DEMOGRAPHICS AND TRAJECTORIES OF CARE FOR MEDICALLY UNINSURED WOMEN ACCESSING HEALTH CARE DURING PREGNANCY

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ABSTRACT

BACKGROUND: In response to large numbers of pregnant women reporting to a specialized walk-in clinic for the medically uninsured in Toronto, a partnership was developed to create a prenatal care referral program for this population. The current program currently relies on volunteer midwives to carry out preliminary risk assessments (including diagnostic tests) for uninsured pregnant women, who are then referred to an appropriate care provider so that they can potentially receive ongoing prenatal care.

OBJECTIVE: This study describes client demographics, comorbidities, prenatal needs, and trajectories of care for pregnant women presenting to the Non-Insured Walk-In Clinic (NIWIC).

METHODS: A retrospective chart review was performed for all pregnant women presenting for assessment and referral at NIWIC since the clinic was initiated in March 2012 until present (Feb. 2015).

RESULTS: Since NIWIC opened, midwives and nurse practitioners there have seen 128 women over about a three-year period. The immigration and insurance status of clients include: women who are non-status uninsured (51.6%; n=66), new Permanent Residents in the 3-month waiting period for OHIP (34.4%; n=44), refugee claimants with inadequate Interim Federal Health Program coverage (8.6%; n=11), or "Other/Did not disclose" (5.5%; n=7). They are associated with more than 50 countries of origin. The average gestational age of pregnancies at time of presentation was 16.1 weeks, and for 41.5% (n=51) of women this was their first pregnancy. No significant differences were identified for any of the health history variables analyzed for the various immigration/insurance status groups. After assessment at NIWIC, women with low and high-risk pregnancies were generally referred to partnering midwife practice groups (69%; n=88) or obstetricians (15%; n=19), respectively.

DISCUSSION: This study provides primary and obstetric care providers with a better understanding of this marginalized population. It shows that innovative partnerships can provide uninsured women with initial or comprehensive prenatal care, and provides evidence for a collaborative care model for prenatal care that can be replicated by other service providers.

[**Keywords:** medically uninsured, prenatal care, immigration status, community health centre]

BACKGROUND

Health care systems with universal coverage are associated with better health outcomes, as well as improvements in quality of life[1,2]. In Ontario, a majority of the population is covered by the Ontario Health Insurance Program (OHIP), which provides for a range of physician, hospital, and diagnostic services. Individuals with OHIP coverage can seek out preventative or treatment services for most episodic, ongoing or emergency health conditions. There remains, however, a heterogeneous subset of Ontario residents who are considered medically uninsured, typically as a result of their immigration status, and who therefore face barriers to receiving adequate health care and increased risks to their health[3,4].

Immigration status and gender are two widely recognized potential determinants of health[4,5]. The West End Non-Insured Walk-In Clinic (NIWIC) is an innovative partnership developed in 2012 between seven Community Health Centres (CHCs) to improve health outcomes among several groups of medically uninsured people in Toronto. The CHCs are Access Alliance Multicultural Health and Community Services (leading partner), Unison Health and Community Services, LAMP CHC, Black Creek CHC, Davenport-Perth Neighbourhood and CHC, Stonegate CHC, and Rexdale CHC. NIWIC services are generally nurse-led, and were initiated to "facilitate access to health care and improve the health status of people who are uninsured"[6]. The physical location for NIWIC is inside Access Alliance's "AccessPoint on Jane" location at 761 Jane St. in Toronto, and this specialized clinic for the uninsured has run two times per week, since March 12, 2012.

Patients who meet the following criteria are able to access episodic health care for specific medical problems that do not require an ongoing relationship between the patient and provider. Patients with complex or ongoing health care, or settlement needs, and who meet the NIWIC criteria, can be referred by NIWIC to a more appropriate primary care, specialist or allied health care provider –

often at a partnering Community Health Centre. Some criteria have been modified since the clinic originally opened to better respond to the clinic's objectives, and the current criteria are listed below.

Criteria for accessing health care services at NIWIC (as of April 2015):

1. Residents of Ontario; and
2. People who have been living without immigration status/the uninsured for at least 6 months -OR- people in the three month wait period for OHIP; and
3. People who do not have a primary care provider; and
4. People who live west of Yonge Street within the City of Toronto

Criteria making someone ineligible for accessing health care at NIWIC:

1. People without status/the uninsured who already have a primary care provider; or
2. Anyone who already has effective and adequate coverage through OHIP, the Interim Federal Health Program (IFHP), or the Ontario Temporary Health Program (OTHP); or
3. Anyone with private medical insurance; or
4. Anyone who is a visitor or student

According to a report by Access Alliance Multicultural Health and Community Services[6], the CHC that houses NIWIC, about 99% of NIWIC patients seen between January and August of 2013 fell into three main immigration categories: (1) those without legal immigration status (60%), (2) those within the three month wait period for OHIP (35%), and (3) Canadian citizens residing in Ontario without current OHIP coverage (4%). The same report noted that some of the most common health issues that patients presented with were those associated with prenatal and postnatal care (17% of patient encounters during the same period)[6].

Based on the findings of the 2013 Access Alliance report[6], a volunteer midwifery service was initiated within NIWIC on Monday evenings in June 2013 to better organize assessment and referral services for uninsured pregnant women presenting to NIWIC to help them overcome barriers to receiving ongoing prenatal care. "Midwife Mondays" serve as an entry point for uninsured pregnant women into the health care system. Women seen at Midwife Mondays who have low risk pregnancies are generally referred to a midwifery practice groups, usually one that is close to where the woman lives. Women seen at Midwife Mondays who are assessed to have high-risk pregnancies are referred to obstetricians.

The pregnancy care approach of midwives at NIWIC includes: past medical history (including full obstetrical history), brief physical exam, requisitions for screening blood work and a dating ultrasound if applicable, educational resources on having a healthy pregnancy, information on what to do in an emergency during the pregnancy, referral to Toronto Public Health for prenatal classes, and referral to a midwifery practice group or obstetrician based on risk factors for the pregnancy for ongoing prenatal, delivery and postnatal care. The funding structure for midwifery care in Ontario allows midwives to take on patients who do not have provincial health coverage. In contrast, NIWIC funds physician fees for direct referrals of uninsured patients who have high-risk pregnancies and who need to be seen by obstetricians.

Many healthcare organizations and researchers have recognized pregnancy care as a common and critical health issue for female newcomers and medically uninsured persons [7-11,12-13]. Focus group research among health care providers in Toronto identified pregnant women as particularly vulnerable among the medically uninsured due to social isolation, lack of family and social support, financial and income issues, or unmet nutritional needs[9]. Furthermore, a recent study of new mothers to Canada found that refugees and asylum-seekers are more likely to have experienced violence during pregnancy than immigrant or Canadian-born women[14]. There is a well-established body of evidence showing that

routine prenatal care reduces the risk of morbidity and mortality for pregnant women, and leads to improved chances of good health outcomes for infants and children[15-18]. The report by Access Alliance analyzes all NIWIC patient records for an eight-month period in 2013[6]. However, to date, no dedicated analysis of the entire period of operation (i.e. approximately three years) and no complete description of the population of patients accessing pregnancy care has been conducted for NIWIC.

OBJECTIVE

The objective of this study was to describe client demographics, comorbidities, prenatal needs, and trajectories of prenatal care for pregnant women presenting to NIWIC.

METHODS

Study Approach

The study approach was a retrospective chart review to analyze medical records for all women assessed by the Non-Insured Walk-In Clinic (NIWIC) during pregnancy since the clinic opened (March 12, 2012 to February 23, 2015). NIWIC operates out of the 761 Jane St. location of Access Alliance Multicultural Health and Community Services in Toronto.

A number of demographic and health-related variables were selected for analysis, and comparisons were made between groups of pregnant women to identify potential differences based on insurance/immigration status. The list below outlines the variables that were studied, with the source of data in all cases being NIWIC's electronic medical records on Nightingale on Demand (NOD), maintained by Access Alliance Multicultural Health and Community Services.

Table 1. Demographic, health and referral variables analyzed for pregnant women presenting to NIWIC.

General Patient Information	
• Age • Postal Code • Country of Origin • Language	• Immigration & Health Insurance Status • Annual Household Income in Canada • Marital Status
Past Medical History & Obstetrical History	
• Hypertension • Diabetes • Smoking • Most Recent Pap Test • Gravidity • Term/Preterm Births • Abortuses • Living children	• History of Pregnancy Complications • History of Cesarean Section • Type of Cesarean Section • Gestational age of the pregnancy on first presentation to NIWIC • Did patient receive previous care for current pregnancy
Screening and Diagnostic Testing:	
• Did NIWIC refer patient for screening ultrasound or blood work?	• Prenatal serology status (HIV, Syphilis, Hepatitis B, Rubella, Varicella) (if ordered)

Visits to NIWIC and Referrals to other Care Providers	
• Number of visits to NIWIC for this pregnancy • Number of visits to NIWIC total,	• Obstetric care provider client was referred to for this pregnancy, Referral made for another issue not directly related to this pregnancy (i.e. within NIWIC, to another Community Health Centre, to a specialist physician)

Data were analyzed using Chi-Square analysis and ANOVAs to identify statistically significant differences between groups of women. A p-value of less than 0.05 was considered indicative of a significant difference between groups.

Ethics

The proposed research utilized data associated with a vulnerable population, based on the precarious immigration status of many women whose records were analyzed. However, the study was deemed minimal risk since it was a retrospective chart review. There was no new data collection or direct patient contact. The data used had been entered during the course of health care provision into electronic and/or written medical records that were maintained securely by Access Alliance Multicultural Health and Community Services, the agency which hosts NIWIC at 761 Jane St., Toronto.

Extracted data for the variables listed in the Methods Section were entered into a study database and records were de-identified to exclude patient names and chart numbers. Database development for the study occurred on-site at NIWIC. Permission to access the data was granted by Access Alliance after Research Ethics Board approval was issued by the University of Toronto (December 11, 2014) and Ryerson University (January 13, 2015). No amendments were required by either Research Ethics Board.

RESULTS

Immigration/Insurance Status

Between March 12, 2012 and February 23, 2015, 128 women have visited the Non-Insured Walk-In Clinic (NIWIC) during pregnancy. These women fall into one of four main immigration/insurance groups (Figure 1): non-status uninsured (51.6%, n=66), permanent residents in the 3-month waiting period for OHIP (34.4%, n=44), failed or current refugee claimants (8.6%, n=11) or "Other/Did Not Disclose" (5.5%, n=7).

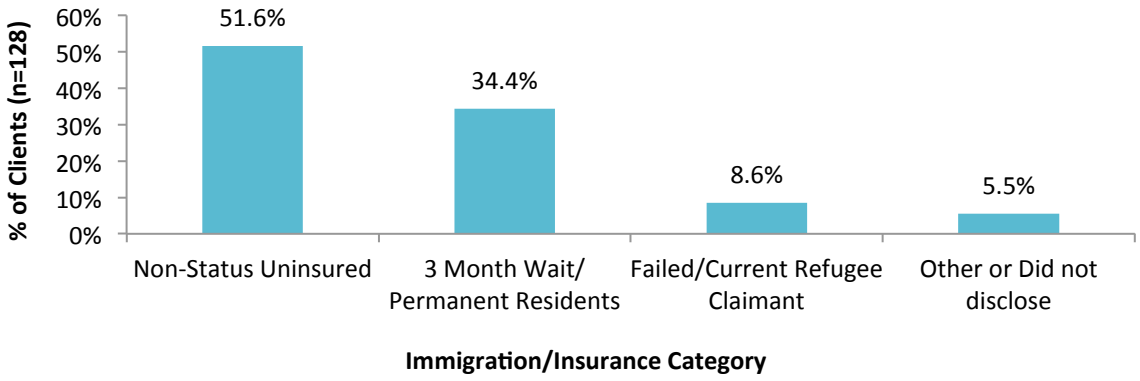

Figure 1. Immigration/insurance categories for 128 pregnant women seen at the Non-Insured Walk-In Clinic over approximately three years.

Other Demographic Results

The average age of the patient population presenting to NIWIC was 31 years old (SD=6.0), with a minimum age of 19 and a maximum age of 47 years old. There was no significant difference between the ages of the four groups (p=0.65) on ANOVA analysis.

With respect to annual household income in Canadian dollars, overall 54.7% of patients (n=70) indicated less than $15,000, 8.6% (n=11) indicated $15,000-19,999, 8.6% (n=11) indicated more than $20,000 (n=11) and 28.1% (n=36) were unable or unwilling to disclose their annual household income. Among those who disclosed income category, 88.0% (n=81) had annual household incomes less than

$20,000. Income category distributions were not significantly different between immigration/insurance status groups on Chi Square analysis (p=0.82).

All 128 patients reported their country of origin, and altogether they come from 51 countries. The greatest number of patients were from Jamaica (13.3%; n=17), St. Vincent and the Grenadines (6.3%; n=8), India (4.7%; n=6) and Portugal (3.9%; n=5). With respect to region of origin, 37.5% (n=48) were from USA/Mexico/Central America/Caribbean, 21.9% (n=28) were from Asia, 16.4% (n=21) were from Europe (including Eastern Europe and Russia), 10.2% (n=13) were from South America, 7.8% (n=10) were from Sub-Saharan Africa, 5.5% (n=7) were from North Africa/Middle East, and 1% (n=1) was from the Pacific region.

Overall, 47.7% (n=61) of patients were married, 28.1% (n=36) were single, 13.3% (n=17) were common law, 9.4% (n=12) selected "Other" or did not disclose, and 1.6% (n=2) were divorced. Chi Square analysis revealed there were significant differences in marital status distributions between immigration/insurance groups ($p<0.0001$). The most common marital status for uninsured non-status patients was single (43.9%; n=29). The most common marital status for permanent residents in the 3-month wait for OHIP was married (79.5%; n=35). Married was also the most common status for current or failed refugee claimants (54.5%; n=6).

Based on six-digit postal code, and using Google Maps, the distances between the patient's homes and NIWIC were calculated. Postal codes were provided for 119 patients (93.0%). The mean distance between patient's homes and the clinic was 12.2 km (SD=10.5). More than half the women (56.3%; n=67) lived within 10 km of NIWIC. However 10.1% (n=12) of the women lived 25 km or more from the clinic. The mean public transit time to the clinic was 39.8 minutes (SD=21.9), and 40.3% (n=48) lived within 30 minutes transit time from NIWIC. However, 33.6% (n=40) of pregnant patients lived more than 60 minutes away from NIWIC by public transit.

Encounters with NIWIC

Overall, the mean number of encounters with NIWIC by pregnant patients was 3.9 per patient (SD=3.1). The mean number of encounters was not the same for all immigration/insurance groups (p=0.048). Non-status uninsured patients had an average of 3.7 encounters with NIWIC (SD=3.0), permanent residents in 3-month OHIP wait had an average of 3.6 encounters (SD=2.4), and failed or current refugee claimants had an average of 6.1 encounters (SD=5.3). Patients in the "Other/Did Not Disclose" group had 3.6 encounters on average (SD=2.8).

The total cumulative number of encounters with NIWIC for all pregnant patients in the study period was 494. As a group, non-status uninsured patients had the greatest total number of encounters at 243 (49.2%). Permanent residents in the 3-month wait were next with 159 total encounters (32.3%). Failed or current refugee claimants had 67 total encounters (13.6%). The fourth and final group of "Other"/"Did Not Disclose" had 25 total encounters (5.1%). Of the 494 total encounters between NIWIC and uninsured patients during pregnancy, 192 encounters (38.9%) were with volunteer midwives. This was possible after a partnership was instituted in June 2013 whereby midwives provided the assessment and referral for ongoing prenatal care. The remaining 61.1% of encounters (n=302) took place between pregnant patients presenting to NIWIC, and other health care or allied health providers from Access Alliance (nurses, physicians, counselors/therapists, dieticians, and settlement workers).

Description of Women's Pregnancies at Time of Presentation to NIWIC

On average, women presented to the clinic at 16.1 weeks (SD=9.8) of pregnancy (range 4 to 39 weeks gestational age). There were no significant differences between immigration/insurance groups (p=0.33) on analysis with ANOVA. Overall 33.1% (n=42) of women presented to NIWIC late in pregnancy, i.e. after 20 weeks gestational age.

Gravidity was established for 96.1% (n=123) of patients who presented to NIWIC. Average gravidity for patients presenting to NIWIC was 2.3 pregnancies (SD=1.5). For 41.5% (n=51) of these women, their pregnancy upon presentation to NIWIC was their first pregnancy. Based on the established $p<0.05$ threshold, there was not a significant difference for this variable between immigration/insurance groups, however the p value was very close to this threshold ($p=0.054$). For permanent residents in the 3-month wait for OHIP a majority of patients were primigravida (58.5%). For non-status uninsured patients, and failed or current refugee claimant patients, 32.3% and 40.0% were primigravida respectively.

Overall, 18.0% (n=23) of women who presented to NIWIC had had a previous Cesarean Section, 76.6% (n=98) had not, and for 5.5% (n=7) this information was not reported. However, among those who had already had a previous pregnancy 50.0% (n=23) of these had had a previous Cesarean Section. Analyzing previous Cesarean Section for women who had previously been pregnant for the different immigration/insurance status groups did not reveal any significant difference between groups ($p=0.46$).

Other Health History Variables Related to Pregnancy and General Health

Overall, 4.7% (n=6) of women reported a history of hypertension, pregnancy-induced hypertension, pre-eclampsia and/or eclampsia, and this was not significantly different between immigration/insurance status groups ($p=0.16$). Overall, 3.1% (n=4) of women reported any history of diabetes and/or gestational diabetes, and this was not significantly different between immigration/insurance status groups ($p=0.66$). Overall, 7.0% (n=9) of women reported a history of preterm delivery or low birth weight, and this was not significantly different between immigration/insurance status groups ($p=0.66$). The above data was captured systematically with specific data prompts in the data collection tool used by health care providers.

Other health history information was captured less systematically in patient medical records, for example: history of anemia, mental health issues, intimate partner violence, ante or postpartum hemorrhage, other significant bleeding history, history of neonatal mortality or significant neonatal morbidity. However history-taking and documentation for these variables between patients and providers was variable, so values reported in the table below likely represent an underestimate of actual prevalence in the study population. Prevalence figures for these additional health history variables are reported in Table 2. There were no significant differences between immigration/insurance groups for these variables (individual P-values reported in Table 2).

Table 2. A sample of health history variables that were captured when clients were asked about "complications during previous pregnancies" or "any other health issues".

Additional Health History Variables	**Overall** (n=128)	**Non-Status Uninsured** (n=66)	**3-Month Wait/ Permanent Resident** (n=44)	**Failed/Current Refugee Claimant** (n=11)	**P-value**
History of anemia during this pregnancy	11.7%	10.6%	18.2%	-	0.21
History of mental health issues (self-reported or based on mental health service provided by NIWIC/Access Alliance)	7.8%	6.1%	6.8%	27.3%	0.06
History of intimate partner violence	3.9%	4.5%	-	9.1%	0.23
Serologies documented by NIWIC in patient chart and results show patient is uninfected (for HIV, Syphilis, and Hep B) or immune (for Rubella, Varicella)	39.1%	36.4%	43.2%	45.5%	0.71
History of antepartum/postpartum hemorrhage, or a significant bleeding history/disorder	5.6%	6.1%	2.3%	9.1%	0.54
History of neonatal mortality or significant morbidity	7.0%	7.6%	4.5%	18.2%	0.30

Assessment and Referral for Ongoing Care

After presenting to NIWIC, 78.1% (n=100) of women were assessed to be low risk, and 14.8% (n=19) were assessed to be high risk. For the remaining 7.0% (n=9) of women, the risk assessment result was either not documented, or not applicable (e.g. miscarriage occurred) (Figure 2).

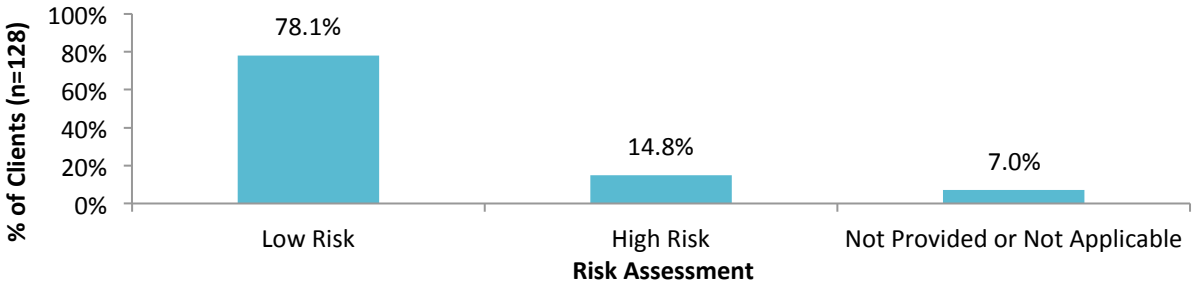

Figure 2. Percentage of clients with pregnancies assessed to be low risk, high risk, or assessment not known.

With respect to referrals for ongoing care, overall 86.7% (n=111) of women were referred for ongoing care by a midwife or obstetrician, whereas 6.3% (n=8) were not referred for ongoing care. Referral information was not provided for 7.0% (n=9) of women.

To further break this down, 68.8% (n=88) of women were referred to a midwifery practice group, 14.8% (n=19) were referred to an obstetrician, 1.6% (n=2) required referral to both midwives and obstetricians, 1.6% (n=2) were on-boarded by a community health centre as their primary care provider, 2.3% (n=3) of women had miscarriages and were not referred, 3.9% (n=5) were not referred for other reasons (e.g. moved out of province, lost to follow up), and as stated above 7.0% (n=9) of women did not have referral information in their records (Figure 3).

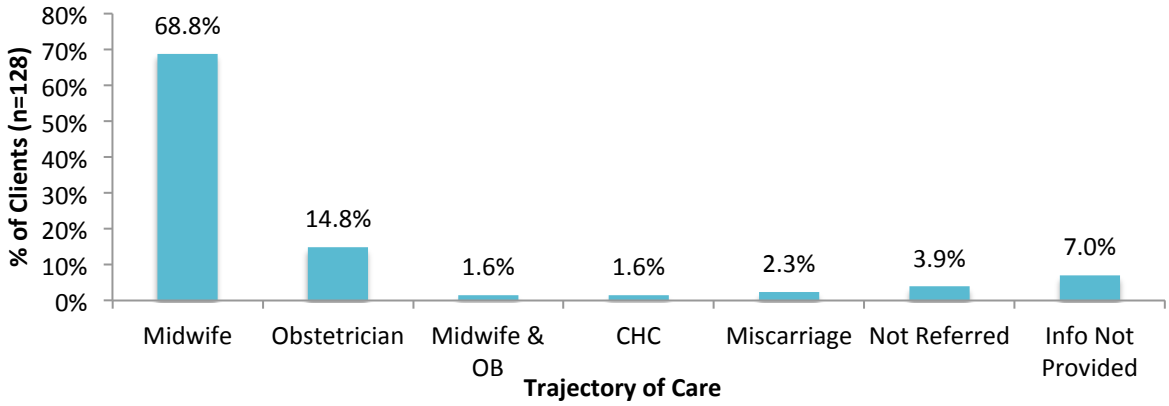

Figure 3. Trajectory of care for pregnant women assessed by the Non-Insured Walk-In Clinic.

For those women who were referred to midwifery practice groups, there were nine participating groups: West End Midwives, Midwives Collective of Toronto, Community Midwives of Toronto, Kensington Midwives, Midwife Alliance, Diversity Midwives, and Midwifery Care-North Don River Valley, Seventh Generation Midwives, and The Midwives' Clinic of East York – Don Mills. It is challenging to know exactly how many referrals were made to each group as patient records often included two names as potential midwifery practice groups to refer to (E.g. "North Don River Valley/West End Midwives"). However, of 90 patient referrals that mentioned midwifery care, 55.6% (n=50) mentioned West End Midwives making it the most commonly cited practice group. Second was Midwifery Care-North Don River Valley with 17 mentions (18.9%).

DISCUSSION

General Conclusions

Results of this study are consistent with previous research for the uninsured population, particularly around advanced gestational age at the time of initial presentation[12,19]. This has potential implications for preventative prenatal health education (e.g. around nutrition), infectious disease screening and treatment, genetic screening, and ensuring adequate management of comorbidities (e.g. for hypertension or diabetes). Many pregnant NIWIC clients had co-morbidities or a history of pregnancy complications, reinforcing the need for NIWIC to connect uninsured pregnant women with adequate pregnancy care. This study also found that a large majority of patients seen at NIWIC reported annual household incomes below $20,000 CAD per year. These results suggest that in addition to facing vulnerabilities related to precarious immigration and/or health insurance status, most women are also marginalized economically, and would face significant barriers if asked to pay for care.

Recommendations for NIWIC

Service Provision

One consideration for the agency is regarding the criteria used by NIWIC to identify eligible women who can be assessed by a midwife and referred on for prenatal care. Some women may be deemed ineligible for care at the time of initial screening by NIWIC, but would become eligible at a later stage in their pregnancy. Given the importance of connecting women with stable and comprehensive prenatal care as early as possible in pregnancy, it should be considered to deem a pregnant woman eligible for NIWIC services if she would become eligible at any point in her pregnancy. One example is a client who has been in Canada less than six months, and is considered a visitor, but who would meet the six-month residency requirement at a later time during her pregnancy. Another example is a client who

is in Canada on a work permit, but who will lose her job and associated insurance because of her pregnancy and needs immediate care for the pregnancy.

NIWIC does not systematically follow up with patients after they have been referred, so it is not presently known whether all of the referrals consistently result in adequate ongoing care for pregnant patients. It is possible that some women experience administrative or financial barriers during the referral process, or later in their pregnancy that could preclude adequate care. The agency might wish to conduct follow up for a sample of women to develop an understanding of the extent to which their referrals led to adequate care throughout their pregnancy, and to learn about any complications that may have occurred after referral. It might also be of interest to the agency to research birth outcomes for the pregnancies assessed and referred by NIWIC, and to analyze the impact that NIWIC's referral had on infant health and survival, relative to a suitable comparison population.

Data Collection

Certain results pertaining to the women's health history are not as reliable and likely represent underestimates because these variables were not captured systematically. This is for information gathered by asking the women generally about past pregnancy complications, or about other important health issues. NIWIC may wish to update its data entry template for midwives by including specific queries for anemia, thyroid disorder, history of significant bleeding (in pregnancy or otherwise), preterm labour, past or present mental health issues, and history of intimate partner violence.

Lastly, the care provider the client is referred to for ongoing prenatal care should be clearly documented in the client's chart. At present, the template prompts the care provider to enter which care provider NIWIC will attempt to refer the woman to, but not the care provider that the woman was ultimately accepted by for care. As midwifery practices often have long wait lists, it is common for the

NIWIC secretary to need to call a couple providers in order to identify one which can take on the woman for pregnancy care.

The Broader Population of Uninsured Pregnant Women

It appears to be feasible to refer low risk women for ongoing prenatal and intrapartum care. This is because they can be cared for by midwife practice groups, who receive compensation from the province regardless of a patient's insurance status, and who have recently been given permission by the province to also pay for diagnostic services and specialist referral fees as needed (previously midwives relied on partnerships with Community Health Centres (CHCs) to cover these additional expenses).

The path to adequate care is more difficult for women who present with high-risk pregnancies. Physician specialists may face risks and challenges (medical, legal, financial, ethical, and administrative) when they are asked to take on care of high-risk patients, since their fees and other costs of care are not covered for uninsured patients who are not referred to them by a midwife or CHC. For patients who self-refer, or who are referred by other service providers (e.g. non-CHC physicians), the physician specialist may have limited options for reimbursement, and they may receive pushback from their hospital and colleagues for accepting responsibility for care of uninsured pregnant women.

NIWIC's model seems to be feasible in its present configuration. One consideration is whether the approach can be scaled up by the agency with existing or new resources, especially in light of the savings to NIWIC based on the recent policy change that enables midwives to pay for their own diagnostics and specialist referral fees. Another consideration is whether this approach could or should be promoted to and adopted by other agencies to further increase access for uninsured pregnant women in the province.

It is estimated that the uninsured population in Toronto may be as high as 500,000 people[10,20], which likely translates (on an annual basis) into thousands of uninsured women receiving inadequate

prenatal care in Toronto and potentially significant burden of disease. In its 2010 Annual Report, the Office of the Chief Coroner for the Province of Ontario attributed the death of a pregnant woman as being related to her uninsured status[21]. The full burden of disease associated with people's lack of access to health care due to their immigration/insurance status has not been estimated for Ontario. Effective advocacy for a systemic solution is needed that can ensure that all pregnant women residing in Ontario have access to safe pregnancy-related care without discrimination based on immigration status.

Lessons Learnt by the Medical Student Researcher

This was a very interesting and rewarding project in a much-needed area of research. It was also a terrific opportunity to collaborate with a dedicated team of health care providers. Overall the data completeness and quality was very decent and facilitated this retrospective chart review without too many difficulties. It was challenging at times to analyze data for and describe a program that has been evolving its approach since its inception. Some questions I have based on my experience of conducting this research are: (1) How well is NIWIC serving uninsured pregnant women, relative to the overall need in Toronto, or even Ontario? (2) How might their eligibility criteria or outreach strategies be modified if they were seeking to increase the volume of clients in need that they serve in the future? (3) How useful has the experience of partnering with me been for the agency with respect to improving the services that NIWIC offers to pregnant uninsured patients? (4) Should we have identified a comparison population to put the NIWIC results into context better? (e.g. a reference study population of Access Alliance clients) (5) How well does this research contribute to the overall body of knowledge on uninsured pregnant women in Ontario or Canada, which is scarce and needed to support advocacy efforts? One major policy change that has occurred since this research began is the new ability of midwives in Ontario to order and pay for diagnostic tests and physician specialist fees for their patients. This will free up significant funds for an agency like Access Alliance who previously had a partnership

with midwives whereby they paid for these services. Access Alliance will need to consider how best to utilize their savings from this policy change to potentially expand and improve health care for uninsured pregnant women.

Plans for Sharing this Research

This research has been presented as a poster presentation at the Department Research Day for Obstetrics & Gynaecology at the University of Toronto (May 8, 2015) and as an oral presentation at the North American Refugee Health Conference (June 5, 2015) (in collaboration with Monika Dalmacio and Manavi Handa). The research team is planning to prepare a manuscript for publication in a peer-reviewed journal by fall of 2015. It should be considered what other ways the learning from this research might contribute to advocacy efforts towards improving health care for uninsured pregnant women.

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