eliminating gaps in Medicaid coverage during reentry	28 Clinical and policy experts	N/A	N/A
Crawford et al., 2022 <sup>45</sup>	Semistructured interviews	South-Central Texas region, USA	N/A	To explore the experiences of Latina mothers impacted by incarceration in the South-Central Texas region?	12	Mean age: 38.4*	100% Latina
Jennings et al., 2021 <sup>51</sup>	Semistructured interviews	Hennepin County, Minnesota, USA	N/A	To describe physicians' views on how transitions into and out of incarceration impact care plans for patients	23 Physicians	Mean age: 48	83% White, 91% non- 3 Hispanic
Kapetanovic, 2014 <sup>36</sup>	Semistructured interviews	Mid-Atlantic, USA	Past 12 months	To explore health and health promotion of recently released women	10	Mean age: 43†	57% White 37% Black/African American
Norris <i>et al.</i> , 2022 <sup>48</sup>	In-person or phone interviews	Arkansas, USA	3–5 years post release	To elevate formerly incarcerated women's voices regarding their perspectives on healthcare in the community	63	Age range: 18–29	6.3% American Indian/ Alaskan Native, 1.6% Asian, 1.6% African American, 82.5% white, 4.8 multiracial
Ramaswamy et al., 2015 <sup>32</sup>	Semistructured interview	Kansas City, USA	6 months	To describe the health priorities of women recently released from jail	28	Mean age: 35	88.5% Black, 7.7% white, 3.8% other
Ramaswamy et al., 2018 <sup>37</sup>	Semistructured interview	Kansas City, USA	6 months	To understand factors that support or undermine sexual and reproductive healthcare use among women recently released from jail	28	Mean age: 3	88.5% Black, 7.7% Mean age: 35 white, 3.8% other
Salem <i>et al.</i> , 2013 <sup>42</sup>	Focus group discussion	USA	<b>∀</b> Z	To understand the healthcare needs of homeless female ex-offenders	44	Mean age: 42	Mean age: 42 79% African American, 14% white, 7% Hispanic/Latino
							:

Table 2 Con	Continued						
Author, year	Design	City/region, country	Post release follow-up	Study aim	Female sample size n (%)	e Age (years)	Ethnic/race background
Salem <i>et al.</i> , 2021 <sup>43</sup>	Focus group discussions	Los Angeles, California, USA	N/A	To understand experiences of formerly incarcerated, homeless women as they prepared to transition to the community	18	Mean age: 37.6	50% American/Black, 22.2% Hispanic/ Latino, 22% white
Schonberg et al., 2019 <sup>**40</sup>	Semistructured interviews	New York, USA	Median time: 21 months	To learn what factors affect the doctor patient relationship and what family physicians can do to improve care for women returning to the community	10	Median age: 27	40% Hispanic, 20% black, 20% white, 10% West Indian, 10% multiracial, 10% born outside the USA
Schonberg et al., 2020 <sup>~41</sup>	Semistructured interviews	New York, USA	Median time: 21 months	To understand the contraceptive needs and pregnancy desires experienced by women after release	10	Median age: 27	40% Hispanic, 20% black, 20% white, 10% West Indian, 10% multiracial, 10% unknown
Sered and Norton-Hawk, 2019 <sup>57</sup>	Interviews and ethnographic observations	Massachusetts, USA	9 years follow-up	To provide those who work in correctional institutions a broader view of the lives of justice-involved women outside of those institutions	47	Median age: 37.9*	72% White, 19% black, 11% Asian/ Hispanic
Stelson <i>et al.</i> , 2018 <sup>35</sup>	Semistructured interviews	USA	Past 25 months	Reentry experiences of mothers released from an urban jail	15	Mean age: 28 N/A	N/A
Thomas <i>et al.</i> , 2019 <sup>63</sup>	Thomas <i>et al.</i> , Semistructured 2019 <sup>63</sup> interviews	Upstate New York, USA	Z/A	The experiences of women who participated in a pilot medical clinic for recently released women	5	Age range: 26–61	46.1% Caucasian, 30.8% African- American, 7.7% Asian, 7.7% Alaska Native, 7.7% Native Hawaiian/ Pacific Islander
*Mean age calc	*Mean age calculated by the authors.						

<sup>\*</sup>Mean age calculated by the authors. †Data for the entire sample. N/A, not applicable/not available.



victimisation were asked to provide insights to decision-makers in the USA regarding their post-release health-care experience. They highlighted the unavailability of care, the lack of compassionate healthcare providers and the need for healthcare professionals who recognise their unique healthcare needs. 48

## Continuity of care and communication between the prison and PHC providers

Few studies have explored the continuity of healthcare after release from prison and its consequences. A study that examined health information transfer and arrangement for continuity of care for women released from New South Wales prisons reported generally poor discharge arrangements.<sup>49</sup> For instance, discharge information was not routinely provided to the community doctor, despite most women having an identifiable doctor in their records. On release from prison, no arrangements were made with community doctors in most cases, and reduced communication between the prison and PHC providers was reported, compared with communication during prison entry. Additionally, unpredictable release dates and movement between correctional settings affected the transfer of information at release. Women enrolled in prerelease healthcare programme had better linkage of care after release, whereas women with physical health conditions that required follow-up were more likely to schedule medical appointments after release, regardless of mental health conditions or SUD. 49

In a case study presented by Kouyoumdjian *et al*,<sup>50</sup> it was demonstrated that PHC providers can play an important role in achieving continuity of care between incarceration and release through consistent communication between the primary care team and the prison-based physician. From the perspective of primary-care doctors in the USA, continuity of care between incarceration and release is likely to be disrupted due to breaks in the patient–physician relationships, challenges in accessing prescription medications, disruptions in insurance coverage, and problems with sharing medical records. On the other hand, physicians' knowledge of a patient's past or upcoming incarceration informed their care plan for the patient.<sup>51</sup>

## Screening

In Ontario, Canada, linkage of correctional and health administrative data showed that women with a history of imprisonment were overdue on cervical cancer screening compared with women in the general population, an issue that persisted three years after release.<sup>52</sup> The same study reported that most of the released women used PHC multiple times during this period. Another study of the same sample reported that women were still overdue for colorectal and breast cancer screenings three years after release from prison.<sup>53</sup> For those who were overdue for breast cancer screening, 78% had had at least one PHC visit in the three years prior.<sup>53</sup> In Kansas City (USA), a high proportion of women released from jails reported

receiving sexually transmitted infections (STI) screening within oneyear after release, where younger age, high school education, having insurance and alcohol or illicit drug being correlated with STI screening.<sup>54</sup>

#### **Prescriptions and health insurance enrolment**

Women continue to face discrepancies in medication prescriptions, either due to insufficient insurance coverage or changes in their relationships with health-care providers after release. In a two-year follow-up study of adult smokers after release from prison in Queensland, Australia, only 9% of the female participants were provided with subsidised smoking cessation pharmacotherapy by their PHC providers, compared with 52.2% of women in the general community.<sup>55</sup>

## Insurance coverage and enrolment

Using administrative data, two natural experiments were conducted to evaluate insurance enrolment initiatives in the USA: Medicaid eligibility expansion and Medicaid enrolment assistance. Both policies were found to be associated with substantially increased Medicaid enrolment during the month of release. Specifically, prerelease enrolment assistance was linked to a higher likelihood of individuals applying for Medicaid before their release date. 56 The study also reported that women were 15% more likely than men to be enrolled in Medicaid during the month of release. In Massachusetts, USA, state level expansion of Medicaid facilitated access to healthcare for women after release from prison.<sup>57</sup> In rural Appalacia (USA), women released after the implementation of the Affordable Care Act (ACA) were more likely to have healthcare coverage for at least one month during the three-month follow-up period compared to those released prior to the ACA (84% and 27%, respectively). 58 Clinical and policy experts considered Medicaid coverage gaps during reentry a significant public health concern in the USA. The experts supported terminating the federal Medicaid Inmate Exclusion, and suggested that deactivating Medicaid coverage during incarceration should no longer be necessary due to the excessive burden on justice-involved people to reactivate Medicaid after incarceration, leading to coverage gaps and probably 'double billing'. The participants suggested scalable policy solutions to eliminate Medicaid coverage gaps during re-entry.<sup>59</sup> In Philadelphia (USA), a pilot programme was initiated to facilitate prerelease Medicaid enrolment and connect incarcerated women at the Philadelphia women's jail with community health centres. Out of 1767 incarcerated women offered the programme, 1292 agreed to participate. Half of the participants in the pilot received physical and/ or behavioural healthcare services through Medicaid in the weeks immediately after re-entry. Among those who declined Medicaid enrolment, reasons included mistrust and insufficient understanding of what insurance is and how it can be used.<sup>60</sup>



## Interventions to improve utilisation of PHC

In a Peer Health Mentoring Program designed to support women in Canada in navigating health and social services after release, participants had increased access to a family physician within three days of release with the help of their mentor. They also received more information regarding PHC access.<sup>61</sup> In a city in upstate New York, USA, a primary care-based programme designed to address the health needs of women nine months postrelease led to an increase in women's receipt of medical checkups, including testing, screening and treatment for various conditions.<sup>62</sup> The same study also reported that 83% of the women did not have a primary care provider prior to programme enrolment. In a qualitative study evaluating a primary care programme (WISH-TC) in New York, women reported feeling empowered to overcome system barriers, make decisions related to their healthcare needs on release, and felt motivated to adopt healthier lifestyle habits. 63 They also prioritised clinic appointments and reported better health literacy and understanding of their personal health needs. A 12-week health promotion programme for women during their re-entry in Houston, USA, showed that many women had little experience with health professionals and felt intimidated or unsure about how to ask pertinent questions. Participants in the programme reported increased health knowledge and benefited from access to dental care. One participant credited the programme for early detection of her breast cancer.<sup>64</sup> In Queensland, Australia, non-Indigenous women participating in a transitional programme had increased contact with a primary-care doctor during the first month after release, while Indigenous participants in the same study had decreased contact. Furthermore, participants who consulted a primary care doctor during the first month postrelease were twice as likely to use PHC within six months compared to those who reported no contact.65

## Risk-of-bias assessment

Most of qualitative studies (13/15) were rated as high quality (rating yes of 7/10 criteria) (online supplemental appendix 2). Notably however, only one qualitative study satisfied the criteria that addresses the consideration of the relationship between researcher and participants. Half of the before–after studies (n=6) were rated as high-quality studies (online supplemental appendix 3), and most of the other quantitative studies (12/14) were rated as high quality (scoring >75% of yes ratings) (online supplemental appendix 4).

#### **DISCUSSION**

This review included 37 studies that explored the experiences of women with a history of incarceration in accessing PHC. We identified five themes describing the predisposing factors, trends and factors influencing PHC utilisation among this population. Consistent with findings from a previous scoping review on community

healthcare for women, transgender and non-binary people who have experienced incarceration,<sup>3</sup> women released from prison continue to face challenges and barriers to obtaining optimal, patient-centred healthcare. These challenges are compounded by the unique gendered vulnerabilities and needs of formerly incarcerated women. The findings suggest that their perception and pursuit of healthcare (the first domain of Levesque's framework) are influenced by various factors. These include health and/or system literacy, belonging to a minority or Indigenous population, as well as perceived discrimination in the healthcare system (whether gender based or due to incarceration history). On the provider side, transitional and health promotion programmes are crucial for addressing this period by providing necessary knowledge and screening activities to assist women in realising their health needs. Studies from Australia, USA and Canada highlight both gender and history of incarceration as factors driving increased PHC utilisation among formerly incarcerated women compared with their male counterparts and women in the general population. This underscores the heightened healthcare needs of formerly incarcerated women. Gender has been consistently associated with lifestyle and health behaviours in the literature, 66 with women seeking PHC to a greater extent compared with men. 67-69 However, the findings of the aforementioned studies partially contradict existing evidence on the barriers to PHC for women with a history of incarceration. Additionally, since some of these studies were limited to a single city or state, a further investigation is recommended.

Few studies have explored structural factors related to the dimension of affordability and the ability to pay that affect access to healthcare (ie, geographical location and availability of transportation). Another common barrier to accessing healthcare after release from prison is the lack of health insurance and difficulties obtaining it on release, resulting in delays and disruption in healthcare access, and breakdowns in relationships with community healthcare providers. In the countries included in this review, such as Australia and Canada, people were either excluded from the national health system, <sup>70</sup> 71 or lacked insurance coverage on incarceration (eg, in the USA).<sup>72</sup> This exclusion undersocres the inequalities in health status and access to healthcare services, even in high-income countries with high universal health coverage index.<sup>73</sup> This situation contributes to the fragmented implementation of various human rights treaties and non-binding United Nations standards, such as the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (Bangkok Rules), which mandate for the humane and gender responsive treatment of women in detention.<sup>74</sup> The various treaties and standards, along with international experts advocate for an integrated system-wide Throughcare approach. This approach emphasises the integration of prison-based rehabilitation, reintegration and aftercare programming. It also



calls for a person-centred and holistic needs assessment that considers comorbidities, gendered vulnerabilities and the need for age-responsive care both in prison and post release.<sup>75</sup> However, evidence on the extent to which these recommendations and guidelines are implemented remains scarce. <sup>73</sup> <sup>76</sup> Included studies from the USA have demonstrated that interventions to expand health insurance coverage among people released from prison can effectively improve coverage rates for this population, which is more likely to be uninsured. Such interventions also have the potential to enhance enrolment in health insurance programmes and reduce health disparities. 72 77 Furthermore, health promotion interventions and transitional programmes offer valuable insights into the potential benefits of integrating transitional care within PHC. These interventions offer strategies for overcoming the barriers to healthcare that women face on release from incarceration. Consistent with a systematic review of postrelease programmes for women exiting prison with SUDs, transitional programmes have proven beneficial by optimising continuity of care from prison to the community. These programmes also facilitated prerelease linkage to health and social services in the community, thus enhancing the overall transition process for women.<sup>17</sup> The Bangkok Rules advocate for collaboration between prison authorities and probation or social welfare services to develop comprehensive preand post-reintegration programmes tailored to address the specific needs of WIP. 78 One example for such efforts is the model of community-based transition clinics developed in the USA to enhance access to healthcare services during the transition from incarceration to the community. These clinics provide information about community healthcare providers and assist in transitional healthcare planning to ensure continuity of care during this critical period.<sup>79</sup> These efforts are crucial in addressing barriers to accessing PHC for this population, helping to prevent worsening health outcomes and reduce the use of acute healthcare services, 80 particularly among low-income or uninsured patients, patients with mental health conditions, and elderly with multiple chronic illnesses.<sup>81</sup> We recommend further research to explore the long-term effects and retention of care among people participating in these programmes, focusing on the appropriateness dimension of access to PHC, which was the least addressed dimension in the included studies in this systematic review.

Moreover, it is worth noting that the included studies predominantly focused on western high-income countries. Upon closer examination, similar patterns of geographical representation were observed among the excluded studies. This underscores the limited scope of literature and evidence from low- and middle-income countries. There is a clear need for a deeper understanding of the situation faced by people who experience incarceration in these settings, especially given the unique challenges present in the PHC systems in these contexts. 82

## Limitations and strengths of the review

To the best of our knowledge, this is the first systematic review that summarises the evidence on factors affecting access to PHC among women with a history of incarceration. Nonetheless, several limitations should be considered when interpreting the findings, notably the restricted evidence to western high-income countries. Additionally, variations in PHC systems across different contexts represented in this review may affect the generalisability of the findings. However, we draw on previous cross-national comparative studies that underscore the potential of comparative research to guide the development of PHC services, while considering the beliefs and values of both healthcare providers and stakeholders.<sup>83</sup> Finally, while some of the included studies reported LGBTQ+/Transgender women in their samples, specific information on this population was not provided. Given the distinct risks and vulnerabilities between transgender and non-transgender people in prison and on release, dedicated policies are necessary to address their unique needs. 84 Therefore, it is crucial to account for and provide comprehensive reporting on these populations in future research.

## **CONCLUSION AND IMPLICATIONS**

Findings of this review highlight the significant barriers women encounter when accessing PHC on transitioning from incarceration to the community. These barriers encompass individual, cultural, contextual and systematic factors. While identifying opportunities and facilitators to enhance PHC access among this population is crucial, access alone is insufficient. Effective support requires integrating Throughcare planning prior to release, ensuring health information transfer on release, and adopting a non-judgmental, gender- and culturally responsive approach. Such strategies can improve PHC utilisation and lead to better health outcomes for formerly incarcerated women. This reiterates the critical need for extending universal healthcare coverage to include people with a history of incarceration, and aligning healthcare services for people in prisons closely with national public healthcare systems. Future research should account for sex/gender disaggregated data when including diverse gender populations. Finally, interventions that aim at improving access to PHC for formerly incarcerated women should be developed in collaboration with local institutions and health agencies. These interventions should focus on enhancing health literacy and assisting women in navigating the healthcare system more effectively.

#### **Author affiliations**

<sup>1</sup>Heidelberg Institute of Global Health, Heidelberg University, Heidelberg, Baden-Württemberg, Germany

<sup>2</sup>Institute of Addiction Research (ISFF), Frankfurt University of Applied Science Faculty of Health and Social Work, Frankfurt am Main, Hessen, Germany <sup>3</sup>Swiss Tropical and Public Health Institute, Basel, Basel-Stadt, Switzerland

<sup>4</sup>Public Health Institute, Liverpool John Moores University, Liverpool, UK



**Contributors** Study conception and design: NA, HS, VW and MCVH. Literature search and screening: NA, BM and MW. Analysis; original draft preparation: NA. Draft editing: HS, VW, MCVH, BM and MW. All authors critically reviewed the manuscript and approved the final version. NA accepts full responsibility for the finished work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

#### **ORCID iDs**

Nisreen Agbaria http://orcid.org/0000-0001-6297-6349
Margit Wirth http://orcid.org/0009-0000-6367-4692
Volker Winkler http://orcid.org/0000-0002-9974-1145
Babak Moazen http://orcid.org/0000-0002-2552-0438
Marie Claire Van Hout http://orcid.org/0000-0002-0018-4060

#### **REFERENCES**

- 1 Glob Prison Trends. Penal reform international 2023. 2023.
- 2 Penal Reform International, Available: https://www.penalreform.org/ issues/women/key-facts
- 3 Paynter M, Heggie C, Low C, et al. Community-based models of health care for women, trans and nonbinary people released from prisons: An international scoping review with implications for Canada. J Clin Nurs 2023;32:3277–94.
- 4 Bard E, Knight M, Plugge E. Perinatal health care services for imprisoned pregnant women and associated outcomes: a systematic review. BMC Pregnancy Childbirth 2016;16:285.
- systematic review. *BMC Pregnancy Childbirth* 2016;16:285.

  5 Van Hout MC, Mhlanga-Gunda R. Contemporary women prisoners health experiences, unique prison health care needs and health care outcomes in sub Saharan Africa: a scoping review of extant literature. *BMC Int Health Hum Rights* 2018;18:31.
- 6 Geitona M, Milioni S-O. Health status and access to health services of female prisoners in Greece: a cross-sectional survey. BMC Health Serv Res 2016;16:243.
- 7 Breuer E, Remond M, Lighton S, et al. The needs and experiences of mothers while in prison and post-release: a rapid review and thematic synthesis. Health Justice 2021;9:31.
- 8 Binswanger IA, Nowels C, Corsi KF, et al. "From the prison door right to the sidewalk, everything went downhill," A qualitative study of the health experiences of recently released inmates. Int J Law Psychiatry 2011;34:249–55.
- 9 Frank M, Loh R, Everhart R, et al. No health without access: using a retrospective cohort to model a care continuum for people released from prison at an urban, safety net health system. Health Justice 2023;11:49.
- 10 Kinner SA, Wang EA. The Case for Improving the Health of Ex-Prisoners. Am J Public Health 2014;104:1352–5.

- 11 Erickson M, Shannon K, Sernick A, et al. Women, incarceration and HIV: a systematic review of HIV treatment access, continuity of care and health outcomes across incarceration trajectories. AIDS 2019;33:101–11.
- 12 Janca E, Keen C, Willoughby M, et al. Sex differences in suicide, suicidal ideation, and self-harm after release from incarceration: a systematic review and meta-analysis. Soc Psychiatry Psychiatr Epidemiol 2023;58:355–71.
- 13 Freudenberg N, Daniels J, Crum M, et al. Coming Home From Jail: The Social and Health Consequences of Community Reentry for Women, Male Adolescents, and Their Families and Communities. Am J Public Health 2005;95:1725–36.
- 14 Tuinema J, Orkin AM, Cheng SY, et al. Emergency department use in people who experience imprisonment in Ontario, Canada. CJEM 2020;22:232–40.
- 15 Declaration of Alma-Ata International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978. *Development (Rome)* 2004;47:159–61.
- 16 Starfield B. Is primary care essential? *The Lancet* 1994;344:1129–33.
- 17 Edwards L, Jamieson SK, Bowman J, et al. A systematic review of post-release programs for women exiting prison with substance-use disorders: assessing current programs and weighing the evidence. Health Justice 2022;10:1.
- 18 Shirley-Beavan S, Roig A, Burke-Shyne N, et al. Women and barriers to harm reduction services: a literature review and initial findings from a qualitative study in Barcelona, Spain. Harm Reduct J 2020:17:78.
- 19 Stanton AE, Rose SJ. The Mental Health of Mothers Currently and Formerly Incarcerated in Jails and Prisons: An Integrative Review on Mental Health, Mental Health Treatment, and Traumatic Experiences. J Forensic Nurs 2020;16:224–31.
- 20 Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:71.
- 21 Ouzzani M, Hammady H, Fedorowicz Z, et al. Rayyan—a web and mobile app for systematic reviews. Syst Rev 2016;5:210.
- 22 Stern C, Lizarondo L, Carrier J, et al. Methodological guidance for the conduct of mixed methods systematic reviews. JBI Evd Synth 2020:18:2108–18.
- 23 Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. Int J Equity Health 2013;12:18.
- 24 Haj-Younes J, Abildsnes E, Kumar B, et al. The road to equitable healthcare: A conceptual model developed from a qualitative study of Syrian refugees in Norway. Social Science & Medicine 2022:292:114540.
- 25 Vandan N, Wong JY, Fong DY. Accessing health care: Experiences of South Asian ethnic minority women in Hong Kong. *Nursing & Health Sciences* 2019;21:93–101.
- 26 Paynter M, Pinzón Hernández P, Heggie C, et al. Abortion and contraception for incarcerated people: A scoping review. PLoS ONE 2023:18:e0281481
- 27 National Institutes of Health. Quality Assessment tool for Observational Cohort and Cross-Sectional Studies, 2021. Available: https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools
- 28 Critical Appraisal Skills Programme. CASP Qualitative studies checklist, 2022. Available: https://casp-uk.net/images/checklist/ documents/CASP-Systematic-Review-Checklist/CASP-Systematic-Review-Checklist-2018 fillable-form.pdf
- 29 Kouyoumdjian FG, Cheng SY, Fung K, et al. Primary care utilization in people who experience imprisonment in Ontario, Canada: a retrospective cohort study. BMC Health Serv Res 2018;18.
- 30 Norris E, Kim M, Osei B, et al. Health Status of Females Who Experience Incarceration: A Population-Based Retrospective Cohort Study. J Womens Health (Larchmt) 2021;30:1107–15.
- 31 Calais-Ferreira L, Butler A, Dent S, et al. Multimorbidity and quality of primary care after release from prison: a prospective data-linkage cohort study. BMC Health Serv Res 2022;22:876.
- 32 Ramaswamy M, Upadhyayula S, Chan KYC, et al. Health Priorities among Women Recently Released from Jail. Am J HIth Behav 2015;39:222–31.
- 33 Hughes MH, Smith M, Brown TC, et al. Gender Differences in Health Care Needs and Service Attainment Among Violent Offenders. J Correct Health Care 2020;26:55–65.
- 34 Emerson A, Lipnicky A, Comfort M, et al. Health and Health Service Needs: Comparison of Older and Younger Women with Criminal– Legal Involvement in Three Cities. J Aging Health 2022;34:60–70.
- 35 Stelson E, Mogul M, Harner H, et al. Social Determinants of Health and What Mothers Say They Need and Want After Release From Jail. Prev Chronic Dis 2018;15:1–5.



- 36 Kapetanovic TA. A Descriptive Exploratory Study of Health Promotion Among Men and Women Released From a County Detention. Center: Catholic University of America, 2014.
- 37 Ramaswamy M, Unruh E, Comfort M. Navigating Social Networks, Resources, and Neighborhoods: Facilitators of Sexual and Reproductive Health Care Use among Women Released From Jail. Womens Reprod Health (Phila) 2018;5:44–58.
- 38 Abbott P, Magin P, Davison J, et al. Medical homelessness and candidacy: women transiting between prison and community health care. Int J Equity Health 2017;16:130.
- 39 Hall B, Atrio J, Moore S, et al. Perceived healthcare quality and contraception utilization among persons recently incarcerated. J Crim Justice 2022;83:101974.
- 40 Schonberg D, Bennett AH, Helmy HL, et al. Influences on the Doctor-patient Relationship for Recently Incarcerated Women: What can the Family Physician do to Improve Care? Family Doctor: A. J N Y S A F P 2019;8:42–8.
- 41 Schonberg D, Bennett AH, Gold M. The contraceptive needs and pregnancy desires of women after incarceration: A qualitative study. *Contraception* 2020;101:194–8.
- 42 Salem BE, Nyamathi A, Idemundia F, et al. At a Crossroads: Reentry Challenges and Healthcare Needs Among Homeless Female Ex-Offenders. J Forensic Nurs 2013;9:14–22.
- 43 Salem BE, Kwon J, Ekstrand ML, et al. Transitioning into the Community: Perceptions of Barriers and Facilitators Experienced By Formerly Incarcerated, Homeless Women During Reentry—A Qualitative Study. Community Ment Health J 2021;57:609–21.
- 44 Fahmy N, Kouyoumdjian FG, Berkowitz J, et al. Access to Primary Care for Persons Recently Released From Prison. Ann Fam Med 2018;16:549–51.
- 45 Crawford AD, McGlothen-Bell K, Cleveland LM. "I did whatever they wanted me to do": a qualitative secondary analysis using reproductive justice to explore sexual violence among justiceinvolved Latina mothers. BMC Public Health 2022;22:1–13.
- 46 Oser CB, Bunting AM, Pullen E, et al. African American Female Offender's Use of Alternative and Traditional Health Services After Re-Entry: Examining the Behavioral Model for Vulnerable Populations. hpu 2016;27:120–48.
- 47 Redmond N, Aminawung JA, Morse DS, et al. Perceived Discrimination Based on Criminal Record in Healthcare Settings and Self-Reported Health Status among Formerly Incarcerated Individuals. J Urban Health 2020;97:105–11.
- 48 Norris WK, Allison MK, Fradley MF. You're setting a lot of people up for failure': what formerly incarcerated women would tell healthcare decision makers. *H J* 2022;10:4.
- 49 Abbott P, Magin P, Lujic S, et al. Supporting continuity of care between prison and the community for women in prison: a medical record review. Aust Health Review 2017;41:268.
- 50 Kouyoumdjian F, Wiwcharuk J, Green S. Optimizing continuity of care throughout incarceration: case and opportunities. *Can Fam Physician* 2015;61:107–9.
- 51 Jennings L, Branson CF, Maxwell AM, et al. Physicians' perspectives on continuity of care for patients involved in the criminal justice system: A qualitative study. PLoS ONE 2021;16:e0254578.
- 52 Kouyoumdjian FG, McConnon A, Herrington ERS, et al. Cervical Cancer Screening Access for Women Who Experience Imprisonment in Ontario, Canada. JAMA Netw Open 2018;1:e185637.
- 53 McConnon A, Fung K, Lofters A, et al. Colorectal and Breast Cancer Screening Status for People in Ontario Provincial Correctional Facilities. Am J Prev Med 2019;56:487–93.
- 54 Pickett ML, Lee J, Brousseau DC, et al. Correlates of sexually transmitted infection testing following women's release from jail. Women & Health 2020;60:1109–17.
- 55 Puljević C, de Andrade D, Carroll M, et al. Use of prescribed smoking cessation pharmacotherapy following release from prison: a prospective data linkage study. *Tob Control* 2018;27:474–8.
- 56 Burns ME, Cook ST, Brown L, et al. Increasing Medicaid enrollment among formerly incarcerated adults. Health Serv Res 2021;56:643–54.
- 57 Sered SS, Norton-Hawk M. Women on the Institutional Circuit: A 9-Year Qualitative Study. J Correct Health Care 2019;25:25–36.
- 58 Dickson MF, Staton M, Tillson M, et al. The Affordable Care Act and Changes in Insurance Coverage and Source of Health Care among High-risk Rural, Substance-using, Female Offenders Transitioning to the Community. J Health Care Poor Underserved 2018;29:843–63.
- 59 Barnert ES, Scannell C, Ashtari N, et al. Policy solutions to end gaps in Medicaid coverage during reentry after incarceration in the

- United States: experts' recommendations. *J Public Health (Berl)* 2022:30:2201–9
- 60 Patel K, Herdman B, Brown K. Preventing Interruptions in Health Care After Release From Jail. J Correct Health Care 2022;28:215–9.
- 61 McLeod KE, Korchinski M, Young P, et al. Supporting women leaving prison through peer health mentoring: a participatory health research study. cmajo 2020;8:E1–8.
- 62 Morse DS, Wilson JL, McMahon JM, et al. Does a Primary Health Clinic for Formerly Incarcerated Women Increase Linkage to Care? Womens Health Issues 2017;27:499–508.
- 63 Thomas K, Wilson JL, Bedell P, et al. "They didn't give up on me": a women's transitions clinic from the perspective of re-entering women. Addict Sci Clin Pract 2019;14.
- 64 Busen NH. An Interprofessional Education Project to Address the Health Care Needs of Women Transitioning From Prison to Community Reentry. J Prof Nurs 2014;30:357–66.
- 65 Young JT, Arnold-Reed D, Preen D, et al. Early primary care physician contact and health service utilisation in a large sample of recently released ex-prisoners in Australia: prospective cohort study. BMJ Open 2015;5:e008021.
- 66 Regitz-Zagrosek V. Sex and gender differences in health. *EMBO Reports* 2012;13:596–603.
- 67 Bertakis KD, Azari R, Helms LJ, et al. Gender differences in the utilization of health care services. J Fam Pract 2000;49:147–52.
- 68 Redondo-Sendino Á, Guallar-Castillón P, Banegas JR, et al. Gender differences in the utilization of health-care services among the older adult population of Spain. BMC Public Health 2006;6:155.
- 69 Thompson AE, Anisimowicz Y, Miedema B, et al. The influence of gender and other patient characteristics on health care-seeking behaviour: a QUALICOPC study. BMC Fam Pract 2016;17:38.
- 70 Linnane D, McNamara D, Toohey L. Ensuring universal access: The case for Medicare in prison. *Alt Law J* 2023;48:102–9.
- 71 Scallan E, Lancaster K, Kouyoumdjian F. The "problem" of health: An analysis of health care provision in Canada's federal prisons. *Health* (*London*) 2021;25:3–20.
- 72 Testa A, Porter LC. Previous Incarceration, Health Insurance, and the Affordable Care Act in the U.S. Am J Prev Med 2023;65:1034–41.
- 73 Winkelman TNA, Dasrath KC, Young JT, et al. Universal health coverage and incarceration. Lancet Public Health 2022;7:e569–72.
- 74 Van Hout MC, Fleißner S, Stöver H. Women's right to health in detention': United Nations Committee Observations since the adoption of the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (Bangkok Rules). J Hum Rights Pract 2023;15:138–55.
- 75 Van Hout MC, Madroumi R, Hoey W, et al. What is optimal integrated multi-agency Throughcare? A global e-Delphi consensus study defining core components of effective rehabilitation and reintegration programming. JCRPP 2023;9:237–57.
- 76 McLeod KE, Butler A, Young JT, et al. Global Prison Health Care Governance and Health Equity: A Critical Lack of Evidence. Am J Public Health 2020;110:303–8.
- 77 Zhao J, Star J, Han X, et al. Incarceration History and Access to and Receipt of Health Care in the US. JAMA Health Forum 2024;5:e235318.
- 78 Drugs UNOo. Crime Introductory Handbook on the Prevention of Recidivism and the Social Reintegration of Offenders. Vienna United Nations Office, 2018. Available: https://www.unodc.org/documents/justice-and-prison-reform/18-02303\_ebook.pdf
- 79 Flanagan NA. Transitional health care for offenders being released from United States prisons. Can J Nurs Res Arch 2004;2004;38–59.
- 80 Wang EA, Hong CS, Shavit S, et al. Engaging Individuals Recently Released From Prison Into Primary Care: A Randomized Trial. Am J Public Health 2012;102:e22–9.
- 81 Khanassov V, Pluye P, Descoteaux S, et al. Organizational interventions improving access to community-based primary health care for vulnerable populations: a scoping review. Int J Equity Health 2016;15:168.
- 82 Langlois EV, McKenzie A, Schneider H, et al. Measures to strengthen primary health-care systems in low- and middle-income countries. Bull World Health Organ 2020;98:781–91.
- 83 Campbell JL. Provision of primary care in different countries. BMJ 2007;334:1230–1.
- 84 Van Hout MC, Klankwarth U-B, Fleißner S, et al. State of transition to Ministry of Health governance of prison healthcare in the Council of Europe region. *Public Health (Fairfax)* 2024;229:151–9.