

Saving Lower-Limbs: Introducing a new Ontario Lower-Limb Preservation Strategy

December 2, 2021

Housekeeping Notes

Please note, this webinar is being recorded for use as an informational reference. The webinar recording will be made available on the CorHealth website at <https://www.corhealthontario.ca/llp>

- Please keep yourself on mute until the end of the presentation and then feel welcome to raise your hand, come off mute and on video as comfortable to ask your question
- You are welcome to type your questions and/or comments in the chat throughout the presentation

CorHealth Ontario

- In 2017, Cardiac Care Network of Ontario (CCN) and the Ontario Stroke Network (OSN) merged to form **CorHealth Ontario with a mandate spanning cardiac, stroke and vascular care in the province**
- CorHealth Ontario is an advisor to the Ministry of Health (MOH) by providing strategic leadership, guidance and data/information to improve cardiac, stroke and vascular care for all Ontarians
- CorHealth Ontario transferred into Ontario Health on December 1, 2021 as part of the province's Health System Transformation

Objectives

1. To provide an overview of the **current state of lower-limb amputation in Ontario** and the **Lower-Limb Preservation Strategy (LLPS)** and **resources**
2. To share information about the **demonstration phase** of the strategy **and opportunities to participate**
3. To invite you to be a **champion for lower-limb preservation**

Robert's Story



Lower-Limb Amputation in Ontario: Current State

Lower-Limb Amputation Rates in Ontario and Other Jurisdictions

Major and minor lower-limb amputation rates by LHIN among patients with diabetes or PAD in Ontario. Rates per 100,000 person-quarters.¹

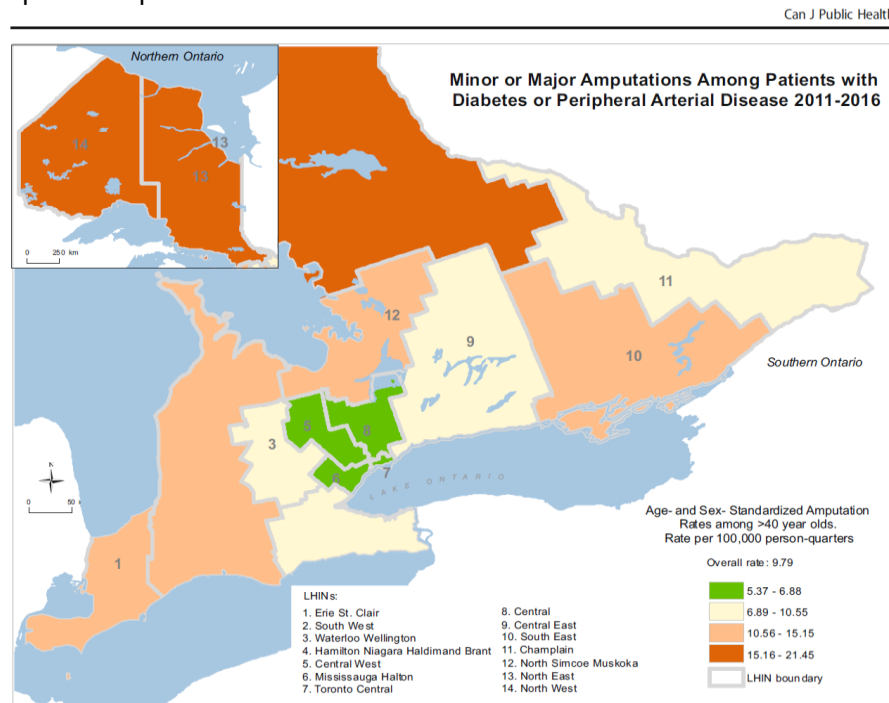
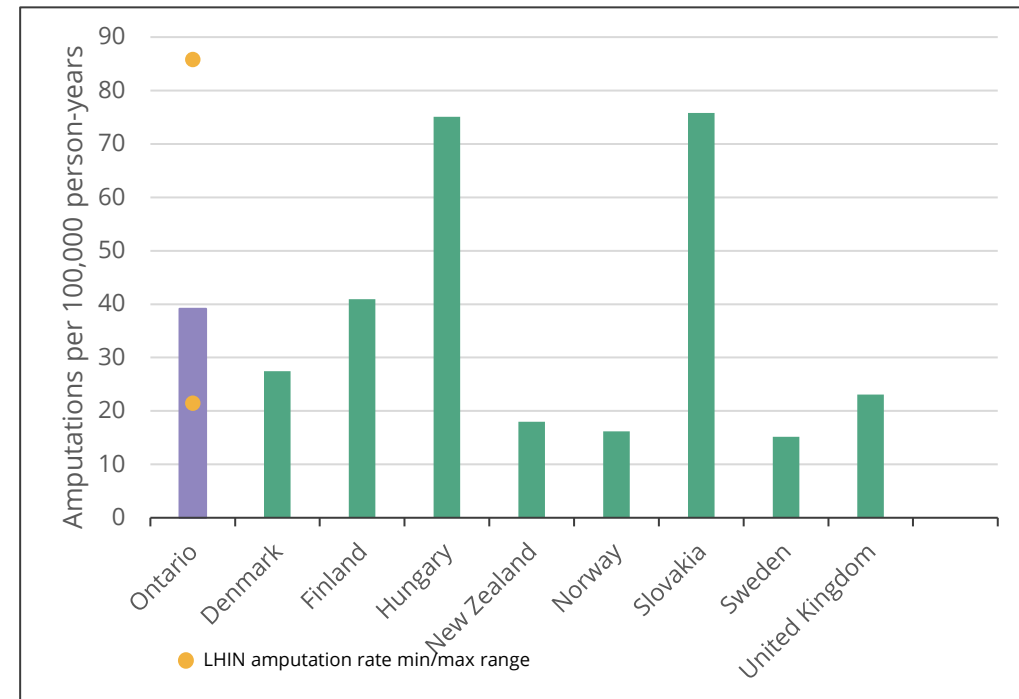


Fig. 1 Age- and sex-standardized rates of minor or major amputations for diabetes or peripheral arterial disease across Ontario

Major and minor lower-limb amputation rates among patients with diabetes or PAD in Ontario and other jurisdictions with publicly funded health care systems.^{1,2}



Ontario data for years 2011-2016, other jurisdictions data for 2010-2014.

Action is needed to prevent amputations in Ontario



1.53 million people have **diabetes**³



15-20% of **people over 70 years** are estimated to have **peripheral vascular disease**^{4,5}



> **300,000** people defined as **high amputation risk** in last 5 years
1,200 major amputations annually⁶
\$70,000 per amputation
\$140 million in direct **amputation** health care costs annually⁷
1 major amputation every 7 hours



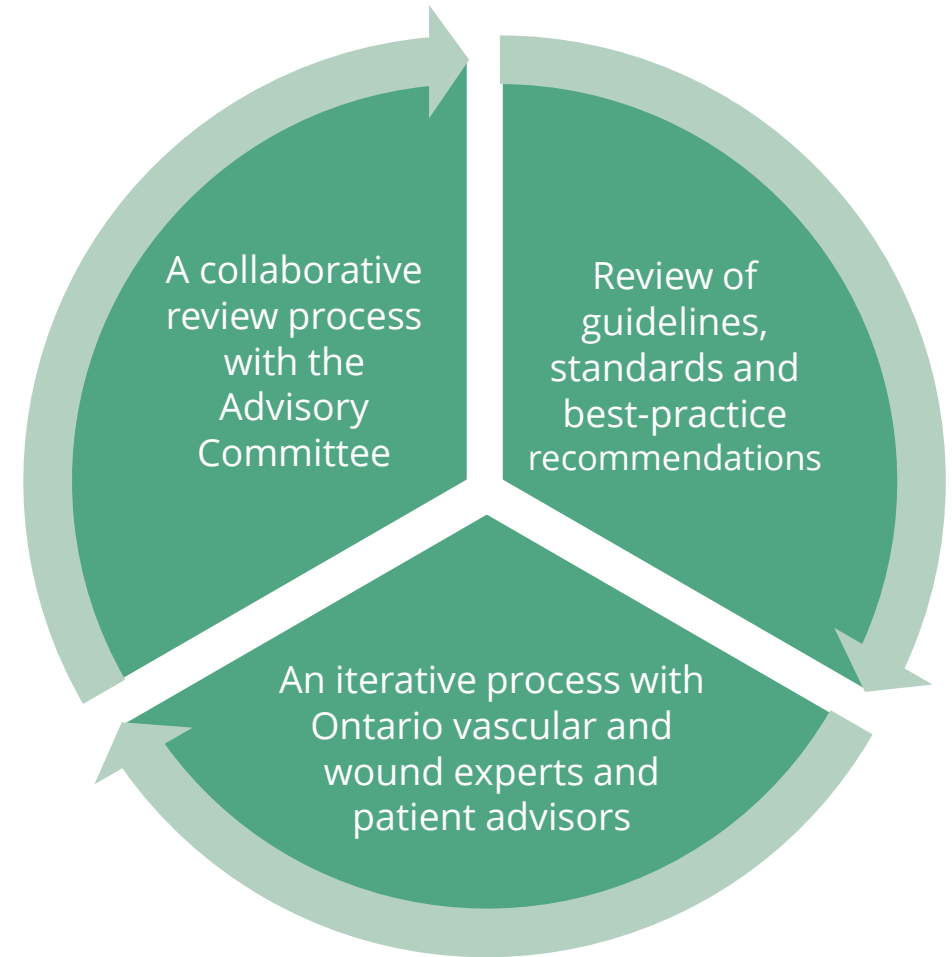
Effective initiatives such as **regular screening**, a **collaborative interprofessional team approach** and **culturally-safe patient education** can **prevent up to 85% of amputations** and have been found to **cost 10 to 40 times less**.^{1,8-12}

A reduction of even 20% would result in 240 lower-limbs saved and a \$16.8 million reduction in amputation costs.

The Lower-Limb Preservation Strategy

The Lower-Limb Preservation Strategy (LLPS)

- CorHealth has partnered with an Advisory Committee to develop a **Lower-Limb Preservation Strategy** to help steward a more coordinated, integrated and patient-centred approach to lower-limb preservation care in Ontario



LLPS High-level Goals, Objectives and Deliverables

Goals

1. To reduce avoidable, non-traumatic major lower-limb amputations in Ontario
2. To improve equitable access to high-quality best-practice early screening, cardiovascular risk factor management and integrated lower-limb wound care

Objectives

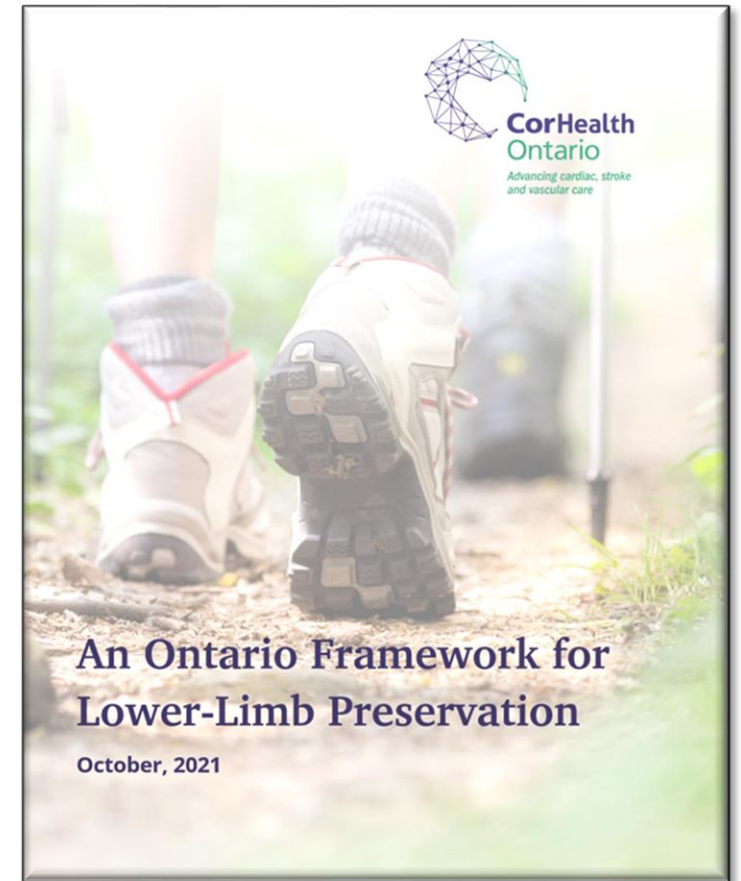
1. To coordinate and facilitate knowledge sharing and adoption of interprofessional integrated lower-limb preservation evidence-based best-practice
2. To support quality improvement through measurement and reporting
3. To advise the Ministry of Health on funding policy

Deliverables

1. An Ontario Framework
 - Patient care pathways
 - Minimum care requirements
 - Model of care
2. Change Package of ideas, tools and resources
3. Measurement and Reporting Recommendations
4. Funding Policy Recommendations

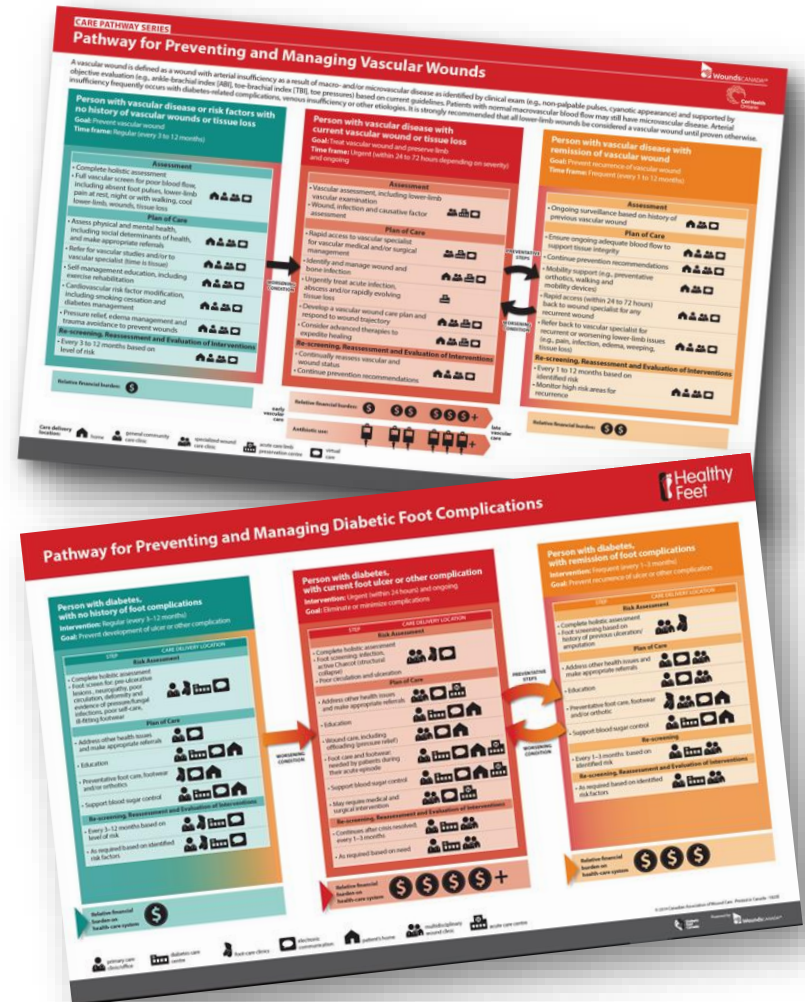
Ontario Framework for Lower-Limb Preservation

- The **Framework** is an **evidence-informed best-practice roadmap** that includes:
 - **System-level care pathways** that highlight the key care activities for the prevention and management of lower-limb wounds
 - **Minimum care requirements** to standardize lower-limb preservation care
 - **Key considerations for a model of care** to guide the development and delivery of integrated local/regional lower-limb preservation services



System-level Care Pathways

- The **Pathways** highlight **key care activities** and emphasize the importance of:
 - ✓ Regular preventative screening
 - ✓ Early identification
 - ✓ Timely assessment
 - ✓ Best-practice treatment
 - ✓ Ongoing surveillance
 - ✓ Culturally-appropriate patient self-management education
 - ✓ Cardiovascular risk factor management
 - ✓ Wound prevention strategies



Minimum Care Requirements

The evidence-informed best-practice minimum care requirements **standardize the prevention and management of lower-limb wounds** in individuals with vascular disease and/or vascular risk factors including diabetes

- Aligned with the care pathways
 - Lower-limb wound prevention
 - Active wound management and limb preservation
 - Ongoing surveillance
- Describes:
 - Assessment activities
 - Frequency of activities/ time-to-treat targets
 - Components of interprofessional care

Lower-Limb Preservation Care Components				
Care Components	Primary	Specialized	Acute	
Shared-care approach with seamless collaboration and communication across the regional continuum of care	✓	✓	✓	
Provision of home or community-based vascular, foot, lower-limb and/or wound care assessment, treatment and surveillance	✓	✓	✓	

Lower-Limb Preservation Care Components				
Care Components	Primary	Specialized	Acute	
Processes and partnerships in place for timely referral for vascular diagnostic testing/imaging	✓			
Processes and partnerships in place for timely referral to specialized care for vascular, foot, lower-limb and/or wound assessment and treatment	✓	✓		
Provision of home, community or hospital-based lower-limb wound care		✓	✓	
Specialized lower-limb wound care clinician/team with expertise and demonstrated competence in the comprehensive assessment and management of lower-limb wounds including: <ul style="list-style-type: none"> • cleansing, debridement and infection, moisture and pain management • development of a wound care plan and responding to wound trajectory • supportive mobility devices • continued wound prevention strategies 				
Appropriate inventory of consumable lower-limb wound assessment equipment and treatment supplies that are immediately available				✓
Provision of specialized acute lower-limb preservation medical and/or surgical care within 72 hours depending on severity				✓
Highly specialized lower-limb preservation interprofessional care team with expertise and demonstrated competence in the assessment and management of patients with vascular disease and/or a lower-limb wound including: <ul style="list-style-type: none"> • vascular diagnostic testing/imaging • medical and/or surgical management including wound treatment, revascularization, soft tissue reconstruction and foot and ankle surgery • advanced wound therapies 				✓

Lower-Limb Preservation Care Components				
Care Components	Primary	Specialized	Acute	
Co-location in the same physical space if possible				
Hospital with a designated Level 1, 2 or 3 vascular program				✓
Appropriate inventory of consumable lower-limb preservation medical and surgical treatment supplies that are immediately available				✓
Hyperbaric oxygen chamber where possible				✓
On-site urgent/emergent diagnostic testing/imaging (e.g., Computed Tomography Angiography (CTA), Magnetic Resonance Angiography (MRA) and angiography) and results				✓
On-site urgent/emergent specialist/surgeon expertise (e.g., vascular; infectious disease; orthopedic, foot and ankle, plastic) to support lower-limb preservation				✓

Key Considerations for a Model of Care

The **model of care** is meant to offer **practical guidance and key considerations** associated with the organization and integration of lower-limb preservation services

Key Considerations

1. Adopting a patient-centred approach	4. Establishing clear multilateral communication and care navigation
2. Focusing on aligning patient needs and characteristics with the right care setting	5. Adopting a collaborative interprofessional team approach
3. Connecting providers across the continuum through a shared-care approach	6. Exploring virtual care opportunities

Care Delivery Locations



home



general community
care clinic



specialized wound
care clinic



acute care limb
preservation centre



virtual
care

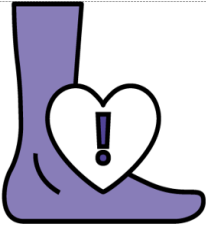

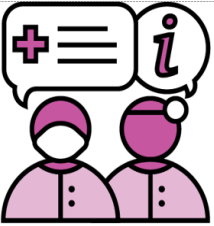


Ontario Framework for Lower-Limb Preservation Change Package



- The **Change Package** accompanies the Ontario Framework for Lower-Limb Preservation and is a **working document**
- Provides **actionable** change **ideas, tools and resources**
- Can be **adopted and/or adapted** based on local/regional needs

Change Package Focus Areas

- The change ideas, tools and resources are grouped into five focus areas:

				
Prioritizing Lower-Limb Preservation	Improving Care Coordination	Equipping Care Teams	Equipping Patients and Families	Measuring Outcomes

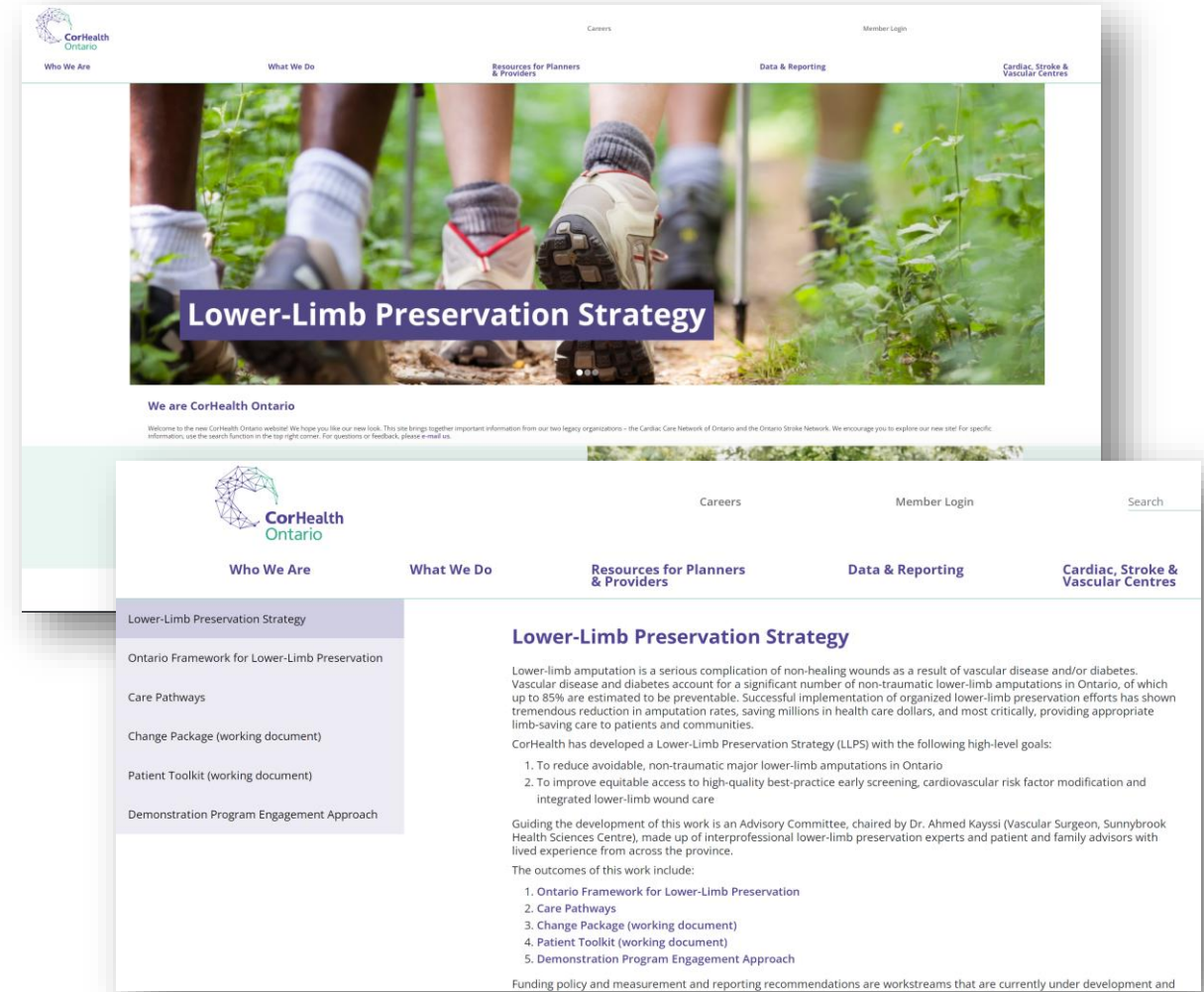


Equipping Care Teams	
Change Ideas	Tools and Resources
Change Concept: Increase lower-limb preservation provider educational opportunities	
Develop a plan and protocols to support continuing education, training and mentorship opportunities to enhance lower-limb preservation care provider knowledge and skills and to maintain competency	Wounds Canada Institute https://www.woundscanada.ca/wci-home Wound, Ostomy and Continence Institute https://wocinstitute.ca/
Support lower-limb preservation care providers in exploring Indigenous perspectives to support the delivery of culturally appropriate and safe care	Indigenous Relationship and Cultural Safety Courses, Cancer Care Ontario https://www.cancercareontario.ca/en/resources-first-nations-inuit-metis/first-nations-inuit-metis-courses Indigenous Canada course, Faculty of Native Studies, University of Alberta https://www.ualberta.ca/admissions-programs/online-courses/indigenous-canada/index.html

For More Information

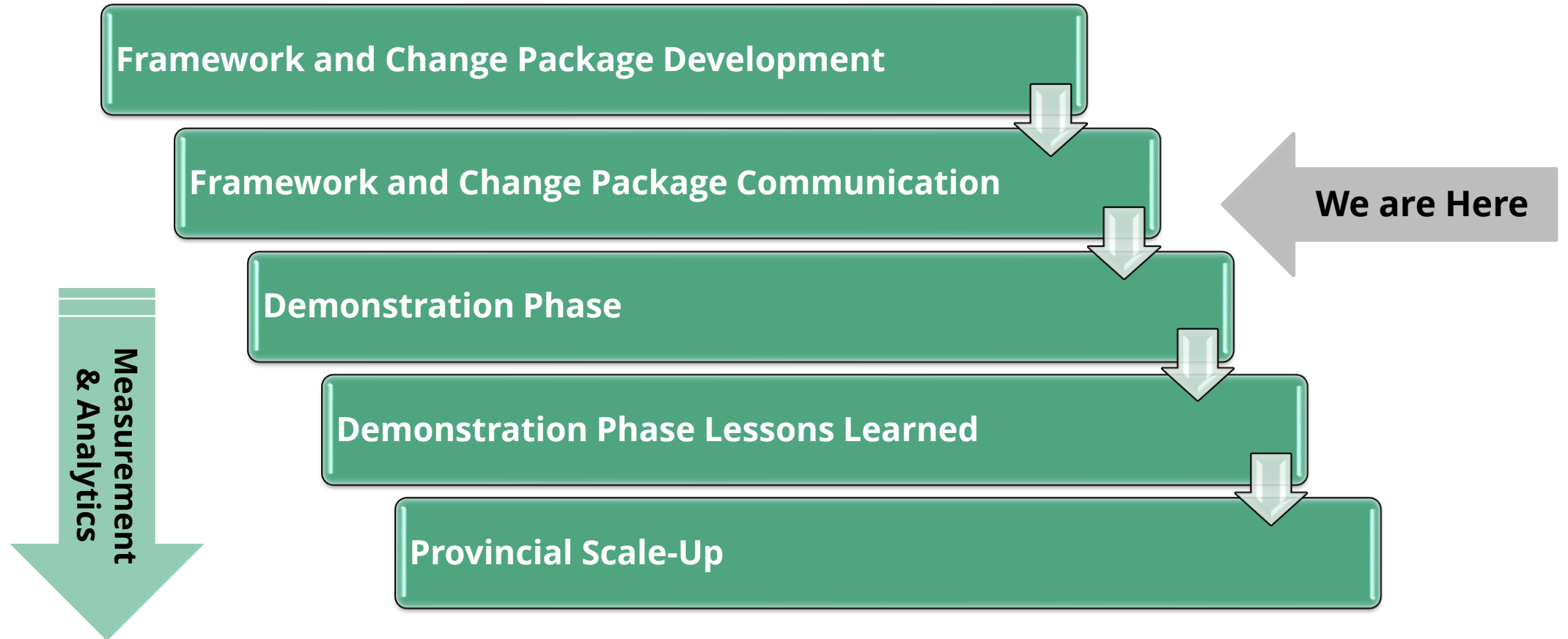
- **Key materials** can be found in the resources section of the **CorHealth website**, including:
 - Framework
 - Care Pathways
 - Change Package
 - Patient Toolkit
 - Demonstration Phase material
- Additional materials will be added as they are developed

<https://www.corhealthontario.ca/llp>



Demonstration Phase

LLPS Phases



Objectives of the Demonstration Phase

1. To **test implementation** of components of the Framework across diverse locations in Ontario
2. To **identify critical success factors** for implementation of local/regional lower-limb preservation services
3. To **identify opportunities** to better align current policy to support best practice

How We Will Achieve the Objectives

- Through the commitment of Demonstration Programs that, in partnership with CorHealth, will:
 - **Identify opportunities** to enhance their local/regional lower-limb preservation services using the Framework and Change Package as guides
 - Prioritize change opportunities and develop, **implement and evaluate change** ideas
 - **Share evaluations and key learnings** with CorHealth and provide input to support **provincial scale-up** of lower-limb preservation programs/services

What is a Demonstration Program?

A demonstration program is a **local/regional, interprofessional group of primary, home, community and specialized** health care **providers** who are **formally committed to collaborate** and implement **changes to improve outcomes** for individuals at-risk for non-traumatic major lower-limb amputation.



Patients & families



Home care



General/family
community
care clinic



Specialized
wound care
clinic



Acute care limb
preservation
centre

What are we asking of Demonstration Programs?

Determine capacity, commitment and readiness

- **Identify local/regional interprofessional lower-limb preservation partners** from across the care continuum
- **Identify patient and family partners** with lived experience
- **Determine interest, capacity, commitment and readiness** to participate as a Demonstration Program to test implementation of components of the Framework

Create action plans

- **Map regional current state patient care journeys**
- **Identify and prioritize gaps and needs**
- **Prioritize opportunities** for change/quality improvement that align with the principles of the Framework
- **Create an initiative proposal for implementation** using the Framework, Change Package and proposal template
- **Develop plans and processes to measure and evaluate change** ideas

Implement action plans

- **Implement action plans**
- **Continue to engage with patient and family partners**
- **Measure** the impact of the changes
- **Maintain ongoing communication** with CorHealth to provide updates on action plan implementation and evaluation and seek support as needed

Support sustainability

- **Participate in a community of practice** to support knowledge sharing between Demonstration Programs
- **Share lessons learned with CorHealth** to support co-development of a plan for provincial implementation of the LLPS
- **Share a vision for program sustainability** beyond the demonstration phase

What is CorHealth's Role?

Support interpretation and application

- **Provide interpretation** (knowledge transfer) of the Framework and Change Package
- **Support demonstration programs** in their current state mapping and identification of regional lower-limb preservation gaps and needs
- **Assist in the identification and prioritization of opportunities for change and the development of action plans** to test implementation of components of the Framework

Support implementation of action plans

- **Support discussions to develop plans and processes to measure and evaluate change** ideas and demonstration program success
- **Maintain ongoing communications** with demonstration programs to review, guide and support action plan implementation and evaluation

Facilitate sustainability through provincial implementation

- **Facilitate dialogue and knowledge sharing** between demonstration programs through a provincial community of practice
- **Lead the co-development of a plan** for further provincial scale-up of the LLPS

Demonstration Phase Anticipated Timelines

November 2021

Fall 2024

**Demonstration
Program
Identification**

Nov 2021-May 2022
(6 months)

Initiation
(6 months)

Implementation
(6 months)

Observation
(12 months)

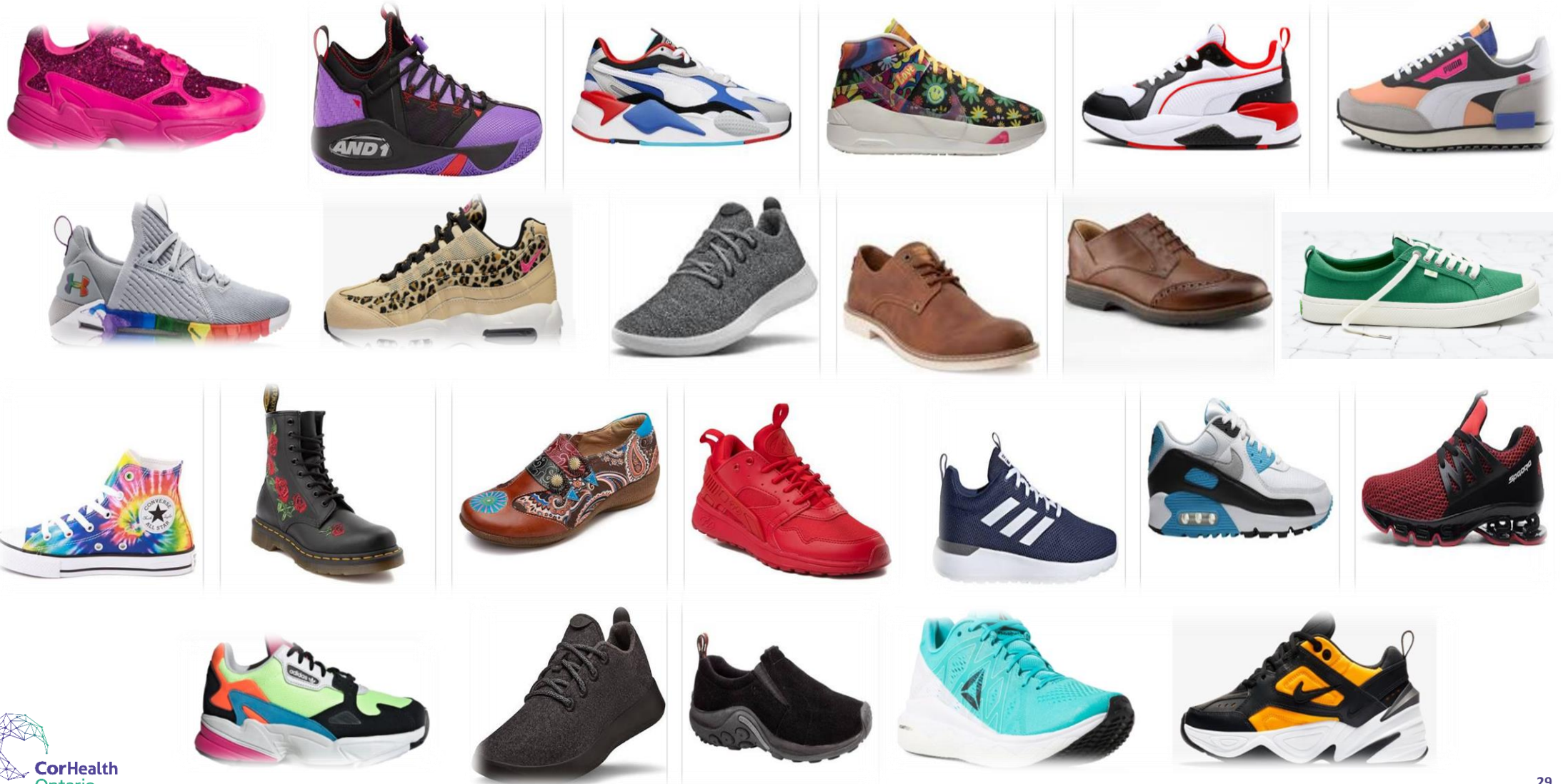
Results
summary

Demonstration Program Opportunities

- Interested in learning more about opportunities to form or participate in a demonstration program?
- Please contact Mike Setterfield at Mike.Setterfield@corhealthontario.ca or Lynn Scholey at Lynn.Scholey@corhealthontario.ca

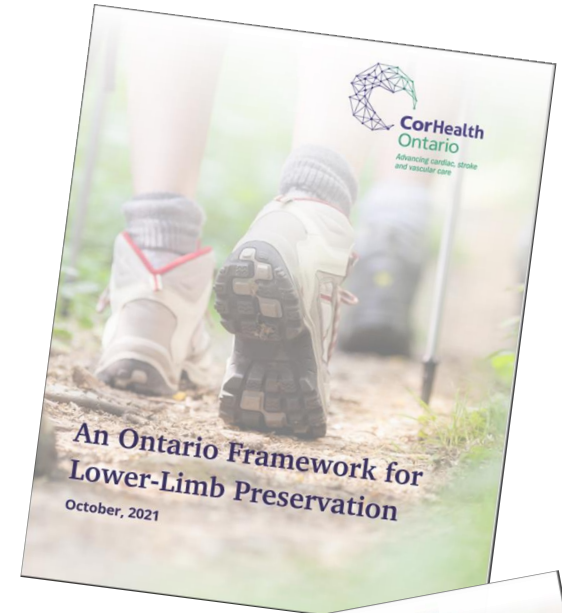
Saving Lower-Limbs

24 amputations every week in Ontario



Saving Lower-Limbs

- The **Lower-Limb Preservation Strategy** provides a **roadmap** for lower-limb preservation providers, organizations and champions to inform and guide the development, delivery and evaluation of lower-limb preservation services to:
 - ✓ Optimize the delivery of best-practice lower-limb preservation care
 - ✓ Reduce health care costs
 - ✓ Improve patient outcomes including reducing avoidable non-traumatic major lower-limb amputations



Actioning the Framework

Administrators

- ✓ Use the Framework to guide:
 - Identification and mapping of local/regional lower-limb preservation services and patient pathways
 - Outreach to other local facilities providing care to vascular and diabetes patients to discuss how you can work together
 - Implementation of local/regional wound care and lower-limb preservation services
 - Development of a plan for measurement of outcomes
 - Advocacy for lower-limb preservation resources within your institution

Clinicians

- ✓ Share the Framework with your colleagues
- ✓ Use the Framework to:
 - Inform your own delivery of best-practice care and processes
 - Guide conversations with your teams about lower-limb preservation
- ✓ Connect with other clinicians in your local area who provide care to vascular and diabetes patients and map lower-limb preservation services and pathways



For more information, please visit us
at: www.corhealthontario.ca/llp

Or contact us at:
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Thank you!

Appendix

References

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The Ontario Ministry of Health was a meeting observer at Advisory Committee meetings and had the opportunity to review and provide feedback on the development of the Lower-Limb Preservation Strategy.