



# Indigenous Diabetes Health Circle: Foot Care Program Evaluation

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April 2022





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# A Message from the Executive Director of IDHC

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Sg:eno

It is with great pleasure that the Indigenous Diabetes Health Circle (IDHC), in partnership with Laurentian University (Dr. Robyn Rowe, Dr. Jennifer Walker and Gabrielle Bruser) and Diabetes Action Canada's Strategy for Patient Oriented Research (SPOR), provide a report evaluating the IDHC Foot Care Program.

This report tells one part of the story: a key part of the story, which describes an evolving holistic wellness program. This is the measurable part of the foot care program story, which describes the impact the program has had on IDHC clients and Indigenous communities in Ontario.

Over the years, the IDHC foot care team has visited many places across the province and served a diversity of people. In so doing, the care and dedication exhibited by the team has certainly ensured program efficacy in both clinical treatment and cost. The level of care for the people served is commendable. The many partners who assisted are to be recognized for their dedication as well. The circle of care provided in each community has saved limbs—many limbs—and for that we are proud.

The journey to adapt and develop a quality foot care program for the IDHC catchment area has involved years of pivotal learning and relationship building.

In the early days, the IDHC was visited and mentored for benchmarking and best practices by an established Australian Indigenous foot care program. IDHC learned important principles about Indigenous wellness program governance. For example, IDHC learned that by having Indigenous practitioners, food preparers, Elders and other community support people present, the circle of care will be appropriate and empowered. IDHC learned how educational resources are culturally specific; how the images in our teaching materials are those to which their clients relate; how the development of self-care kits empowers each and every one to make foot care a Self-Care priority; how cultural safety is key to building enduring relationships; and finally, how IDHC can successfully provide needed care while, in the interim and at all times in the process, our people are heard, respected and kept safe. IDHC listened carefully and learned how this successful Australian program conveyed its services to the outback, and in parallel, IDHC went “on the road” and transported its program to communities across Ontario—in some cases, directly to clients' homes.

From the amazing team at the Military Hospital in Baton Rouge, Louisiana, IDHC discovered that the loss of limbs was unnecessary. The IDHC team was trained to save limbs. IDHC discovered that 90% of successful foot care results from just getting people to remove their shoes and socks. With the inclusion of Indigenous practitioners in our program, the trust was established so that we have achieved the goal of looking at our clients' feet (a first step and a necessary step). We at IDHC now know very well that we need to thoroughly educate our people in how to protect their mobility throughout their lives. And thus the IDHC program continued to grow to include orthotics, off-loading devices, shoes, socks and now winter boots as we listen to voices in Indigenous communities.



Roslynn Baird





## **A Message from the Executive Director of IDHC (Cont'd)**

The program expanded to include the education of frontline workers throughout the province, thus building capacity so that more and more community members can assess, make referrals and catch foot care concerns early so that they are treatable. Training is also extended to our foot care practitioners in the form of Cultural Safety training, ensuring safe and respectful treatment of our clients. We continue to ship 100's of foot self-care kits annually, providing community members with the tools needed to care for their feet on a daily basis. The IDHC foot care program has enriched our lives and the lives of our clients. The good results go much further and deeper than what can be reported in the purely empirical data collected—but this report tells an important part of the story.

It has been a privilege to work with communities to establish this foot care program as we look forward to more good health and wellness.

—Roslynn Baird



# A Message from IDHC's Foot Care Program Coordinator

Aanii Boozhoo

Since 2007, the IDHC Foot Care Program has hit the ground running when it comes to building partnerships and providing services. This report comes at a pivotal time with such great change around us. With great thanks to our partners at Laurentian University as well as Diabetes Action Canada's Strategy for Patient Oriented Research (SPOR), we present this evaluation and reflection of many years of hard work at IDHC.



Lindsey Cosh

This Foot Care Program's holistic model of care reflects the 4 directions and supports a continuum of seamless foot care services based on: knowledge sharing, foot screening, treatment support and data collection. Its foundation is rooted in building relationships, access to care, community capacity and closing existing service gaps in foot care. From the program's beginning days and throughout the years, it has responded to many requests of partnerships for community foot care. Time was taken to understand changing needs, learn from our Elders, incorporate cultural teachings and—with guidance, collaboration and hard work—give back what was needed to help strengthen the health of our community.

Foot care events have allowed relationships, trust and respect to be formed and from there, many limb-saving teachings were provided, skills on self-inspections were increased, thousands of feet were assessed and treated and many referrals were made for follow up care. The resource kit that started in a modest paper bag still remains a vital part of the program. These resources are provided as a way to continue learning and practising care. It highlights the teachings and the importance of self-care on a daily basis. The subsidy and the ongoing clinic components of the program have been flexible and supportive in addressing the unique needs of communities and identifying ways to provide the best care to the client. From expanding access to qualified, culturally safe service providers, to expanding funding for footwear and advanced treatment options, this program has helped clients to experience relief from pain and gain the ability to walk again.

This program has grown beyond only working to provide foot care events, resources and subsidized treatment; it has also listened to what the community needs and in return developed a way to increase the capacity of frontline workers in the community. The Level 1 Foot Care Course has provided training, resources and continued support from the program and in turn strengthened the circle of care to communities in need.

Years have gone by and landscapes have changed. Throughout this, a constant driving force of the program as reflected in this report is the dedication to care for those in need—the way they need it—in order to care for themselves. As this program's holistic model of care was seeded with cultural teachings, grown with compassion and delivered with flexibility, it enabled us to listen, learn and adapt our ways. The years of growth have proved successful in strengthening community partnerships, increasing capacity and access to care, resulting in positive impacts that support our communities' health and wellness.

It has been an honour to be involved in an amazing program that has fostered beautiful connections to share teachings of love, respect, truth, humility, honesty, wisdom and bravery. It has been said that this program has awakened many people to an understanding of wellness and self-care—that it has left footprints in those hearts and left their world more beautiful than it was before they experienced this program and its holistic services of foot care. Miigwech to this program and to all of whom that I have been blessed to meet throughout the years. I look forward to more opportunities to share teachings of good health with those I know and those I have yet to meet.

—Lindsey Cosh



## A Message from the IDHC Board

On behalf of the Board of Directors, I am pleased to contribute a comment about this important Foot Care Evaluation for 2022.

As a non-profit organization with a vision to strengthen Indigenous community capacity to reduce the impact of diabetes, it is fair to say that a small but mighty Foot Care program has done its part in the past and continues to do its part today—measurably and immeasurably.

Consider the massive output:

- Collaborating with Indigenous communities to set up and host full-day foot care events
- Providing assorted foot care services, such as educational programs, foot assessments, and treatments with chiropodists, foot care nurses and reflexologists
- Delivering cultural safety training to every single service provider that registers with the IDHC foot care program
- Developing and delivering accredited three-day Level 1 Foot Care Training
- Presenting webinars, workshops, activities, self-care resources and guest speakers
- Furnishing necessary equipment and resources for participants to apply learnings at home within their own communities
- Extending this work right across Ontario—very often to the underserved northern region of Ontario—all from an Indigenous perspective

The quantification of output is formidable. From 2010 to 2019, there have been 16,061 ongoing clinic visits benefiting at least 1,188 people every six to eight weeks (see for yourself the chart on page 39).

Most recently, IDHC's Foot Care program adapted its services to the challenges presented by the COVID-19 pandemic providing preventative foot care—while following provincial health and safety guidelines. The program increased internal and external capacity, carved out new virtual pathways and strengthened relationships with collaborators and partners.

A very long thank you list is in order. The IDHC Board would like to thank IDHC Elders, advisory team, community leaders—and the communities with whom we work. Thank you to the Foot Care program for the foundational work in Indigenous foot health across Ontario.

The IDHC Board of Directors:

- Dr. Agnes Coutinho
- Stephanie Peplinskie
- Isadore Day
- Cindy Hunt
- Carol Taylor
- Robert Tenneriello

Nya:weh. Miigwech. Marcee.

—Constance McKnight, Indigenous Diabetes Health Circle Board of Directors, President



**Board President  
Constance McKnight**



## A Message from IDHC Foot Care Program (FCP) Advisors Andrew Springer

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My connection to the FCP began in January 2010. Initially, I was primarily involved in participating in foot care events put on around the province in partnership with various hosts. I was privileged to participate in events held at friendship centres, community health centres and on reserves. My previous exposure to Indigenous peoples was limited to work on behalf of the Province of Ontario and the Premier at the blockade of the CN rail at Longlac in 1990, and later in various discussions on behalf of the Ontario Society of Chiropractors with the Federal government and groups like Allied Iroquois and Associated Indians (AIAI) regarding foot care funding.

My involvement with the IDHC (then SOADI) allowed for the development of rewarding personal relationships and for the exposure to and an appreciation of the experience, culture and history of the Indigenous Peoples in Canada. The organization was instrumental in facilitating Indigenous Cultural Safety Training for me and other Service Providers.

The holistic nature of the Foot Care Program and its services is unique, but perfectly suited to the population that it serves. Through these activities, I have come to understand the importance of addressing diabetes in Indigenous communities, the need for education, support and trusted advice. Relationships are critical to the success of such care and intervention. In the absence of trust and trusted relationships, those at greatest risk of the complications of diabetes remain reluctant to come forward and receive care. By partnering with community organizations, the Foot Care Program wisely starts off on a positive basis with potential clients with an express or implied endorsement from a trusted source (the event or ongoing clinic host). It is in reaching those at greatest risk, providing care, education, direction and appropriate referral, that there is hope of reducing the incidence of the complications of diabetes—especially ulceration and amputation—in Indigenous communities run in Ontario.

Due to my professional commitments, my role has evolved into an Advisory one where my professional experience and my experience with the Foot Care Program intersect. It is in this role that I feel I can have the greatest impact and where I feel most honoured to serve.

—Andrew Springer, D.Ch.



Andrew Springer



## A Message from IDHC Foot Care Program (FCP) Advisors Edward Moloy

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I have been a Chiropodist for more than 29 years. I have been working in First Nation (FN) communities over 19 years and have been working as a service provider with the Foot Care Program (FCP) at IDHC for over 15 years.

Working with the FCP at IDHC has been a great learning experience for me. It has opened my eyes to issues within Indigenous communities of which I had no prior knowledge before seeing them first-hand. I feel very privileged to work with this organization as they do a lot of good for the communities for which they serve. I have learned and am still learning so much about the Indigenous culture, teachings and traditions.

When I started with the FCP, I would travel to different FN communities to do workshops and foot assessments. Within the last few years, I was able to go to a few fly-in communities which I really enjoyed. Hearing people (Elders and young people) speaking their language fluently, which I usually do not hear much at the two FN communities that I work at, was a beautiful experience. I have been able to witness how traditional medicines have integrated with modern-day care for the well-being of the people.

At the fly-in communities, I was able to see how hard it is for people to survive. For example, at the local grocery stores prices were exorbitant for everyday staples. Listening to people talk about health care and how infrequently a doctor or dentist comes to the community is shocking. Lack of proper nutrition and access to proper health care is a detriment to diabetics within the communities.

I have been able to attend the Chiefs of Ontario annual conferences with IDHC. This has provided me with an opportunity to meet people from different FN communities all over Ontario. Through education and foot assessments, we can connect with these people to speak to the importance of foot health and how valuable our services are to limb preservation for their community members.

I am so impressed at how far the FCP has evolved since starting with them. They have done so much to help educate communities through workshops and ongoing clinics. Even through COVID, the FCP has been able to stay connected with people to ensure they are looked after.

As the FCP keeps evolving and making connections with providers that want to help to make a difference, I hope this helps to improve foot health within FN communities and allow better access to proper care to avoid limb loss and improve quality of life for the people we look after.

—Edward Moloy, D.Ch.



Edward Moloy



## Stories from Clients

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### Robert Fenton

My name is Robert Fenton. I am Anishnaabe from Thunder Bay, ON. My employment was Community Diabetes Worker. I, also, have type 2 diabetes. At that time, I was receiving foot care from a local Indigenous agency. I was asked to leave that service as I had a family doctor. I don't know why that had anything to do with it.

As a Diabetes worker, I thought it would be easy for me to acquire foot care. I applied at every Indigenous agency in my area. I was turned away at each agency for various reasons.

After 6 months without foot care, I attended a National Conference on Diabetes. As part of the conference, SOADI's foot clinic was there [IDHC was previously called the Southern Ontario Aboriginal Diabetes Initiative], providing free foot care. So, I booked an appointment to see one of the chiropodists. Upon inspecting my feet, the chiropodist remarked, "you got here just time". I had an infection on my big toe and if I had waited longer, it would have developed into a more serious infection with the danger of having my toe amputated. Chi-Meegwech to SOADI for their Foot Clinic and saving me from a potential amputation.



Robert Fenton

—Robert Fenton


### Frances Hill

I just wanted to express my gratitude of being able to receive professional foot care from Indigenous Diabetes Health Circle for the past several years. My experience was always professional and treatment was explained thoroughly for the chronic plantar fasciitis and ingrown toenails that I suffer from. Scheduling appointments has always been easy and I always felt like I was receiving the best care. After a couple of ultrasound treatments I noticed a tremendous relief from the pain and it allowed me to walk and attend to my daily activities. I am also thankful to have orthotics for my shoes and to be walking pain free!

One happy customer!

—Frances Hill





“ 99% of foot care is having people  
take their shoes and socks off ”

————— Roslynn Baird —————  
Executive Director



## Background

The Indigenous Diabetes Health Circle (IDHC) is a non-profit organization with the established vision of strengthening Indigenous community capacity to reduce the impact of diabetes (1). IDHC seeks to promote relationship building and capacity building through holistic wellness models that build on traditional teachings and best practices in order to develop programs, education and resources that are of benefit to Indigenous communities. Through the development of innovative and multi-levelled health pathways and protocols that embrace the mind, body and spirit, IDHC aims to address and improve the outcomes of diabetes for Indigenous Peoples in Ontario.

In Canada, approximately 2.4 million people have diabetes, with rates reported to be 3 to 5 times higher for First Nations people (2). First Nations, Inuit and Métis children and youth have higher rates of type 2 diabetes and Indigenous women have higher gestational diabetes rates (2,3). Diabetes not only has a younger age of onset in First Nations, Inuit and Métis people, but also progresses more rapidly and results in more co-morbidities and complications in Indigenous populations than the general Canadian population (2,3). Complications can include cardiovascular disease, hypertension, lower limb amputation, retinopathy, kidney disease and neuropathy (2,4). In Ontario, the rates for major and minor amputations for First Nations persons with diabetes have declined over time (2); however, the risk of amputation is still 3 to 5 times higher than for other people in Ontario (2).

Recognizing the need for improved access to quality diabetes-related care, including foot care programming, IDHC operates from a head office in Thorold, Ontario with satellite offices covering the north, south, east and west of the province. Trained frontline workers at these locations offer nutrition and exercise programs, and provide land-based and other educational programs. Indigenous Peoples with diabetes who attend the IDHC Foot Care events can check their blood sugar levels, receive a foot assessment and advice and care from chiropodists and nurses, learn about healthy nutrition and cooking, participate in exercise activities and even share a nutritious meal together (1).

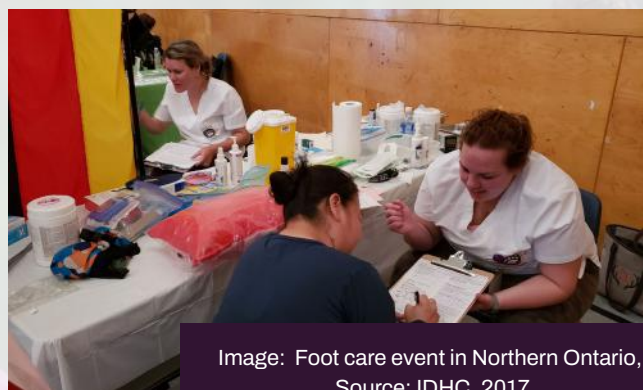


Image: Foot care event in Northern Ontario, Source: IDHC, 2017



This study was supported by the Ontario SPOR Support Unit (OSSU) through research dollars held at Laurentian University. The results and conclusions reported in this report are those of the authors and are independent from the funding sources. No endorsement by OSSU SPOR is intended or inferred.



## Our Approach to Program Evaluation

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Our approach to evaluating IDHC's Foot Care Program was informed by the work done by Indigenous scholars and researchers in outlining the principles and methods of Indigenous program evaluation (5-8). In the Western approach to program evaluation, the evaluator is often distanced from the program's staff and stakeholders under the guise of providing an objective evaluation (9). In contrast, Indigenous approaches to program evaluation focus on relationship-building, where the program evaluation is conducted through a close and long-term partnership with the people who are involved in the program (10).

The participatory nature of Indigenous program evaluation helps to ensure that the evaluation serves to build the capacity of the organization rather than focusing on whether or not the program has accomplished the objectives defined by funding agencies or other external bodies (9). It has also been suggested that project evaluation that is overly critical (i.e. based on deficits) can lead to disempowerment within the organization and the broader community (5,11). Instead, Indigenous program evaluation seeks to celebrate accomplishments and work collaboratively to identify the best way forward (9,10).

In this program evaluation, university researchers worked together with the staff at IDHC to determine the best way to evaluate the Foot Care Program. We adopted a strengths-based approach, highlighting the positive impact IDHC has had on the health and well-being of their clients, while looking honestly and critically at effectiveness of the programs. The team met on a bi-weekly basis and discussed all the decisions that were made throughout the evaluation. Our strategy involved attributing value to different ways of knowing, including stories from clients and service providers, pictures taken during events, clinics and other program components, as well as quantitative data collected throughout the program. Through our partnership with IDHC, we aimed to weave these sources of information together to provide a holistic picture of IDHC's Foot Care Program.



# Program Overview

## The Holistic Foot Care Program

The IDHC's holistic Foot Care Program offers a four-directions/medicine wheel, whole-health approach to care which includes four program components:

- 1) Foot Care Outreach and Events
- 2) Ongoing Foot Care Clinics
- 3) Subsidized Treatment Sites
- 4) Self-Care and Prevention Resources

These four program pieces work together to provide the ideal environment for improved foot care management, to build individual and community capacity.

This report will begin by describing the services offered through IDHC. Then, the outreach and events program component will be explored, where many new clients come to learn about IDHC. Next, a section will explore the service coverage available through IDHC for clients to benefit from foot care services offered at i) the ongoing clinics, or ii) subsidized treatment sites, which will be described in the following sections. Lastly, the final section of the report will illustrate the self-care and prevention resources offered at IDHC, which are distributed during outreach and events.

### Program Flow:





## Some Services Offered

### Reflexology

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The reflexes on the soles of your feet relate to different parts of your body. Reflexology is an Indigenous practice that focuses on these pathways of connection. The technique involves applying focused pressure to specific points on your feet, hands or ears. Using this practice, the reflex points are stimulated, and the body's natural electrical energy works along the nervous system to clear any blockages in corresponding zones.

Reflexology has been a part of IDHC's program from the beginning. The program's philosophy is centred on the connection to Shkagamik-Kwe and her healing energy. Indigenous practitioners of foot reflexology provide these services at community outreach events. Reflexology sessions are provided to help increase blood flow, improve pancreas health and reduce stress levels.

Reflexologists receive in-depth training to acquire the knowledge and skills necessary to provide the different types of reflexology, including facial, maternity and cranio-sacral (head and lower spine) reflexology. Reflexologists working with IDHC are certified through accredited courses which are based on Ontario College of Reflexology (OCR) requirements.



Image: Reflexology session at a foot care event in partnership with an international Indigenous conference, Source: IDHC, 2017

There are **7,200**  
nerve endings on  
the feet!

“[Reflexology] is an important component of the program as it not only allows for the comfort of receiving care from our Indigenous practitioners, but also has therapeutic benefits when living with diabetes.”

– Lindsey Cosh, Foot Care Program Coordinator

Source: Information provided by IDHC, 2021



## Some Services Offered

### Chiropodists, Foot Care Nurses and Pedorthists

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#### Chiropodists:

A Chiropodist (pronounced: 'ker-ro-po-dist') is a primary health-care provider, described as a **foot specialist, who provides a variety of medical services ranging from nail and skin care to orthotics and in-office surgeries.** Chiropodists can assess, diagnose and provide treatment for a range of conditions affecting the foot, ankle and lower leg. They also play a role in the prevention of injury and disability and in promoting foot health and well-being.



Image: Chiropodist services during foot care event in the northern region, Source: IDHC, 2017

#### Foot Care Nurses:

Foot care nurses are either **registered nurses, registered practical nurses or nurse practitioners who have taken advanced training in foot care.** They are medically trained to deliver expert, client-focused foot care services within their respective nursing scopes of practice and in a variety of settings. Foot care nurse services may range from foot risk assessment, education, training, identifying and treating common foot concerns as well as making referrals to specialized foot and wound care providers such as a chiropodist, podiatrist or physician.

#### Pedorthist:

Canadian Certified pedorthists are **orthotic and orthopaedic footwear experts who are trained in analyzing posture and movement patterns, and examining the structural components of the foot.** Pedorthists are able to provide a foot examination, consultations and foot devices based on referrals from physicians, nurse practitioners and other health-care providers. With specialized education and training in foot orthoses and footwear, they help to alleviate pain, abnormalities and debilitating conditions of the lower limbs and feet.

#### The Role of These Service Providers Within IDHC:

Foot care nurses and chiropodists provide services at foot care events, ongoing foot care clinics and at subsidized treatment sites. They have the tools to provide diabetes foot assessments and treatment, and they can make referrals for followup care. Foot care nurses at both events and ongoing foot care clinics can refer clients to see a chiropodist for advanced care that falls out of their scope of practice. Chiropodists also provide care to clients through the subsidy program. Chiropodists work out of subsidized treatment sites that are set up to provide advanced treatment, surgery and access to foot devices. Pedorthists also provide care to clients at subsidized treatment sites. Orthotics and footwear can be accessed through this service based on referrals.



Image: Foot care nurse services during foot care event in the northern region of Ontario, Source: IDHC, 2019

Source: Information provided by IDHC, 2021



## Some Services Offered

### Cultural Safety Training

Cultural safety training has been provided to every service provider that registers with the IDHC Foot Care Program. The training is facilitated by San'yas Indigenous Cultural Safety (ICS) program. This training is a unique, online program designed to enhance self-awareness and strengthen the skills of those who work both directly and indirectly with Indigenous people. The goal of the ICS training is to promote positive partnerships between service providers and Indigenous people.

Skilled facilitators guide and support each learner through interactive course materials. The course participants examine culture, stereotyping and the consequences and legacies of colonization. Participants learn about terminology, diversity and aspects of colonial history including Indian residential schools and Indian Hospitals. To date, 42 IDHC service providers have successfully completed this training and are now fully aware of what it means to provide culturally safe foot care when working with their clients.

42  
Service Providers\*  
Trained in Cultural  
Safety



Image: Service provider training session, Source: IDHC, 2010



Image: Level 1 Diabetes Foot Care Course Trainee Tool Bag (IDHC formerly known as SOADI) Source: IDHC, 2018

\*Service providers include chiropodists, foot care nurses, pedorthists and reflexologists.  
Source: Information provided by IDHC, 2021



## Some Services Offered

### Level 1 Diabetes Foot Care Training

This three-day training provides an introduction to the **prevention of diabetes and diabetes-related complications**. The course incorporates holistic healing practices and traditional medicine. Participants learn how to identify different foot concerns and how to provide diabetic foot screening using foot care tools. IDHC also gives the equipment and resources necessary for participants to apply what they learned within their own communities. This training is now in an accredited process with the Indigenous Certification Board of Canada (ICBOC). In the future, IDHC aims to develop a Level 2 course that would deepen the knowledge and skills of all successfully trained Level 1 frontline workers. The vast majority of participants who completed the followup survey after attending the training expressed that they would benefit from a Level 2 course.



Image: Graduates of the IDHC Level 1 Diabetes Foot Care Training course, Source: IDHC, 2020



Image: IDHC Level 1 Diabetes Foot Care Training course, Source: IDHC, 2014

**194**  
graduates of the  
Level 1 Foot Care  
Training Course\*

\*Data provided by IDHC, 2021

"I can now answer questions for my clients with [a response] other than 'ask your doctor'. I am able to see issues on the feet and determine a treatment course and if necessary refer to a medical nurse or doctor as needed."

– Level 1 Foot Care Training Graduate, 2014

Data sources: IDHC Level 1 Foot Care Course Evaluations (2014-2018)



## Some Services Offered

### Level 1 Diabetes Foot Care Training (Cont'd)

The Level 1 Foot Care Training is designed to build capacity within a community by providing training to community members—you don't need to be a nurse to take the course! This way, the course helps to fill the gap in health service availability often seen within communities.

One month after the training with IDHC, 33 graduates responded to a followup survey about what they have already accomplished within their communities. *In total*, graduates reported that since the training, they have . . .

- Given at least **79** traditional food and medicine teachings
- Given at least **237** foot care teachings
- Conducted at least **249** foot assessments
- Made at least **80** referrals
- Identified at least **123** foot concerns
- Prevented at least **42** amputations

"The foot care team has done an excellent job in ensuring that not only frontline workers were equipped with the tools necessary but also the community members!!"

– Level 1 Foot Care Training Graduate, 2014

### Participants' overall self-reported knowledge before/after foot care training:

	Knowledge Level Before	Knowledge Level After
Indigenous medicine/holistic wellness practices	low	high
Type 2 diabetes prevention	medium	high
Diabetes and its complications	medium	high
Foot care and foot conditions	medium	high

After the course, participants also reported **high levels of knowledge** regarding traditional food and nutrition as well as the impacts of colonization on diabetes in Indigenous communities

#### Knowledge Level Scale:

Minimal-----low-----medium-----high-----extensive

Data sources: IDHC Level 1 Foot Care Course Evaluations (2014-2018), IDHC Level 1 Follow-up Survey (2014-2021)





## Foot Care Outreach and Events

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IDHC partners with various Indigenous communities upon invitation and request. They work with community organizations to set up and host a full day of foot care services that can include educational programs, foot assessments and treatments with Chiropodists, Foot Care Nurses and Reflexologists. They also provide webinars, workshops, activities, self-care resources and guest speakers. This full day of screening, treatment and education is a great way to learn more about healthy lifestyles, diabetic foot care and preventative self-care.

The next section will talk about the characteristics of those who register and participate in IDHC's outreach program and events. It will also give an overview of participants' evaluations of outreach and events.





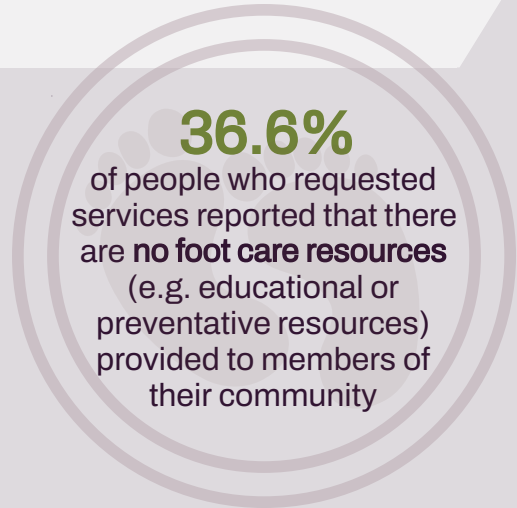
# Foot Care Outreach and Events

## Foot Care Service Requests

Communities who are interested in the foot care program first submit a request to IDHC for outreach events or other services. On the request form, people are asked a range of questions about foot care services already provided in their communities. Between 2013 and 2019, IDHC has received a total of **152 requests**.

People submitting a request were asked which service(s)\* they would like . . .

- 17.1%** requested an ongoing clinic in their community
  - 44.7%** requested an annual foot care event
  - 21.1%** requested foot care training
  - 64.5%** requested one of the various types of foot care presentations offered by IDHC (i.e. self-care presentation)
- . . . in addition to other services

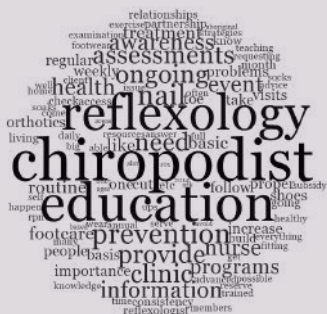


When asked to list foot care services provided within their community, 16.4% of people submitting requests **did not list any foot care services**. Those who did list foot care services mainly mentioned that services are offered through Indigenous and community-based groups and organizations.

### Word Clouds

(An illustration of the most common words used in response to questions on the request form)

**Types of foot care services needed within communities**



**Top Five Words**

1. Chiroprapist
2. Education
3. Reflexology
4. Nails
5. Prevention

**Barriers to accessing foot care within communities**



**Top Five Words**

1. Lists
2. Waiting
3. Funding
4. Providers
5. Long

\*People could select more than one service, therefore these percentages do not add up to 100%

Data source: IDHC Foot Care Program service request data (2013-2019)

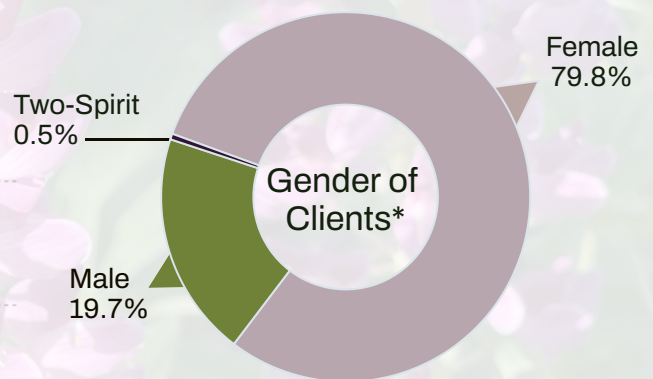
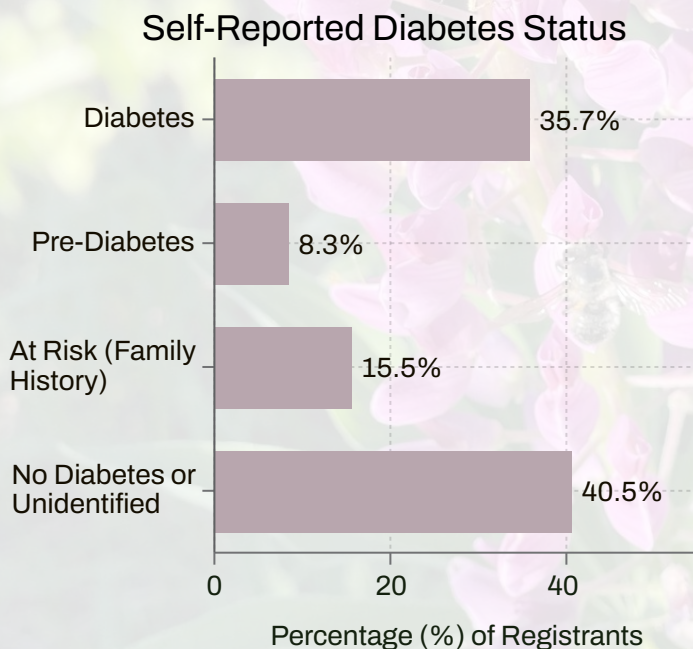
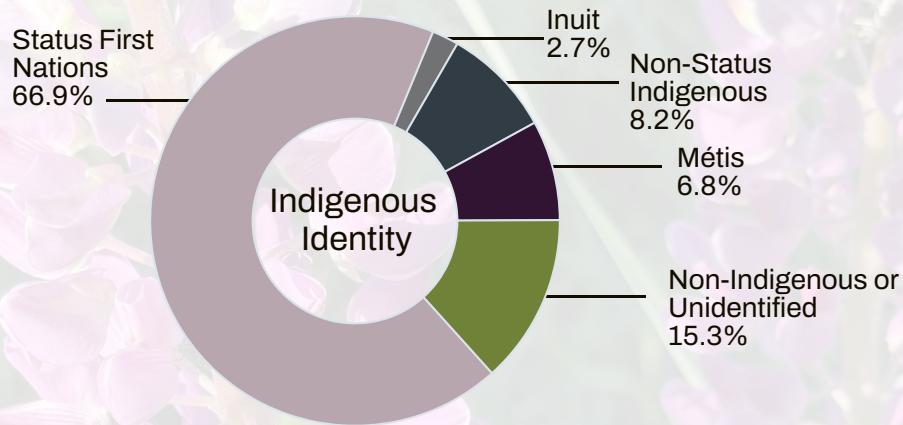


# Foot Care Outreach and Events

## Registration (2013-2019)

Between 2007 and 2019, a total of **8,938 people** registered to participate during outreach and events. This works out to an average of **688 registrants every year**. Outreach and events have been happening since 2007, however, the statistics below represent the newest data collected between 2013 and 2019. Registrants were included in this next portion of the evaluation as long as they weren't missing any key information. Between 2013 and 2019 alone, 4,027 people registered during outreach and events (including only complete registration forms).

A large proportion of those who registered were female, and status First Nations. Only about one-third of those who register reported that they have diabetes. The majority noted that they do not have diabetes, are at risk or have pre-diabetes. Lastly, about one third of those who registered said that they have attended an IDHC clinic in the past.



Mean age of all registrants: **51.4 years**

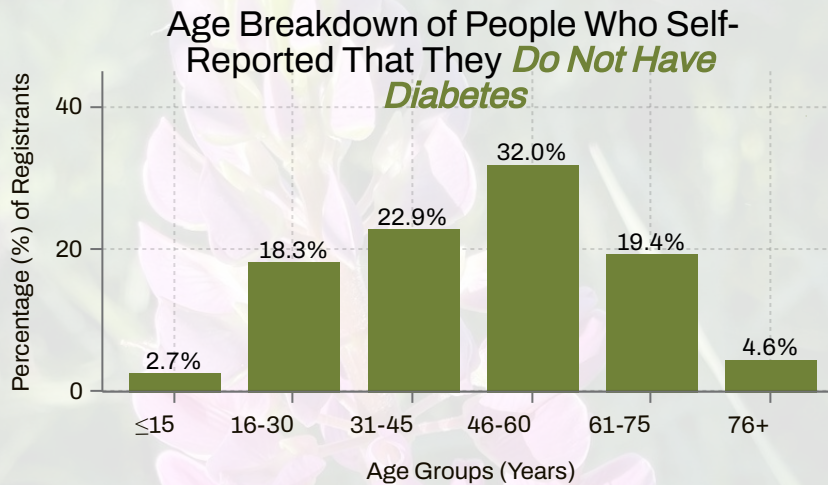
Data source: IDHC Foot Care Clinic Registration and Consent (2013-2019)



# Foot Care Outreach and Events

## Age Breakdown of People Who Registered (2013-2019)

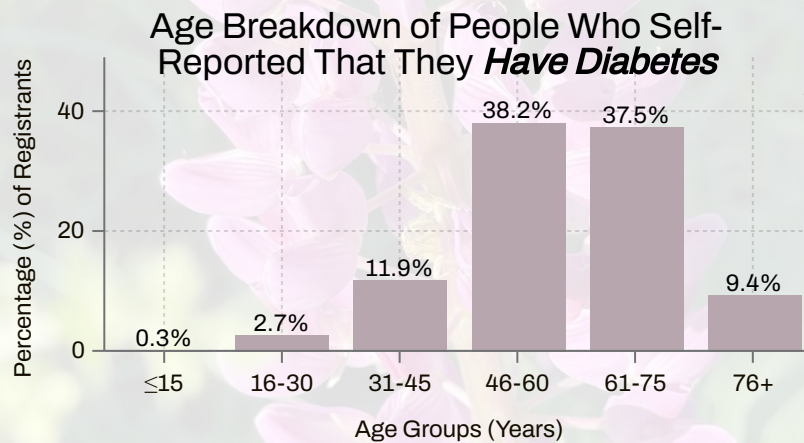
As shown on the previous page, the average age of registrants was approximately 51 years old. However, people who reported that they did not have diabetes were, on average, **nearly 12 years younger** than those who reported that they have diabetes.\* Looking at the age distribution of clients helps to get a better understanding of the people served by the Foot Care Program.



Average age:

**47.3 years**

Around 56% of people who reported that they do not have diabetes were above age 45.



Average age:

**58.9 years**

Over 85% of people who reported that they had diabetes were above age 45

\*Here, the 'no diabetes' category includes anyone who did not report a diagnosis of diabetes (i.e. also including those who have pre-diabetes or are at risk).  
Data source: IDHC Foot care clinic registration and consent (2013-2019)





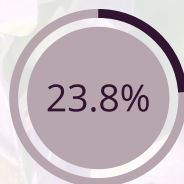
# Foot Care Outreach and Events

## Health Concerns of People Who Registered (2013-2019)

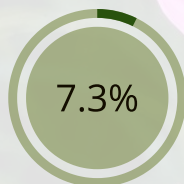
Many conditions and health concerns such as peripheral vascular disease (a blood circulation disorder) and neuropathy (nerve damage) often go unnoticed or undiagnosed (2,4). Some signs and symptoms can indicate that someone is at risk of developing a serious diabetes-related complication. For example, people who have hypertension are predisposed to developing peripheral vascular disease (PVD) (2). Further, experiencing a loss of protective sensation (i.e. numbness or tingling) in the feet may be a sign of peripheral neuropathy. It is therefore important to treat and monitor foot health concerns to ensure that symptoms do not worsen (12).



10.0% of people who registered said they have a **heart condition**



23.8% of people who registered said they have **hypertension**



7.3% of registrants said they have **neuropathy**



1.3% of registrants said they have **peripheral vascular disease (PVD)**

### Top Ten Foot Concerns of People Who Register

1. Dry Skin (23.4%)
2. Pain/tenderness (22.5%)
3. Changes in bone structure or flat feet (22.2%)
4. Ingrown toenail (19.6%)
5. Numbness and/or tingling (17.5%)
6. Callus (17.4%)
7. Cracked skin/nail (14.3%)
8. Arthritis (14.2%)
9. Abnormality/changes in nail (13.9%)
10. Poor circulation (12.3%)



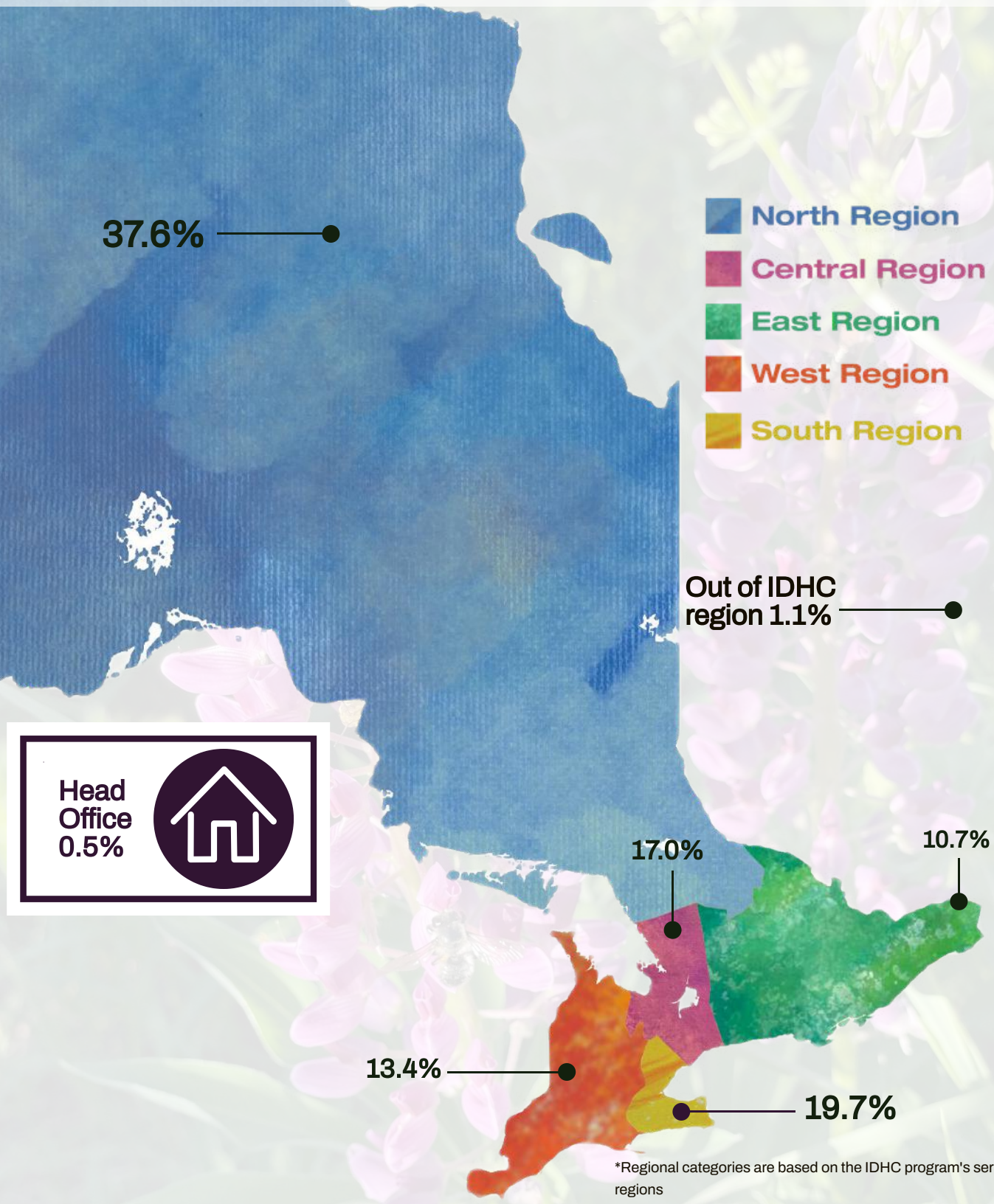
Image: Fly-in Foot Care Event in a Remote Northern Community, Source: IDHC, 2017

Data source: IDHC Foot Care Clinic Registration and Consent (2013-2019)



## Foot Care Outreach and Events Regions of Ontario (2013-2019)\*

Since 2013, the largest proportion of event evaluations have come from the **Northern Region**.



\*Regional categories are based on the IDHC program's service regions  
Data source: IDHC Foot Care Event Evaluations (2013-2019)  
Image: Map of Ontario provided by IDHC (2021)



# Foot Care Outreach and Events

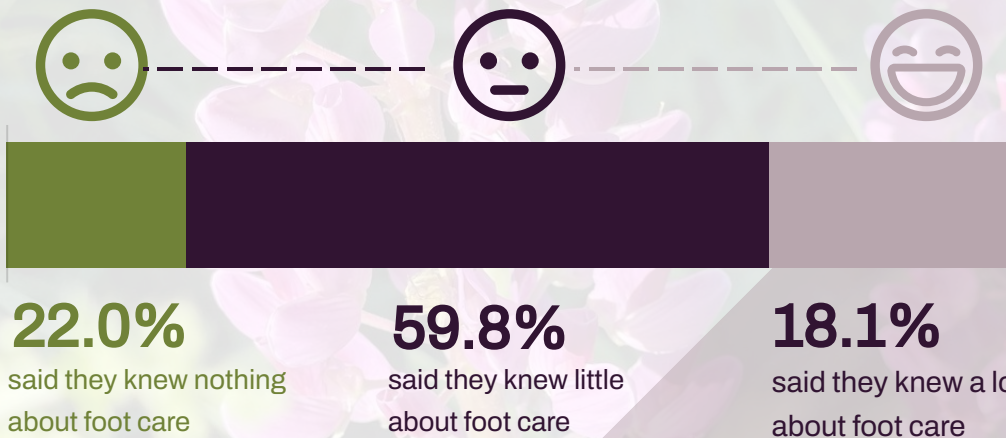
## Foot Care Knowledge (2013-2019)



Image: Group education at a foot care event in the northern region of Ontario, Source: IDHC, 2019



### Level of knowledge about foot care Before attending an event:



People who had **attended an IDHC event in the past** were

**4.1 times\***

more likely to say they have a lot of foot care knowledge, compared to people who hadn't attended an event before.

- **Women** were 2.4 times more likely to say they knew a lot about foot care, compared to men
- **People with diabetes** were 66.2% more likely to say they know a lot about foot care, compared to those who didn't have diabetes

Data source: IDHC Foot Care Clinic Registration and Consent (2013-2019)



# Foot Care Outreach and Events

## Summary of Accomplishments

Since 2007, a total of **345 foot care and outreach events** have taken place. Between 2013 and 2019 alone, a total of 171 events have been held. As data collection practices changed around 2013, we have presented some statistics for the newest data representing the time period between 2013 and 2019.

**In total**, between 2013 and 2019,

**16,096** people attended an IDHC event

**1,808** referrals were made to health service providers

**855** Indigenous health teachings were given.



Image: Nutrition bingo winner at a foot care event in a remote northern community, Source: IDHC, 2017

“Everything on your body is connected to your feet so practising good foot care can prevent health issues in the future.”

– Event Participant (Eastern Region of Ontario, 2018)

**On average**, at each event . . .

**96** people attended

**24** clients were seen by a foot care specialist

**20** foot concerns were identified (with one-on-one treatment and education provided)

**10** clients with a **low risk** of ulcer or amputation were seen by a foot care specialist

**4** clients with a **high risk** of ulcer or amputation were seen by a foot care specialist



Image: Remote Community Event Promotion, Source: IDHC, 2017

Data source: Foot Care Outreach and Event Summary (2013-2019)







# Foot Care Outreach and Events

## Participant Evaluation (Cont'd) (2013-2019)

Each aspect of outreach and events received highly positive evaluations. 94% of attendees thought the overall clinic and the IDHC team were 'the best.' These evaluations are an indicator that participants are strongly satisfied with IDHC services.

### Participants' Satisfaction with Self-Care Resources:\*



“This clinic has made an impact on my overall health. I can't wait to get regular foot care. Thank you!”  
 – Event Participant (West Central Region of Ontario, 2013)



\*N/A responses were omitted from these results

Data source: IDHC Foot Care Event Evaluations (date range is 2013-2019, except when otherwise specified)





## Foot Care Service Coverage

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Through IDHC's Foot Care Program, clients can apply for financial coverage of the foot care services they need. The program prioritizes coverage of foot care services for Indigenous people who: are living with diabetes; have current foot concerns; are at a high risk for foot complications; and do not qualify for any other funding resources.

For individuals who qualify, IDHC can cover continuous treatment with foot care service providers (e.g. foot care nurses) at one of the **Ongoing Foot Care Clinics** set up to run in community with partnering Indigenous hosts. Applicants who have a higher risk of diabetes-related complications (e.g. foot ulcer) qualify to receive coverage of advanced care with foot care specialists (chiropractors and podiatrists) at one of IDHC's **subsidized treatment sites**. Service providers at the Ongoing Clinics can also make referrals for clients to access services at the subsidized treatment sites, as needed.

Many clients who apply for foot care service coverage are referred from outreach and events. If a foot care event is held even once in a given community, clients with a need for foot care can be directed to the foot care service coverage application. This way, their attendance at a one-time event can lead to regular treatment at the ongoing clinics or subsidized treatment sites.

This next section will present the characteristics of the clients who apply for foot care service coverage with IDHC, including things like age, gender and health concerns. We will also look at what foot care services clients were already using, and whether or not their services were covered. Statistics representing the number of applicants approved will also be shown.

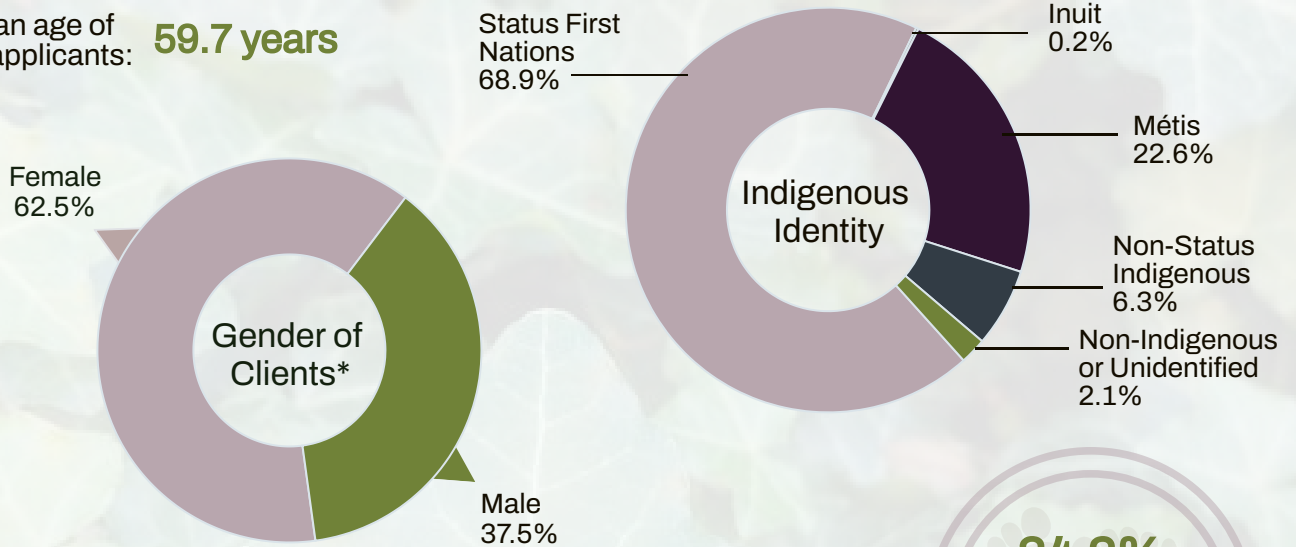


# Foot Care Service Coverage

## Applicant Characteristics (2008-2019)

Between 2008 and 2019, IDHC received a total of **1,795 applications** for foot care coverage. A large proportion of applicants were female and status First Nations. IDHC aims to provide service coverage for Indigenous clients who have diabetes and are currently experiencing foot concerns. While the majority of people who applied reported that they have diabetes, around 23% of applicants specified that they are pre-diabetic or at risk of diabetes.

Mean age of all applicants: **59.7 years**



\*One person identified as two-spirit between 2018 and 2019. Data representing two-spirit people was not available prior to 2018.

**34.2%**  
of applicants have attended an IDHC clinic in the past

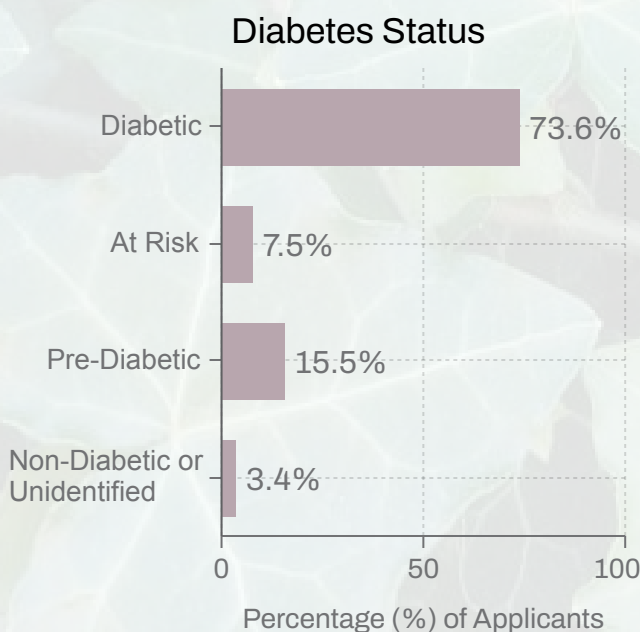


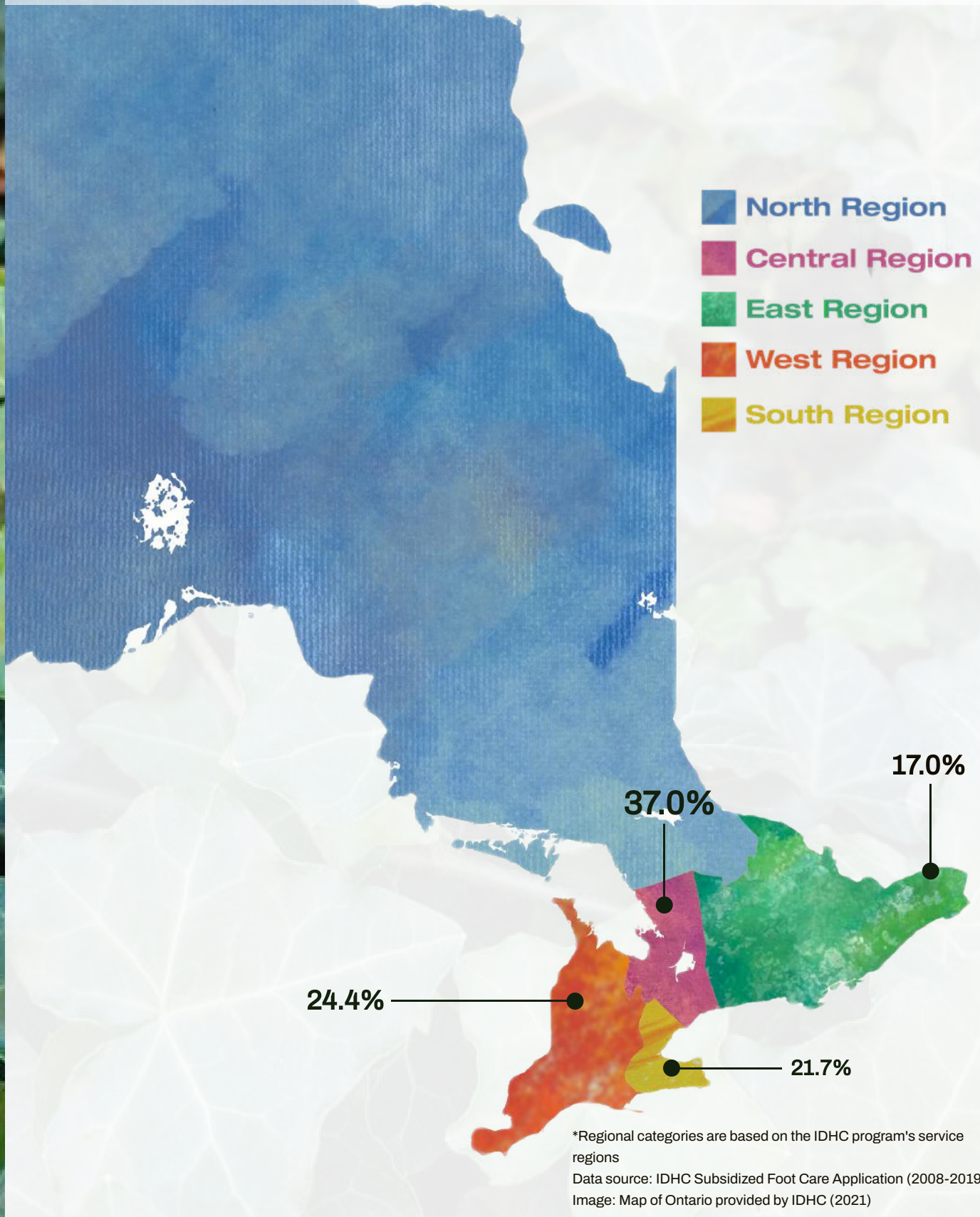
Image: Service provider assisting client with application for follow-up care, Source: IDHC, 2017

Data source: IDHC Foot Care Subsidy Applications (2008-2019)



## Foot Care Service Coverage Regions of Ontario (2008-2019)\*

Since 2008, the largest proportion of applications have come from the **Central Region**.





# Foot Care Service Coverage

## Foot Care Concerns of People Who Apply (2018-2019)

The majority of people who apply for coverage stated that they have nail concerns. A large proportion of applicants also reported pain or loss of sensation in their feet, as well as concerns about their skin. Within this sample, women were more likely to report concerns about foot swelling and bone structure concerns, while men were more likely to report concerns about sores or fissures (cracks) on their feet.

### Foot Concerns of People Who Apply for Coverage

1. Nail concerns (71.7%)
2. Pain/loss of sensation (47.3%)
3. Skin concerns (39.6%)
4. Wide feet (29.3%)
5. Swelling (24.3%)
6. Bone structure concerns (20.1%)
7. Infection/wound (12.5%)
8. Open sores/fissures (4.8%)



Image: Foot care event, assisting with client's application for coverage for followup treatment, Source: IDHC, 2019

### Gender and Foot Concerns:

#### On the health-care coverage application. . .

Compared to women, men were **37% less likely** to report **bone structure concerns**.



Compared to women, men were **3.3 times more likely** to report concerns about **open sores/fissures**.



Compared to women, men were **30% less likely** to report concerns about **swelling**.



Data source: IDHC Foot Care Subsidy Applications (2018-2019)



# Foot Care Service Coverage

## Foot Care Services Used by Applicants (2018-2019)

People with diabetes are recommended to get a yearly foot assessment. However, around one-third of applicants with diabetes said they have never accessed foot care services before. Further, the majority of applicants stated that they have no foot care coverage, making it difficult to access the needed care. Some people have used Non-Insured Health Benefits (NIHB) to cover the services they used in the past; however, NIHB coverage is limited. Over 10% have paid for their services out of pocket, with a small percentage of people reporting coverage through benefits or private insurance.

While some applicants have seen a foot care nurse or a chiropodist in the past, fewer have accessed pedorthic, orthopaedic or reflexologist services. Clients see pedorthists for specialized footwear and supportive devices and orthopaedic surgeons are seen when required for lower limb surgery (e.g. amputation, bunion surgery, etc.). Reflexology treatment can benefit circulation and sensation in the feet and can also be used on a regular basis to help increase general wellness throughout the body.

**31.1%** of applicants with diabetes stated that they have **never accessed foot care** services before.\*

**60.2%** of applicants stated that they have **no foot care coverage**.

### Foot Care Services Accessed by Applicants in the Past:

**33.9%** of applicants have seen a foot care nurse

**21.3%** of applicants have seen a chiropodist/podiatrist

**7.1%** of applicants have seen a reflexologist

**5.2%** of applicants have received pedorthic services

**2.5%** of applicants have seen an orthopaedic surgeon

### Types of Health-Care Coverage Used for Past Foot Care Services:

1. Non-Insured Health Benefits (NIHB) (Coverage limited to custom-made footwear and orthotics)  
— 33.1%
2. Out-of-pocket  
— 11.5%
3. Social Services (ODSP/W, Welfare)  
— 11.1%
4. Insurance (e.g. benefits or private insurance through work or school)  
— 3.8%

**Note: Some applicants have accessed one or more of these services, and some have not accessed any (i.e. the categories are overlapping). Similarly, some applicants indicated several types of health-care coverage, and some did not indicate any.**

\*Note that 14.3% applicant responses were missing.

Data source: IDHC Foot Care Subsidy Applications (2018-2019)



# Foot Care Service Coverage

## Applicant Approval Rate (2008-2019)

Nearly all applicants were **approved** for foot care coverage. Applications are generally noted to be **pending** when IDHC has not received complete information from the applicant. When the information is received, the request is then processed. People who are **conditionally approved** are often those with pre-diabetes who are approved for treatment but qualify for fewer visits to treatment sites, as they have a lower risk of foot complications. These clients are monitored, and if their condition changes then they can be can receive treatment more frequently.

In the few cases where an application is **denied**, it is generally because the applicant is not part of the prioritized population (Indigenous people who are living with diabetes, and are at a high risk for foot complications). Due to resource constraints, the program focuses on funding people with the highest risk of foot health complications. However, with increased capacity, the program could expand to accommodate more people who have pre-diabetes to allow early intervention and prevent foot complications.

**92.2%**  
of applications  
were **approved**

**5.8%**  
of applications  
were **pending**

**0.2%**  
of applications  
received **conditional  
approval**

**1.8%**  
of applications  
were **denied\***

\*Note: The reason for denial is not always specified for each person.  
Data source: IDHC Foot Care Subsidy Applications (2008-2019)







## Ongoing Foot Care Clinics

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The Ongoing Foot Care Clinic is one of the IDHC's four program priorities. Ongoing Clinics are hosted every 6-8 weeks within Indigenous communities by working with local organizations and service providers. This allows IDHC's Foot Care Program and host organizations to provide in-community access to treatment and education. Ongoing Clinics strive to create a sense of belonging, enable group learning and increase access to treatment services. In general, the Ongoing Clinics aim to provide local and sustainable foot care services for Indigenous communities. Clients can apply for foot care service coverage to access regular treatment and care at these Ongoing Clinics.

Currently, the Foot Care Program has 15 Ongoing Clinics happening at various locations across Ontario.

This section of the report will include information about the Ongoing Clinics and the services provided. It will also describe the health status and demographics of the clients who attend the Ongoing Clinics. This will help to understand the characteristics of the population served by the IDHC Ongoing Clinics. Clients were included in the analysis if the date they visited the Ongoing Clinic was available in the data.



# Ongoing Foot Care Clinics

## Clinic Attendance (2010-2019)

From 2010 to 2019, at least **1,188 people** benefited from the IDHC's Ongoing Foot Care Clinics. Most of the clients return many times—some, as many as 85 times. In all, there have been **16,061 Ongoing Clinic visits**, including home visits.



Image: Mother and daughter attend the Ongoing Clinic, Source: IDHC, 2017

**75%**

of clients attended the Ongoing Clinics **more than once**

**40%**

of clients attended the Ongoing Clinics **10 or more times**

Ongoing Clinics are held every 6-8 weeks. On average, clients returned **14 times** for ongoing foot care!

“I have been a client for years and this program is very beneficial to me. Really helpful receiving great foot care from [IDHC].”

– Ongoing Clinic Client (Central Region of Ontario)

Data source: IDHC Ongoing Clinic Summary (2010-2019)



# Ongoing Foot Care Clinics

## Gender and Foot Care (2010-2019)

It was previously identified at IDHC that men are not using their foot care services to the same extent as women. The number of new diabetes diagnoses in First Nations men is similar to the number in women (2). However, the proportion of men attending the Ongoing Foot Care Clinics is *much* lower compared to the proportion of women. In response to this discrepancy, the IDHC team has made an effort to engage men throughout their program.

As one example, diabetes and foot care advocate John Munroe (Yellow Quill First Nation) has worked with IDHC to raise awareness about the potential complications of diabetes. He has been an inspirational guest speaker for IDHC events, sharing his experiences with diabetes and limb amputation with the broader community.

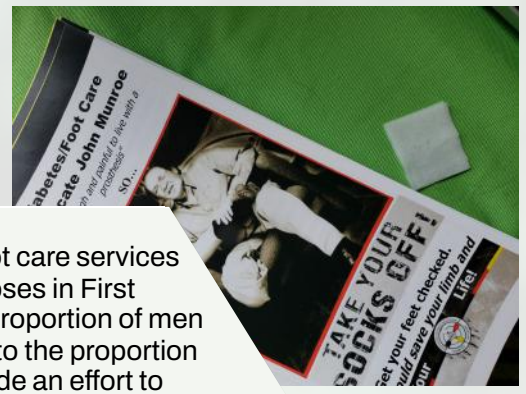
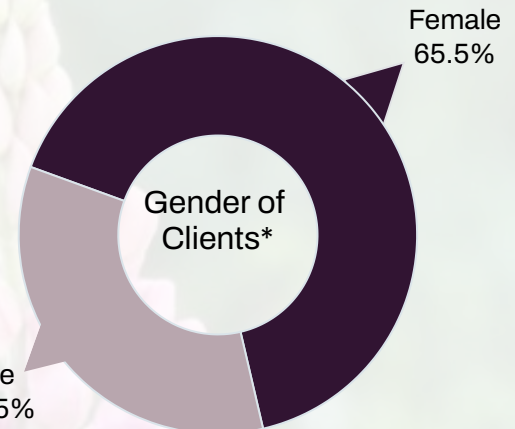


Image: Pamphlet, Source: IDHC, 2020



Image: Poster with Foot Care Advocate John Munroe, Source: IDHC, 2017



Data source: IDHC Ongoing Clinic Summary (2010-2019)  
 \*At first Ongoing Clinic visit. No data representing Two-Spirit people in this sample.

### A Brief Biography of John (Victor) Munroe:

- Born 1952 at Nut Lake Indian Reserve (Rose Valley Saskatchewan), now known as Yellow Quill First Nation
- Diagnosed with diabetes in 1974, and given limited information to help him control his diabetes
- Underwent amputation of his right leg in 2005, as the result of an infection due to poor circulation caused by diabetes
- Used his experiences to promote health and wellness in Indigenous communities, and to provide education about diabetes to those who are affected

To read his full story, visit this link: <https://idhc.life/foot-care-program/>

“Knowledge and education is the key in controlling this disease and to living a happy and healthy life.”  
 – John (Victor) Munroe, Diabetes/Foot Care Advocate

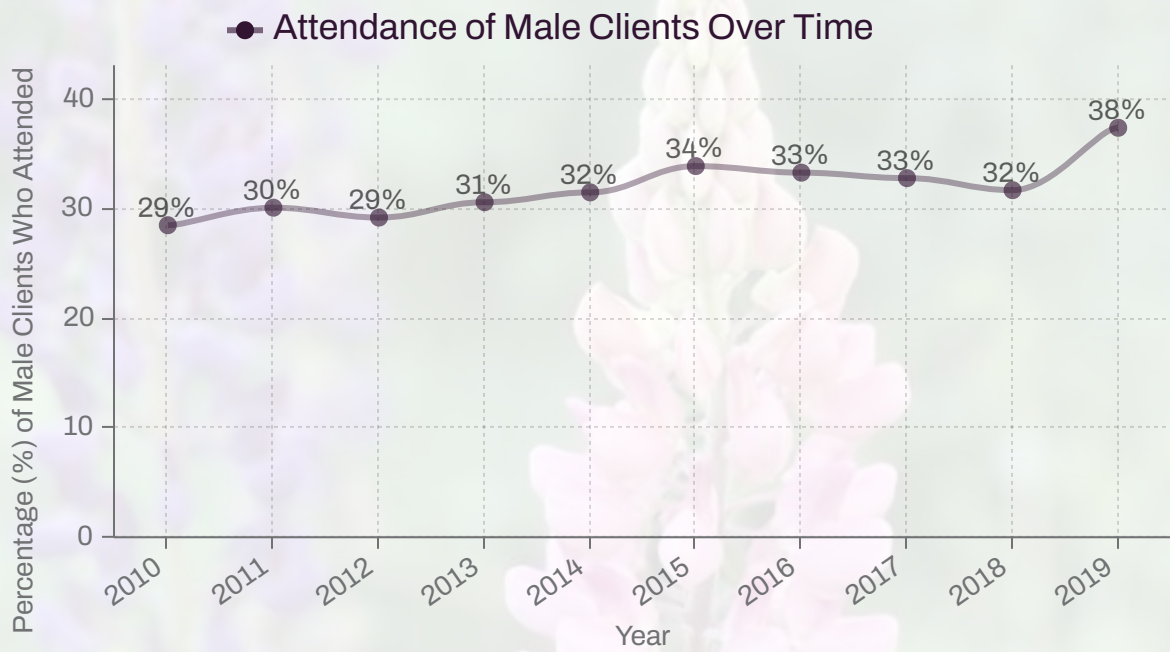
Source: Information provided by IDHC



# Ongoing Foot Care Clinics

## Gender and Foot Care (Cont'd) (2010-2019)

Findings from the Ongoing Clinic client data suggest that the proportion of male clients may be increasing over time. Between 2010 and 2019, there was a slight increasing trend in male attendance. This suggests that the IDHC is making progress in engaging men in foot care.



On average...

women visited the Ongoing Clinic

**14 times**

men visited the Ongoing Clinic

**13 times**

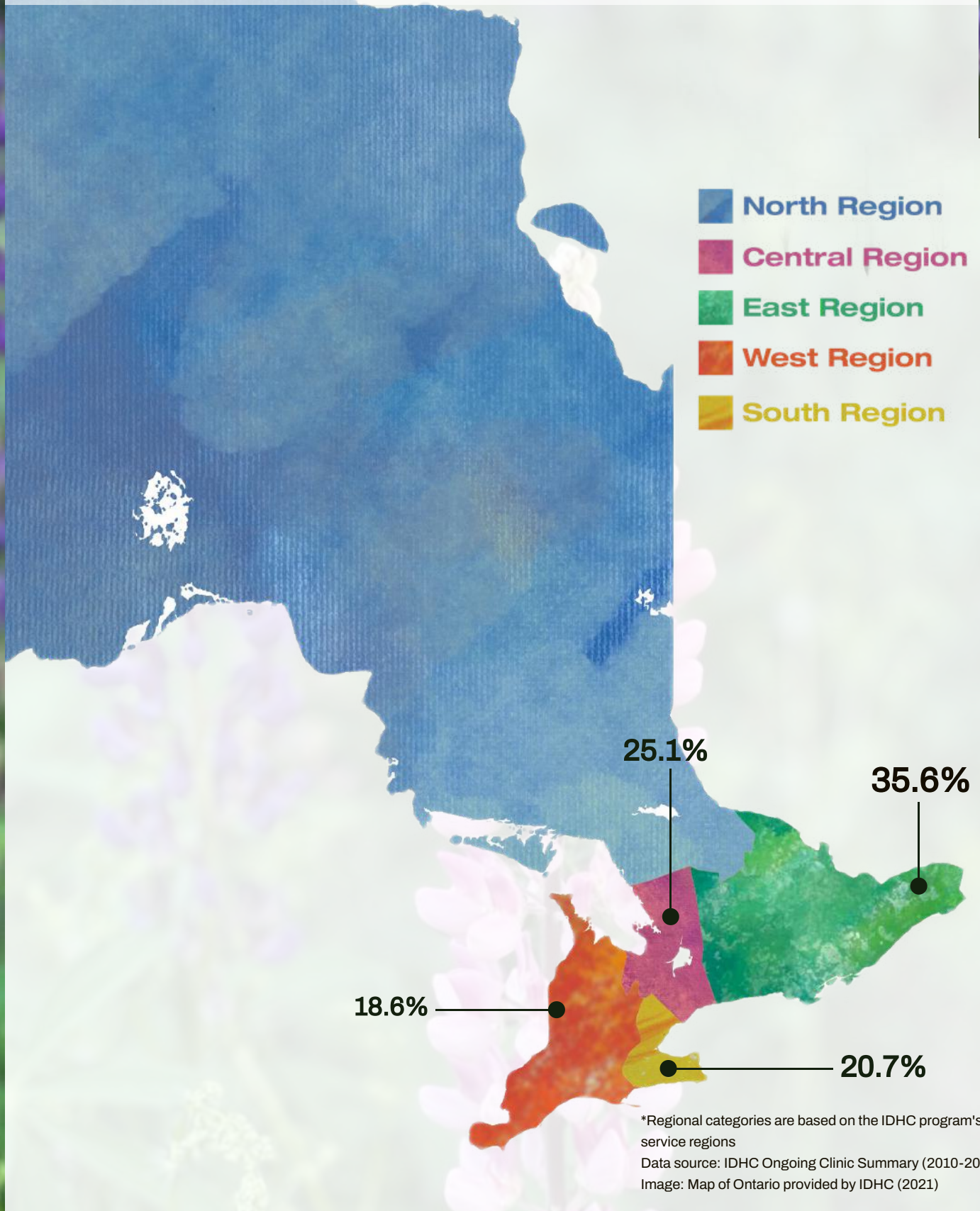
In general, fewer men attend the Ongoing Foot Care Clinic, compared to women. However, those who do attend the Ongoing Clinic visit just as frequently as women. There is no significant difference between the number of times women visit the Ongoing Clinic, and the number of times men visit.

Data source: IDHC Ongoing Clinic Summary (2010-2019)



## Ongoing Foot Care Clinics Regions of Ontario (2010-2019)\*

The largest proportion of clients lived in the **Eastern Region** of Ontario at the time of their visit.





# Ongoing Foot Care Clinics

## Diabetes-Related Complications:

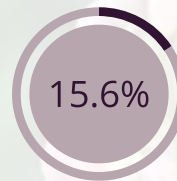
### Peripheral Vascular Disease (PVD) and Neuropathy (2010-2019)

At over one-third of clients' visits to the Ongoing Foot Care Clinic, the client is identified as having Peripheral Vascular Disease (PVD)—a blood circulation disorder. At nearly half of clients' visits to the Ongoing Clinic, they are noted to be experiencing neuropathy (nerve damage which leads to a feeling of numbness). A large proportion of those who have diabetes were experiencing neuropathy when they first entered the Ongoing Clinic. Although, these findings show that neuropathy and PVD can also affect those who have pre-diabetes.

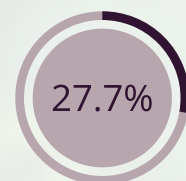
### Peripheral Vascular Disease (PVD):



The Ongoing Foot Care Clinic supported clients with PVD at **36%** of clients' visits to the Clinic



At the first Ongoing Clinic visit, **16.7%** of people with *pre-diabetes* had PVD



At the first Ongoing Clinic visit, **28.4%** of people with *diabetes* had PVD

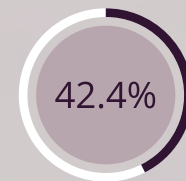
### Neuropathy:



The Ongoing Foot Care Clinic supported clients with neuropathy at **48%** of clients' visits to the Clinic



At the first Ongoing Clinic visit, **16.4%** of people with *pre-diabetes* had neuropathy



At the first Ongoing Clinic visit, **42.3%** of people with *diabetes* had neuropathy

Data source: IDHC Ongoing Clinic Summary (2010-2019)



## Ongoing Foot Care Clinics Yearly Accomplishments (2014-2019)

Every year at the Ongoing Foot Care Clinics, thousands of teachings related to diabetes and footwear are given to clients. Callus reductions are the most common treatment received by clients, followed by ingrown nail and fungus treatments.

It was estimated by service providers that with these services, around 75 amputations were prevented each year, on average. Further, nearly 200 ulcers were prevented, yearly. In recent years, it has been estimated that between 7.1% and 11.8% of diabetic foot ulcers in Ontario resulted in amputation (14). These preventative foot care services help to decrease the number of diabetic ulcers that lead to amputation.

Each year, *on average* . . .

- 1,149** footwear teachings\* were provided
- 1,170** diabetes teachings\* were provided
- 751** callus reductions were provided
- 525** ingrown nail treatments were provided
- 390** fungus treatments were provided
- 189** ulcers were prevented
- 128** corn treatments\* were provided
- 103** referrals\* were provided
- 75** amputations were prevented
- 61** lesion treatments were provided
- 59** prescriptions\* were provided
- 30** wart treatments were provided

\*Data from 2010-2019

Each **ulcer** costs the Canadian health-care system **\$21,371**, on average (15)

Each **amputation** costs the Canadian health-care system **\$75,081**, not including the cost of rehab and prosthesis (16)



Image: One-on-one teaching at the Ongoing Clinic.  
Source: IDHC, 2014

“Very conscientious providers.”  
– Ongoing Clinic Client (Central Region of Ontario)

The financial impact of ulcers and amputations on individuals is yet to be estimated in the literature. Although, people who undergo a lower extremity amputation can spend between **16 and 37 days in the hospital** after the operation (17). This alone can result in a substantial **loss of income**.

Data source: IDHC Ongoing Clinic Summary (2014-2019)



# Ongoing Foot Care Clinics

## Progress Over Time (2010-2019)



When people with diabetes experience numbness in their feet (neuropathy), it becomes more difficult to feel when damage or injury occurs. If left untreated, wounds can become infected and require minor or even major amputation (15). Therefore, if any loss of sensation occurs, regular foot care and treatment is necessary to ensure that this does not result in more severe complications (15).

As shown below, the vast majority of clients attending the Ongoing Clinics were able to improve or maintain their condition.

Of people who first came in to the Ongoing Clinic\* with **no loss of protective sensation** . . .

**65.7%** were able to **maintain sensation** in their feet by the time of their last visit



Image: Group learning at the Ongoing Clinic, Source: IDHC, 2012

Of people who first came in to the Ongoing Clinic\* with **a loss of protective sensation** . . .

**21.0%** were able to partially or completely **recover sensation** in their feet by the time of their last visit

Overall . . .

**78.5%** **did not progress** to more serious complications



Image: IDHC Ongoing Foot Care Clinic cultural teachings on traditional Indigenous foods, Source: IDHC, 2016

Of people who first came in to the Ongoing Clinic\* with **peripheral sensory neuropathy and a predisposing foot deformity** . . .

**28.0%** **successfully treated** their foot deformity

**28.8%** **successfully treated** their foot deformity and partially or completely regained **sensation**

Overall . . .

**88.8%** **did not progress** to more serious complications

\*Including clients who attended the Ongoing Clinic at least twice  
Data source: IDHC Ongoing Clinic Summary (2010-2019)

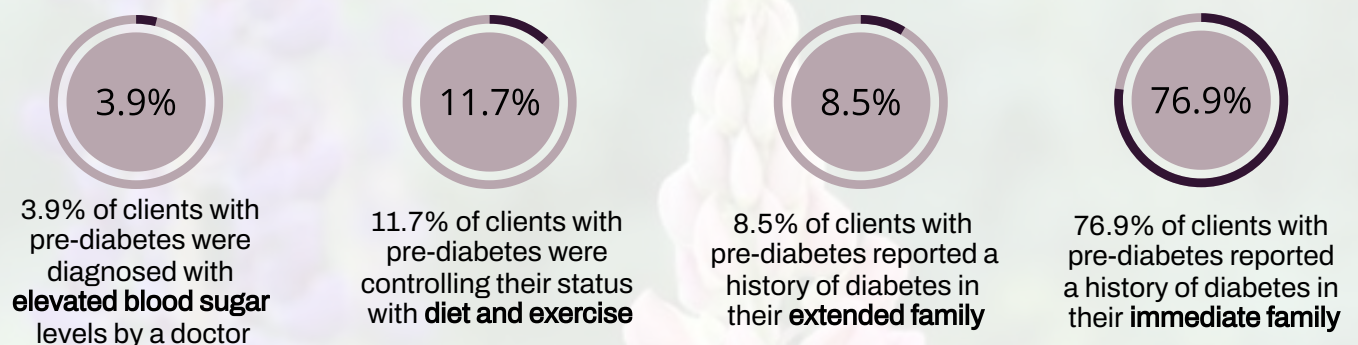


# Ongoing Foot Care Clinics

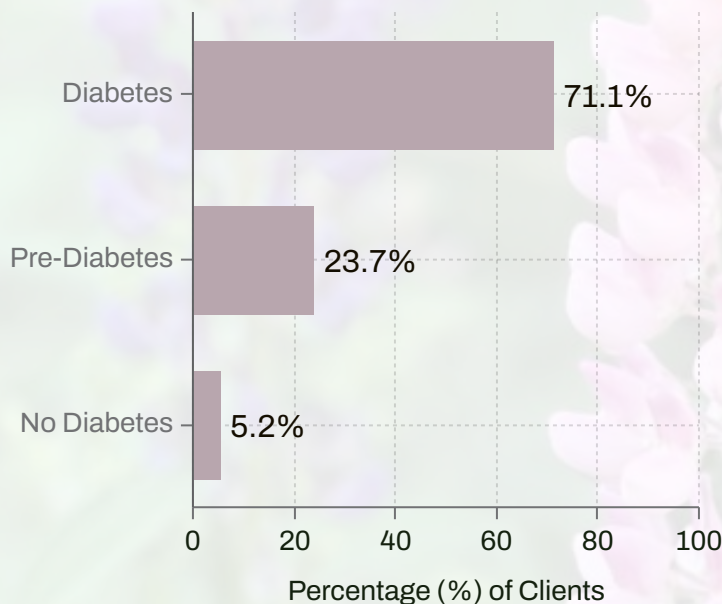
## Clients with Pre-Diabetes (2010-2019)

Those who have pre-diabetes are at a high risk of developing diabetes (18). Therefore, it is expected that as we observe clients over time, the proportion of those who have diabetes will increase. For the clients attending the Ongoing Clinic, the yearly rate of progression from pre-diabetes to diabetes was roughly 34%. Most often, new diabetes diagnoses occurred in the first few visits to the Ongoing Clinic. Still, over 42% of clients with pre-diabetes were able to maintain their status throughout their visits to the Ongoing Clinic, without ever progressing to diabetes.

### At their first visit to the Ongoing Clinic\* . . .



### Diabetes Status at First Ongoing Clinic Visit



Throughout their time at the Ongoing Clinic . . .

**42.4%**  
of clients with pre-diabetes\*\* remained pre-diabetic and did not progress to diabetes

“Foot care has helped tremendously.”  
– Ongoing Clinic Client (Central Region of Ontario)

\*Percentages do not add up to 100, as the categories are sometimes overlapping (e.g. a client might have a history of diabetes in their immediate family *as well as* their extended family.)

\*\*Including clients who attended the Ongoing Clinic at least twice.

Data source: IDHC Ongoing Clinic Summary (2010-2019)






## Subsidized Treatment Sites

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Clients with a higher risk of diabetes-related foot conditions can access subsidized care at select sites, located across Ontario. At these sites, foot care specialists (i.e. chiropodists) provide foot assessments to clients and work with the program to design an advanced treatment plan to manage and treat foot conditions and prevent limb loss. Many clients from the Ongoing Clinic are also referred to these subsidized sites as needed, to access advanced care and customized footwear and devices.

In one of the previous sections in this report, information about the clients who apply for IDHC's health service coverage was presented. This section will now explore some of the data representing the clients who receive health coverage to access advanced services at the subsidized sites.



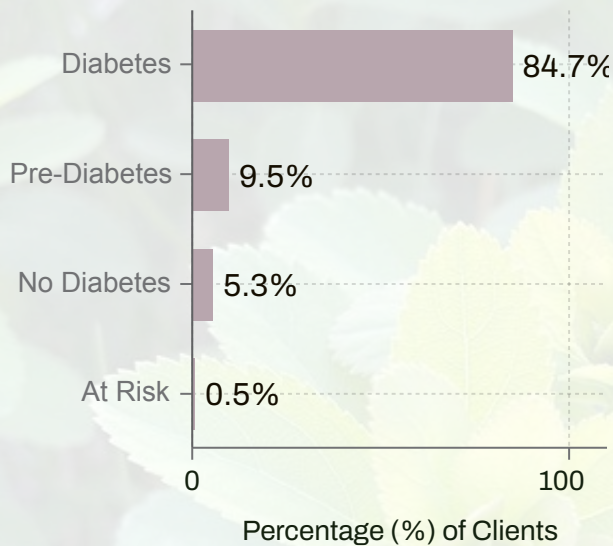


# Subsidized Treatment Sites

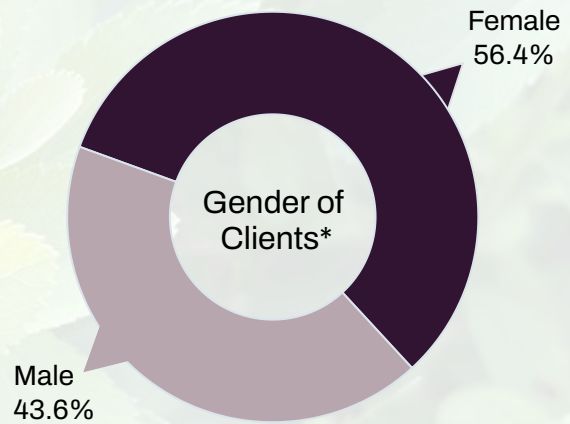
## Health Status and Characteristics of Clients

Between 2006 and 2019, approximately **1,199 people** have been able to access foot care services at the subsidized treatment sites. In total, IDHC has subsidized approximately **9,940 visits** with foot care service providers at these sites.

### Diabetes Status of Clients Attending Their First Appointment at the Subsidized Treatment Site



On average, clients attended **eight** subsidized foot care appointments



\*At first clinic visit. No data representing Two-Spirit people in this sample.



Image: Orthotic casting at community clinic, Source: IDHC, 2021

### Neuropathy



At their first subsidized appointment, **42.4%** of clients had neuropathy

### Peripheral Vascular Disease (PVD)



At their first subsidized appointment, **31.7%** of clients had PVD

Data source: Subsidy Invoice Form (2006-2019)







## Subsidized Treatment Sites Regions of Ontario (2006-2019)\*

The largest number of clients received treatment at subsidized sites in the **Central Region**. These clients also visited the subsidized sites more frequently.

### Why?

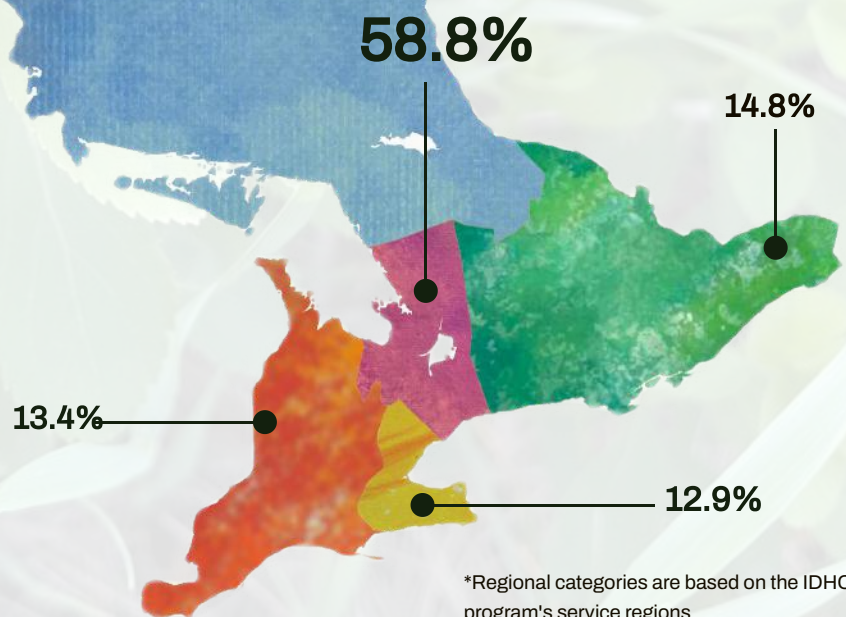
Clients might be visiting these treatment sites more frequently because they have particularly complex medical needs. Toronto is part of the Central Region. With the city's high population, there may be more demand in this region.

Average Number of Times Clients Visit Subsidized Treatment Sites Across IDHC Service Regions

IDHC Service Regions	Average Number of Visits
 <b>Central Region</b>	10.1
 <b>East Region</b>	6.2
 <b>West Region</b>	5.5
 <b>South Region</b>	5.7

### Northern Ontario

Originally based in southern Ontario, IDHC has been working to expand its services into the Northern Region. As of 2019, core funding has been allocated to run subsidized treatment sites in the north (not captured in this evaluation)



\*Regional categories are based on the IDHC program's service regions  
Data source: Subsidy Invoice Form (2006-2019)  
Image: Map of Ontario provided by IDHC (2021)



# Subsidized Treatment Sites

## Progress Over Time (2006-2019)

The vast majority of clients were able to maintain their condition, and to prevent existing symptoms from worsening. As shown in the following statistics, many clients who accessed foot care services at subsidized treatment sites were even able to improve their condition over time. Some clients who were experiencing foot health concerns when they first began receiving treatment had shown a marked improvement by their last visit.

Of clients who had **no loss of protective sensation** at their first subsidized foot care appointment\* . . .

**62.9%** were able to **maintain sensation** in their feet by the time of their last visit



Image: Bone and orthotic display at a subsidized treatment site, Source: IDHC, 2019

Of clients who had **peripheral sensory neuropathy and a predisposing foot deformity** at their first subsidized foot care appointment\* . . .

**28.8%** **successfully treated** their foot deformity

**15.1%** **successfully treated** their foot deformity and partially or completely regained **sensation**

Overall . . .

**90.4%** **did not progress** to more serious complications

Of clients who had **a loss of protective sensation** at their first subsidized foot care appointment\* . . .

**19.0%** were able to partially or completely **recover sensation** in their feet by the time of their last visit

Overall . . .

**76.4%** **did not progress** to more serious complications



Image: Client receiving treatment at subsidized site, Source: IDHC, 2016

\*Including clients who visited a service provider at least twice. Data source: Subsidy Invoice Form (2006-2019)



## Subsidized Treatment Sites Accomplishments Over Time (2006-2019)

At the subsidized treatment sites, clients have received thousands of teachings and foot care treatments. Callus reductions are the most common form of treatment done at these sites, followed by ingrown nail treatments. Particularly for clients with diabetes, calluses, ingrown nails and other foot conditions can lead to foot ulcers if they are not treated properly (12). In cases where a client's condition was worsening, service providers noted that without intervention, the client would have developed an ulcer and/or an amputation.

Service providers estimated that with this subsidized foot care program . . .

. . . **398** ulcers were prevented

. . . **113** amputations were prevented

**790** home visits  
were conducted  
from 2006-2019



Image: Chiropodist providing insole modification to clients existing footwear,  
Source: IDHC, 2017

Between 2006 and 2019, the following were provided at subsidized treatment sites. . .

**7,205** one-on-one diabetes teaching

**6,992** one-on-one footwear teachings

**4,576** callus reductions

**1,430** ingrown nail treatments

**565** lesion treatments

**545** referrals

**490** prescriptions

**487** corn treatments

**426** fungus treatments

**191** wart treatments

\*Including clients who visited a service provider at least twice.  
Data source: Subsidy Invoice Form (2006-2019)



# Subsidized Treatment Sites

## Footwear (2006-2019)

The Foot Care Program focuses on building awareness about proper fitting footwear, through one-on-one teachings, educational activities and more. The program also shares knowledge about cultural footwear such as moccasins and kamiks (pictured below). Kamiks are warm and fitted footwear worn in northern arctic communities. Often, traditionally made footwear is made to fit the person's foot. This makes them a great choice for comfort and support.



Image: Footwear tracing done with an Inuit community member wearing their traditional Kamik (winter boot). Source: IDHC, 2016

**24.2%** of clients said they don't currently have a foot care service provider

**81.0%** of clients said they would not be able to access footwear without IDHC assistance

Nearly every client (**98.9%**) indicated that new specialty shoes would help to improve their lifestyle. Here are some of the reasons they gave:

With new specialty shoes I can . . .

- . . . Walk longer distances
- . . . Walk and stand with less pain
- . . . Increase my level of physical activity
- . . . Enjoy walking outdoors without pain

Through the IDHC Foot Care Program:

**185** clients received orthopaedic shoes

**110** clients received orthotics

**380** clients received specialty shoes

Before . . .



Image: A client's shoes before receiving subsidized footwear, Source: IDHC, 2020

After . . .



Image: Brand new specialty shoes (New Balance), Source: IDHC, 2020

Data sources: IDHC Subsidy Invoice Form (2006-2019), IDHC Specialty Shoe Order Form (2011-2019)





## Self-Care and Prevention Resources

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The self-care and prevention resource kits are often offered through the outreach and foot care events and Ongoing Clinics which are held in partnership with host organizations in Indigenous communities across Ontario. Prior to events, outreach or other programs, IDHC staff or partner organizations can submit requests for various resources, based on the clients' foot care needs. Requests can also be submit online.

The full resource kit was created to increase the capacity of Indigenous communities to practice regular self-care by providing the necessary resources and education. The kit contains the tools and educational materials needed to perform daily foot inspections and hygiene practices (kit contents listed on the following page).





# Self-Care and Prevention Resources

## Types of Resources Available

### Each **full kit** contains:

- a self-inspection mirror
- diabetic socks
- cedarwood foot cream
- an IDHC foot care video (DVD or USB)
- diabetes/foot care education pamphlets
- a self-inspection checklist with dry erase marker
- mild, unscented soap
- a foot file
- a nail file
- a shoehorn
- a long-handled bristle brush
- a reminder magnet and pen
- an inspirational Grandfather Teachings stone
- a mini first aid kit



Image: Displaying and handing out resources at a foot care event in Northern Ontario, Source: IDHC, 2015

### Additional Resources Available:

In addition to the full resource kits, due to their popularity, individual items that come in the kit were also offered and ordered as stand-alone items (e.g. additional diabetic socks, foot creams, foot care videos, checklist etc.). 'Replenishing resource kits' are also available, which contain: foot cream, a foot file, a nail brush, a mini first aid kit and a pen, which can be provided as a refill to clients who have already received the full kit.

Bingo and Jeopardy packages were available to partners by request, between 2012 and 2019. They included the materials needed to play fun and educational games which share information about nutrition, foot care and healthy living. These games are currently not available for order as they are being revised. Lastly, IDHC offers a package called 'Take Your Socks Off: Healing Together,' which includes a poster, pamphlet and story based on the experiences of foot care advocate John Munroe (see page 40).



Image: Nutrition Bingo and other resource kit items at outreach event in Northern Region, Source: IDHC, 2018

“It is important to have the necessary tool[s] to care for your feet. I'm very grateful to have received the Foot Care Kit!”  
– IDHC Resource Evaluation Form

Data source: IDHC Foot Care Program Resource Request (2009-2019)



## Self-Care and Prevention Resources

### Requests by Resource Type (2009-2019)

In total, IDHC filled 520 requests for various foot care resources between 2009 and 2019. The following table shows the number of requests fulfilled for each type of resource, as well as the average number of items provided per request, followed by the total ever provided. Some items (e.g. Foot Care Bingo) were introduced in 2012 and therefore have lower numbers.

Overall, IDHC has distributed tens of thousands of self-care and prevention resources. The full resource kit was the most commonly provided and requested resource, which includes many different items that are integral to self-care routines.

Foot Care Resource	Total Number of Requests	Average Number Provided Per Request (Approximate)	Total Number of Items Provided Since 2009
Full resource kit	306	27	8,301
Replenishing kit	117	24	2,756
'Take Your Socks Off: Healing Together' package	62	19	1,178
Foot care jeopardy package (2012-2019)	30	3	79
Foot care bingo package (2012-2019)	40	7	263
Service directories (contacts for service providers)	66	13	882
<b>Resources offered/ordered in addition to those included in the full resource kit:</b>			
Foot care video (DVD)	76	17	1,311
Cedarwood foot cream**	176	25	4,385
Diabetic socks	170	at least 20*	at least 3,383*
Foot care/diabetes education handout (2012-2019)	218	27	5,851
'Healthy Feet' checklist (2012-2019)	71	1	71
IDHC Pamphlets (organizational information)	128	35	4,533

\*This is an underestimate of the actual number provided, as the exact number couldn't be captured in the results.

\*\*Lotion was distributed instead of cream in IDHC's earlier years (before around 2010)

\*\*\*Some large bulk orders which surpassed the budgetary allowance of IDHC were offered on a per cost basis for Indigenous Organizations

Data source: IDHC Foot Care Program Resource Request (2009-2019), IDHC Foot Care Outreach and Event Summary (2013-2019)



# Self-Care and Prevention Resources

## Reasons for Requests (2009-2019)

The largest proportion of requests was made to distribute resources through Ongoing Foot Care Clinics. By distributing resources through Ongoing Clinics which are held regularly in partnership with host organizations, communities are able to maintain a steady supply of foot care tools.

As shown below, IDHC supports not only its partnered engagements, but also agencies and organizations that run their own programs (e.g. special diabetes foot care events). The support offered by IDHC helps Indigenous organizations to build the capacity and sustainability of their own foot care programming. With support from IDHC, people attending these events and programs were able to receive all the tools necessary to begin or continue their journey with self-care and prevention. Practising proper self-care outside of clinical settings has been shown to help to reduce the risk of developing severe foot conditions that can lead to limb loss (13).

### Reasons for resource requests:\*

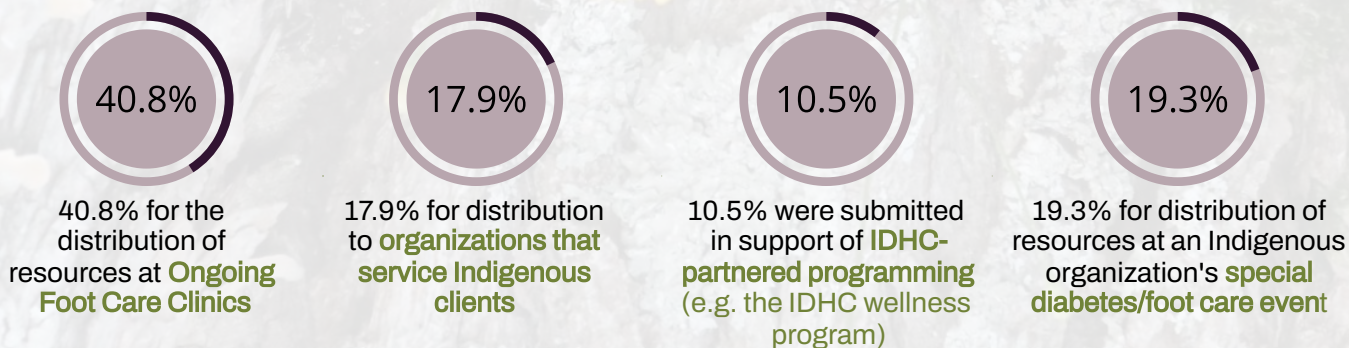


Image: Self-care resource teaching and dissemination at a remote community event, Source: IDHC, 2019

"[The resource kit] helps to give clients independence in their own foot care."  
– IDHC Resource Evaluation Form

\*Percentages do not add up to 100, as the categories are sometimes overlapping (e.g. some people indicated client request *as well as* IDHC partnership as the reason).

Data source: IDHC Foot Care Program Resource Request (2009-2019)

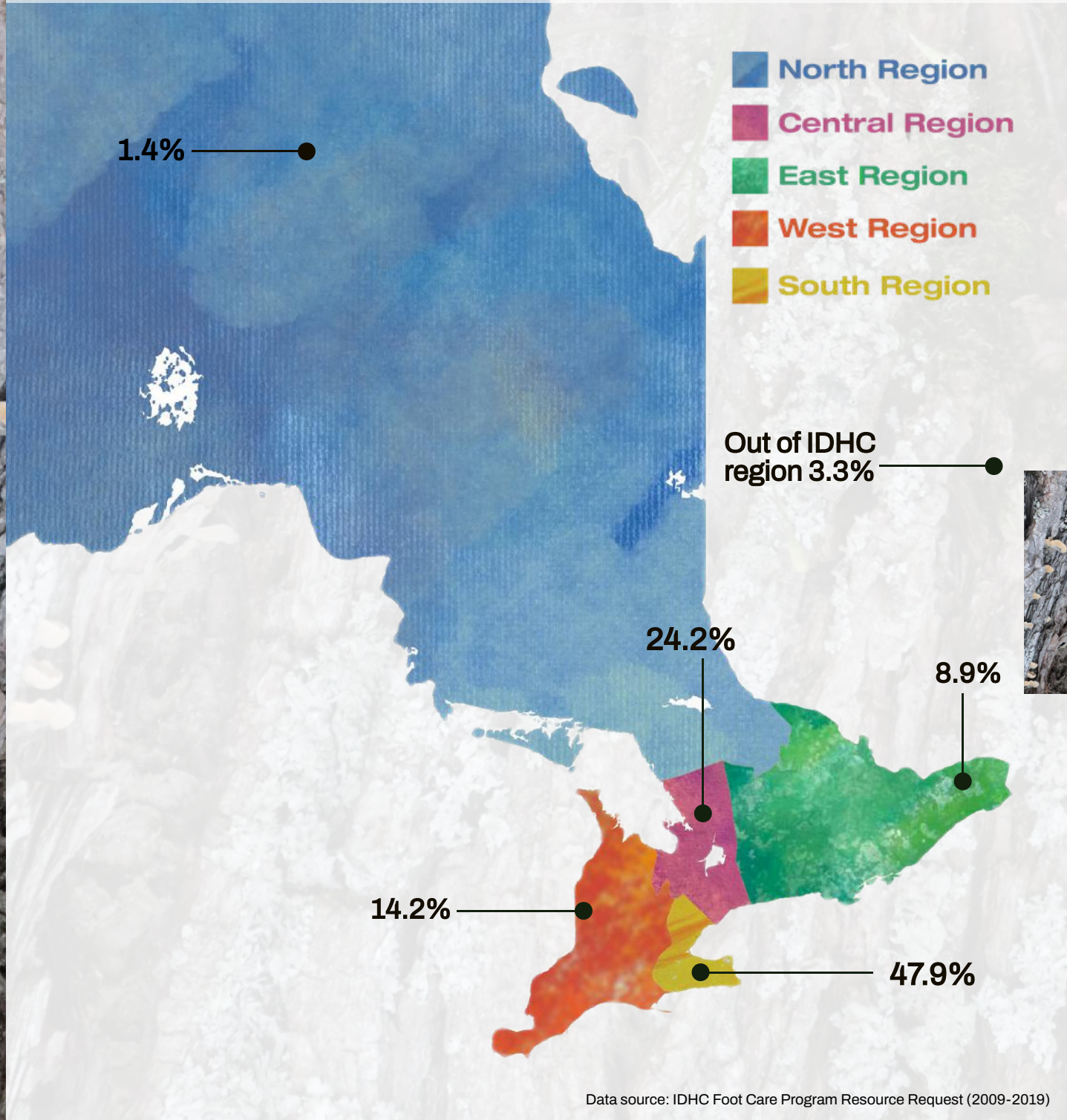


## Self-Care and Prevention Resources Regions of Ontario (2009-2019)

Since 2009, the largest proportion of requests has come from the Southern Region.

### Why?

IDHC was originally based in Southern Ontario, and its head office is located in the South Region. Many Ongoing Clinics (five) are also operating within this region, and many resources are regularly requested to be provided to clients at these Ongoing Clinics. For these reasons, a high proportion of resource requests comes from the South Region.





# Self-Care and Prevention Resources

## Evaluation of Resources Distributed During Outreach and Events (2013-2019)

3,494 people evaluated the self-care resources they received through IDHC Foot Care Outreach and Events. Of these people, 89% reported the highest level of satisfaction with the self-care and prevention resources they received.

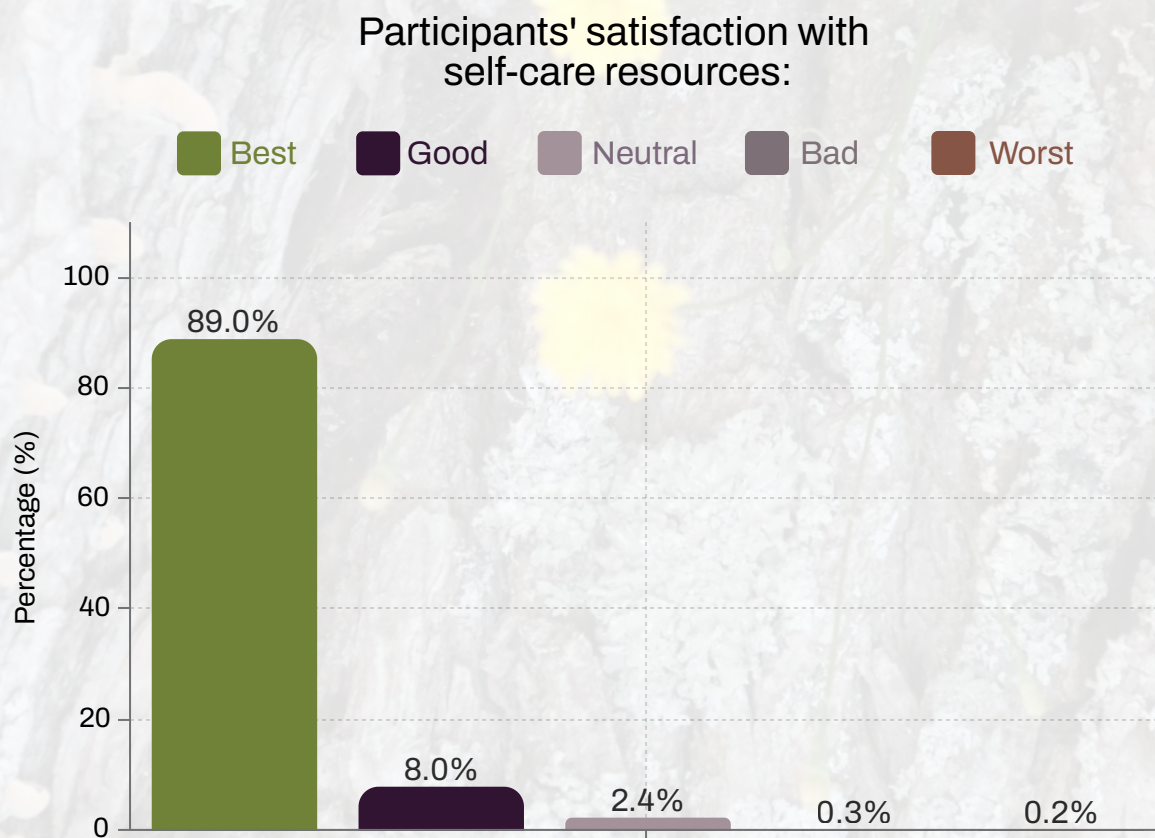


Image: One-on-one self-care resource teaching and dissemination during community outreach, Source: IDHC, 2019

“[I] was able to utilize all the things in the package, and [I] still use the mirror to check my feet regularly.”  
– IDHC Resource Evaluation Form

\*N/A responses were omitted from these results  
Data source: IDHC Foot Care Event Evaluations (2013-2019)



# Self-Care and Prevention Resources

## Feedback and Resource Evaluation

Separate from the evaluations received for resources distributed during Outreach and Events, IDHC has also received a number of evaluations through its online resource order form. In total, between 2011 and 2019, 26 clients who received self-care and prevention resources filled out an evaluation form, answering questions about how helpful the resources are. Of these 26 people, nearly half were considered at risk of developing diabetes due to their family history with the illness, and nearly 40% reported being diagnosed with diabetes themselves. Over 60% of respondents self-identified as Indigenous (this small sample included people identifying as Status or Non-Status First Nations, as well as Inuit).

All 26 respondents indicated that the resource kit was helpful for their foot care. Their top five most helpful items are listed below, alongside quotations pulled from the evaluation forms. The positive feedback continually received from clients demonstrates the profound impact of these resources.

### Top Five Most Helpful Resources (As Indicated by Respondents)

1. Diabetic socks (35%)
2. Foot file (19.2%)
3. Soap (19.2%)
4. First aid kit (11.5%)
5. Inspirational stone (11.5%)

"The [mirror] is great to check the bottom of the feet and the cream really helps with cracking heels. The socks are the best ones I have tried."  
– IDHC Resource Evaluation Form



Image: Nutrition Bingo winner at foot care event in the Northern Region of Ontario, Source: IDHC, 2018



Image: Foot care resource display at an event in Northern Ontario, Source: IDHC, 2018

"The tools provided assist me with daily self-care."  
– IDHC Resource Evaluation Form

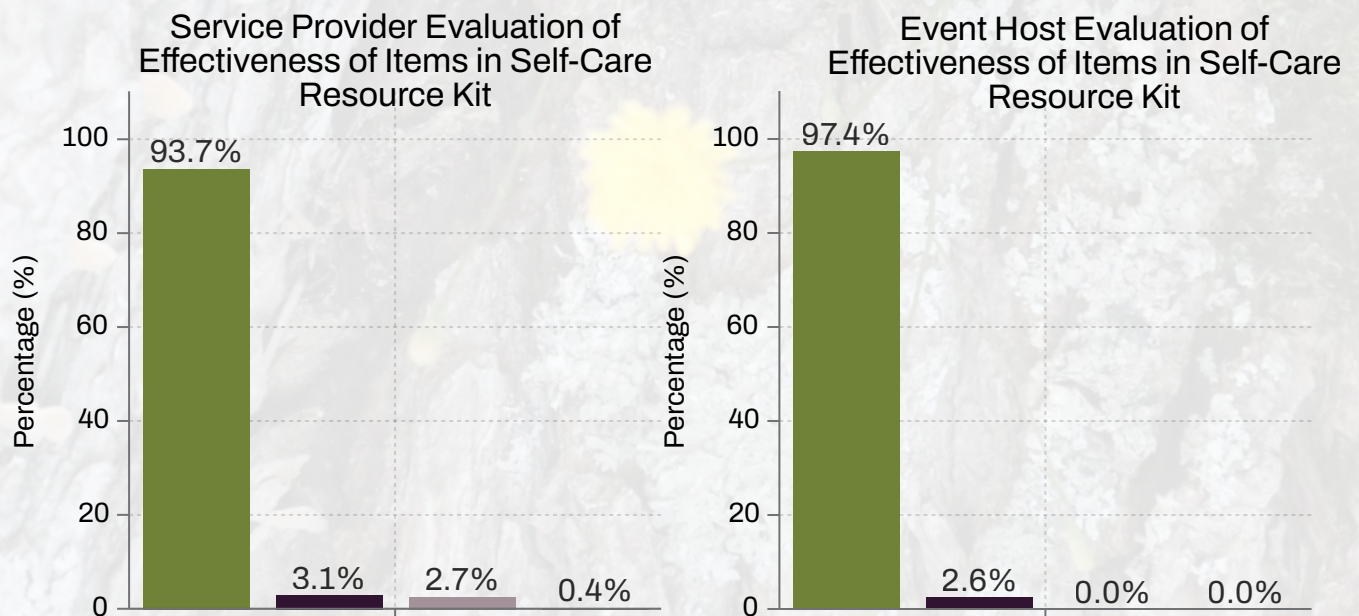


# Self-Care and Prevention Resources

## Service Provider and Event Host Evaluations (2013-2019)

A total of 445 service providers and 78 event hosts completed an evaluation of the IDHC program and the resource kits distributed. Well over 90% of both service providers and event hosts reported that the items in the self-care and prevention resource kits were very effective. This shows the high level of satisfaction service providers and event hosts have with the resources provided by IDHC.

■ Very Effective    
 ■ Fairly Effective    
 ■ No Response    
 ■ Not at All Effective



Data sources: IDHC Service Provider Event Evaluation (2013-2019), IDHC Event Host Evaluation (2013-2019)







## Looking Ahead: Next Steps

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This report has highlighted the progress and accomplishments of IDHC's Foot Care Program prior to the COVID-19 pandemic. Since the onset of COVID-19, IDHC has undergone rapid changes in program structure. The organization has been shifting towards an increasingly virtual service delivery model to limit physical travel across Ontario and within Indigenous communities, thereby minimizing the risk of COVID-19 transmission. This program restructuring has helped to keep IDHC staff and clients safe while continuing to deliver virtual foot care services and education across Ontario.

In re-establishing the program, IDHC has continued to strengthen its commitment to capacity-building within Indigenous communities. Throughout the pandemic, the foot care resources IDHC offers have become increasingly popular. In response, IDHC has strengthened the Self-care and Prevention Resource component of its Foot Care Program, designating a centre located at its head office for shipping and receiving and implementing stronger policies around shipping and procurement in anticipation of increased orders.

Further, Ongoing Clinics and Subsidized Treatment have continued to operate within communities throughout the pandemic, as IDHC has prioritized the provision of essential services. One-time events are currently running on a virtual platform. Looking forward, IDHC plans to increase the number and availability of Ongoing Clinics and Subsidized Treatment locations.

IDHC has also continued to provide foot care training and cultural safety training through the pandemic using a virtual learning platform (see page 62). To date, hundreds of frontline workers and service providers have graduated from foot care and cultural safety training. IDHC aims to continue to strengthen its partnerships with Indigenous communities across Ontario and further develop its role in assisting communities in capacity-building, including the continued support with trainings for frontline workers.





# A Glimpse of IDHC's Evolving Foot Care Program

## Virtual Level 1 Foot Care Training

### Testimony from Stephanie King (2022 Virtual Level 1 Foot Care Training Graduate)

Not too long ago I took the Level 1 foot care course with IDHC, I managed to complete the 10 foot care screenings and have used the kits. I have a contract right now working [in a First Nations community] doing foot care, where I did my foot care screenings. I will be getting called back and wish to bring in more kits to the community members that come to the clinic. Right now, I am the only foot care nurse, and these kits were well appreciated/received by the members who attended. I am requesting to get some more kits if available and am very thankful for the opportunity to have been in the Level 1 foot care course. I feel so much more professional and confident and feel like my clients really listen and must use this tool kit to take proper care of their feet when they leave the clinic. Not to mention it brings me pride to get to work in my home community with the knowledge and skills to prevent further amputations. This has become my new focus in my nursing career to bring forth what I have learned to my community.

—Stephanie King

The screenshot displays a Thinkific online learning interface. On the left is a course menu with the following items: Module 1 - Diabetes 101 (0/3), Module 2 - Traditional Foods (0/6), Module 3 - Plant Medicines (0/3), Module 4 - Basic Foot Care (0/4), Module 4 - Independent Work (TEXT), Recording - Module 4: Basic Foot Care (VIDEO - 109 MIN), Slides - Basic Foot Care (PDF), Reflection - Basic Foot Care (SURVEY - 4 QUESTIONS), Module 5 - Foot Assessment (0/8), Module 6 - Preventive Foot Care Model - Building a Workshop for Self-Care Teachings (0/3), Assessments (0/3), and Resources (0/10). The main content area shows a slide titled 'IDHC Indigenous Diabetes Health Circle Pedal Power' with the sub-heading 'Dorsalis Pedis - on the top of the foot' and an image of a healthcare professional examining a patient's foot. On the right side of the screen, a vertical stack of five video thumbnails shows participants: Jessica Pace, Lindsey Cosh, Kathleen LaForme, Camille, and Georgia Baum.



# Looking Ahead: Next Steps

## Conclusions

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This program evaluation has aimed to bridge the gap between the grassroots efforts of IDHC staff and evaluative research processes. The results of this evaluation will help to shape programming within the IDHC Foot Care Program and demonstrate best practices for providing diabetes foot care services to Indigenous communities in Ontario. Further, this collaborative program evaluation process has helped to build upon IDHC's own program evaluation capacity. IDHC has already begun to refine and revise its system of data collection in preparation for future program evaluations.

This report has highlighted some of the impressive accomplishments of the IDHC Foot Care Program, demonstrating the program's holistic impact on the health and wellness of Indigenous people across Ontario. From an Indigenous perspective, 'holistic health' encompasses interconnected physical, mental, emotional and spiritual elements of well-being for individuals, families, communities and cultures (19,20). Overall, the IDHC Foot Care Program has demonstrated a substantial impact on each aspect of holistic health.

The Foot Care Program has improved the physical health of clients by helping to provide thousands of foot care treatments to Indigenous people who have a high risk of diabetes-related complications, and preventing hundreds of ulcers and amputations. Further, the program has increased mental wellness by sharing foot care knowledge during events and one-on-one teachings with tens of thousands of clients, helping them to understand their foot care needs and giving them the tools to practise self-care.

Positive and encouraging stories and comments provided by clients, staff, service providers and many others illustrate the manner in which the program has helped clients to achieve and maintain emotional balance. Many clients have emphasized how IDHC foot care events promoted happiness and relaxation. Lastly, while health centres are often places of discomfort for many people, the meaningful relationships fostered through the Foot Care Program between clients and service providers have contributed to spiritual healing. The program's centring on traditional Indigenous knowledge and healing practices has also contributed to maintaining spiritual balance and cultural connection.

The indirect impact of IDHC's accomplishments on Indigenous communities across Ontario is immeasurable. This report has provided a glimpse of the program's successes by presenting some quantifiable measures of success, stories from clients, staff and service providers and photos that capture important moments from the program's 16 years in existence. Looking forward, it is anticipated that the Foot Care Program's next steps will continue to build capacity and improve the health and wellness of Indigenous communities throughout Ontario.



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# Technical Appendix

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## Level 1 Foot Care Training

### **How did we measure the knowledge level of participants before and after the Level 1 Foot Care Training (pg. 21)?**

Before and after the training, participants were asked to rate their level of knowledge about diabetes and foot care on a scale ranging from minimal to extensive. We analyzed the before and after responses by looking at the median and mode (most frequently occurring responses) for each topic (e.g., type 2 diabetes prevention). To see if there was a statistically significant change ( $p < 0.05$ ) in knowledge level before and after, we used the Wilcoxon Signed Ranks Test.

## Foot Care Outreach and Events

### **What do the word clouds mean (pg. 23, 30 & 31)?**

To analyze the free-text responses of clients or participants, we used NVivo qualitative analysis software to create word clouds. With NVivo, we can determine which key words were used most frequently in responses. The software then allows us to visualize the word frequency reports in the form of word clouds, as pictured in the Outreach and Events section. The bigger words in the word clouds were mentioned with greater frequency than the smaller words.

### **How do we know that there is a significant age difference between clients who have diabetes and those who do not have diabetes (pg. 25)?**

We performed a one-way ANOVA test to determine if there was a significant difference ( $p < 0.05$ ) between the ages of people with diabetes and people without diabetes. Here, diabetes status was self-reported by the registrant, and the 'no diabetes' category includes people who do not report any diagnosis of diabetes, including people who have pre-diabetes or are at risk.

### **How did we calculate who is more likely to report high levels of foot care knowledge (pg. 28)?**

People registering were asked about their level of knowledge about foot care, ranging from no knowledge to a lot of knowledge. We used bivariate and multivariate logistic regression to understand the impact of gender, past event attendance and diabetes status on self-reported foot care knowledge. Knowledge levels were categorized into a binary variable including the categories 'little to no knowledge' and 'a lot of knowledge.' We used the significance level of 0.05 to determine whether the associations between the independent variables (gender, past event attendance and diabetes status) and the dependent variable (self-reported foot care knowledge) were statistically significant. We also verified that there were no significant interactions ( $p < 0.05$ ) between any of these variables.

## Foot Care Service Coverage

### **How do we know whether men and women are more likely to experience certain foot conditions (pg. 35)?**

We looked at the types of foot concerns reported by clients on their application form and observed some gender differences. We looked at the bivariate association between gender and each of these foot conditions, using logistic regression to determine whether the association was statistically significant at  $p < 0.05$ .



## Technical Appendix (Cont'd)

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### Ongoing Foot Care Clinics

#### **How do we know that men and women visited the clinic a similar number of times (pg. 41)?**

We compared the mean number of visits for those who identified as men and women, and noticed they were relatively similar. We then ran a one-way ANOVA test to determine if there was any statistically significant difference ( $p < 0.05$ ) between the number of visits in both groups.

#### **How did we follow each client's progress through multiple visits?**

In the Ongoing Clinic and Subsidized Treatment Sites sections, we looked at clients' health status over time (at first and last visits). For clients who received treatment at Subsidized Treatment Sites or Ongoing Clinics, an application was initially filled out, either by themselves, or with the help of a client representative or service provider. In this process, clients consented to the use of their personal health information for evaluation purposes, provided that no identifiable information will be released.

Thus, in the Ongoing Clinic and Subsidized Treatment Sites sections, we used identifiers to connect different pieces of information for the same individual within a dataset. However, in the initial application form, identifiers contained some misspellings as a result of human error. A lack of accurate and consistent identifiers within datasets limited our ability to follow each client's progress through multiple visits. While not a perfect solution, thorough data cleaning was performed to minimize the error introduced by misspellings in order to connect as many client files as possible to better follow individuals throughout their health-care journeys. As such, the results pertaining to a client's first or last visit should therefore be interpreted with a degree of caution.

#### **How did we look at each client's progress over time (pg. 50 & 45)?**

In the Ongoing Clinic and Subsidized Treatment Site datasets, service providers recorded a 'Risk Rating' for each client at the time of their appointment. Risk rating ranges from 0 to 6, and is a measure of the client's risk for diabetic foot complications. The legend for risk rating is shown below. In the report, we used the definition of a client's rating, rather than the number, for clarity.

- 0 – No loss of protective sensation, yet has diabetes
- 1 – Loss of protective sensation, no self-care
- 2 – Peripheral sensory neuropathy, predisposing foot deformity
- 3 – History of pathology, previous amputation/ulcer.
- 4 – Active neuropathic ulceration, charcot arthropathy.
- 5 – Severe active foot infection, of foot ulcer, foot deformity
- 6 – Severe, acute peripheral arterial disease.

#### **How did we manage missing date values in ongoing clinic client data?**

In the Ongoing Foot Care Clinic section, we looked at clinic data representing all the clients who attended the ongoing foot care clinic between 2010 and 2019. 51 people were excluded from the analysis due to missing data. It should be noted that we did not see any significant differences (at  $p < 0.05$ ) between the characteristics of the main sample and the group of people excluded from the analysis. Gender, diabetes status and the occurrence of neuropathy and peripheral vascular disease were not significantly different.



## Technical Appendix Cont'd

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### Subsidized Treatment Sites

#### **How do we know that clients visited subsidized sites in the Central Region of Ontario most frequently (pg. 49)?**

We saw that the average number of times clients returned to a subsidized treatment site differed regionally. We used linear regression to look at the relationship between the number of times clients visit the site, and the region where the sites are. We used the significance level of 0.05 to determine whether the association between the independent variable (region) and the dependent variable (number of visits) was statistically significant.

### Self-care and Prevention Resources

#### **How did we calculate the number of requests by resource type (pg. 55)?**

The numbers seen in the table on page 55 come from two different datasets. One dataset represents requests for resources for various kinds of programming hosted either by IDHC and partners or through independent community programs. The other dataset tracks the number of resources offered during IDHC Foot Care events and outreach. We have presented the combined numbers from both these datasets to offer a glimpse at the number of overall resources that have been distributed with the support of IDHC.

The numbers presented in the table on page 55 are based on some underlying assumptions. First, where an item was requested but no quantity was specified, the quantity was assumed to be 1. Where the quantity was specified, but incorrectly formatted, the quantity was also assumed to be 1. These assumptions were often applied to the results for diabetic sock distribution, as requests for socks were often submitted as free-text rather than numeric responses. The average and total presented for standalone diabetic socks is therefore an underestimate of the actual number of socks provided by IDHC.

#### **How did we identify the top five most helpful resources (pg. 59)?**

Clients who received foot care resources were asked to identify which items they found to be most helpful. They were able to select more than one item. Out of all items, the greatest proportion of people indicated that the diabetic socks they were given were the most helpful resource. The next most helpful items were then listed in consecutive order. Due to the small sample size, this may not be representative of how clients feel about the resources. However, this list can provide a snapshot of the results from the collected evaluation data.



