Integrated Lower-Limb Preservation (LLP) CoP Webinar:





September 12 , 2024





Land Acknowledgement



TIME	TOPIC	NAME		
8:00 am	Land Acknowledgement	Aiman Mohammad		
8:05 am	Welcome & Introductions Housekeeping	Dr. Varun Kapila		
8:10 am	LLP Clinical Deep Dive	Nicola Bartley		
	Q&A	Dr. Varun Kapila		
8:50 am	Wrap Up	Lyndsay Orr & Dr. Varun Kapila		

Housekeeping

- Please keep yourself on mute unless you are speaking.
 - We encourage you to type your questions or comments in the chat box. The chat box is monitored throughout the webinar. Questions will be addressed directly in the chat box or in the discussion following the presentations.



- We also encourage you to share any suggestions/topics for future webinars.
- This meeting will be recorded. A copy of the webinar recording, and slides will be available on the virtual CoP shared space.

LLP Clinical Deep Dive

Speaker: Nicola Bartley

LLP Community of Practice LLP Clinical Deep Dive

Nicola Bartley MCISc (Wound Healing)., D. Ch

Chiropodist/Integrated Care Clinician for Mid-West Toronto OHT Lower Limb Preservation Demonstration Project



What is a Chiropodist?

- Chiropodists provide assessment, treatment and management of acute and chronic conditions of the foot
- We treat various foot and lower limb issues, caused by diseases and injuries and promote proper foot health and overall well-being
- Chiropodists are primary care providers



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What Can Chiropodists Do?

- Chiropodists provide medical treatment of nail and skin concerns such as; abnormal nails, corns, and calluses to promote healthy, pain-free feet
- Chiropodists can perform nail, skin and soft tissue surgical procedures
- Biomechanical and Gait analysis
- Custom foot orthotics/Offloading
- Chiropodists have prescription rights
- Wound Care



Where Chiropodists Work

- Hospitals
- Community Health Centres
- Family Health Teams
- Long-term care homes/Retirement Homes
- House Calls
- Private Practice



Chiropodists in Ontario

- Chiropody services are not covered by OHIP
- Extended Health Care Benefits
- Veteran's Affairs
- NIHB (Non-Insured Health Benefits for First Nations and Inuit)

Lower Limb Complications in Ontario

- Over 800 Chiropodists in Ontario to serve 15 million people
- 29% of Ontarians live with diabetes or pre-diabetes
- 10% live with diagnosed diabetes
- Foot ulceration affects an estimated 15%– 25% of people with diabetes in their lifetime
- One-third of amputations in 2011–2012 were performed on people reporting a diabetic foot wound
- People with lower socio-economic status/racialized/Indigenous individuals have a higher incidence of lower limb complications and amputations
- First Line of Defense/Recurrence

Mid-West Toronto OHT Community Diabetic Foot Clinic Workflow





Community Diabetic Foot Clinic MWT-OHT LLP team to hold monthly Diabetic Foot Clinics at community setting



Chiropody Appointment

LLP Chiropodist to screen, assess and treat identified patient and recommend appropriate next steps.

If patient is diabetic, pre-diabetic, has peripheral vascular disease, or has a foot wound, they will receive foot screening using the Inlow's 60 Second Diabetic foot screen. I will then perform treatment as indicated

Patient Identification

Patient identified by community partners (Auduzhe, Scott Mission, St. Stephen's-Community Drop-In, Parkdale Queen West Community Health Centre) to receive Chiropody services at upcoming community foot care clinic



Transition Back to Community

Integrated Care Lead transitions patient back to primary care - for unattached/poorly attached, Integrated Care Clinician works with community partners) for primary care options



Integrated Care Clinician & Patient Navigation

Referral review by Integrated Care Clinician for care plan development and patient navigation

In partnership with the patient and Hub NP, Integrated Care Clinician implements care plan needs, such as referrals to medical/surgical specialist, HCCSS now Ontario Health @ Home



Connected Care Hub Referral

If patient scores moderate risk or higher on their foot screening, the Chiropodist will send a referral to the our virtual administrative Hub for advanced care and patient navigation

Mid-West Toronto OHT Community Education & Screening Workflow



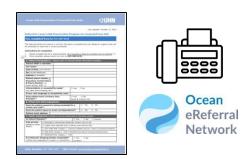
Community Education

Community Partners receive training on how to conduct the InIow's 60 Second Diabetic Foot Screening and identify appropriate patients to conduct assessment



Foot Screening

If patient has foot wound or is diabetic/pre-diabetic, has peripheral vascular disease, or poor foot health (i.e. skin/nail changes, loss of sensation) they will receive a Foot Screen by community partners/clinicians



Transition Back to Community

Integrated Care Lead transitions patient back to primary care - for unattached/poorly attached, Integrated Care Lead works with community partners for primary care options

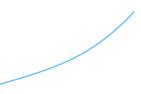


Integrated Care Clinician & Patient Navigation

Referral review by Integrated Care Clinician or care plan development and patient navigation.

In partnership with patient and Hub NP, Integrated Care Lead implements care plan needs, such as referrals to medical/surgical specialist, HCCSS **Connected Care Hub Referral**

If patient scores high risk or above on Foot Screen, community partner/clinician to send referral to Hub for advanced care and patient navigation through OCEAN e-referral or manual fax



Mid West Toronto UHN only Emergency Department & GIM Workflow



Patient presents to ED or GIM Clinic

Patient presents to UHN Emergency Department or TWH GIM Wound & Soft Tissue Outpatient Clinic



UHN ED or GIM Outpatient Clinic Visit

Patient to be triaged seen by ED or GIM clinician. If patient has diabetes, pre-diabetes, peripheral vascular disease and/or poor foot health (i.e. skin/nail changes, loss of sensation), they qualify for 'Chiropody Foot Care'

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Connected Care Hub Referral

If patient qualifies for 'Chiropody Foot Care', ED or GIM clinician to complete Connected Care Hub referral in Epic; ED/GIM clinician to ensure patient has contact information listed in Epic



Community Clinic

Chiropody Foot Care Clinic to occur monthly at Parkdale Queen West CHC.

LLP Chiropodist to screen, assess, treat and recommend appropriate next steps for patient. LLP Chiropodist to work with Hub NP to arrange any medical/specialists/HCCSS referrals or to adjust medications as needed



Connected Care Hub

Referral review by Hub admin and patient scheduled for upcoming Chiropody Foot Care Clinic at UHN or at a community site (Parkdale Queen West CHC); Connected Care Hub admin to contact patient to provide info on upcoming clinic

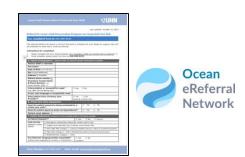
Mid-West Toronto OHT SCOPE Community Chiropody Referral Workflow



Patient Identification Patient identified by SCOPE Primary Care Provider



If patient has foot wound or is diabetic/pre-diabetic, has peripheral vascular disease, or poor foot health (i.e. skin/nail changes, loss of sensation) they will receive foot screen by SCOPE Primary care Provider



Connected Care Hub Referral

If patient scores high risk or above on Foot Screen, and requires Chiropody services, SCOPE Primary Care Provider to send referral to Hub through OCEAN e-referral



Community Clinic

Chiropody Foot Care Clinic to occur monthly at Parkdale Queen West CHC.

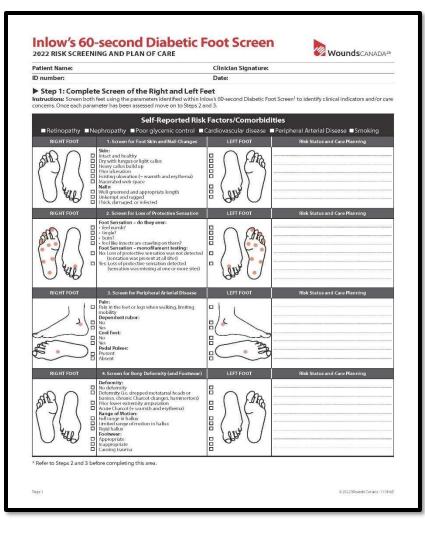
LLP Chiropodist to screen, assess, treat and recommend appropriate next steps for patient. LLP Chiropodist to work with Hub NP to arrange any medical/specialists/HCCSS referrals or to adjust medications as needed



Integrated Care Clinician & Patient Navigation

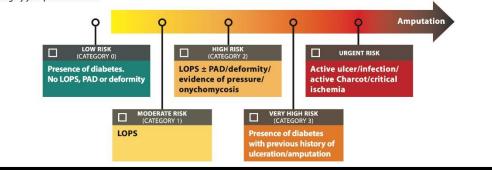
Referral review by Hub admin and patient Community site. Connected Care Hub admin to contact patient to provide info on upcoming clinic

The Inlow's 60-second Diabetic Foot Screen



Step 2: Determine the Risk for Ulceration and Amputation

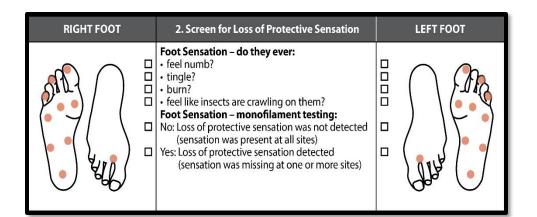
Instructions: Review the results from Inlow's 60-second Diabetic Foot Screen to identify parameters that put the patient at risk. Align the identified parameters with the International Working Group of the Diabetic Foot (IWGDF) Risk Classification System² (plus Urgent Risk) to identify which risk category your patient falls into.

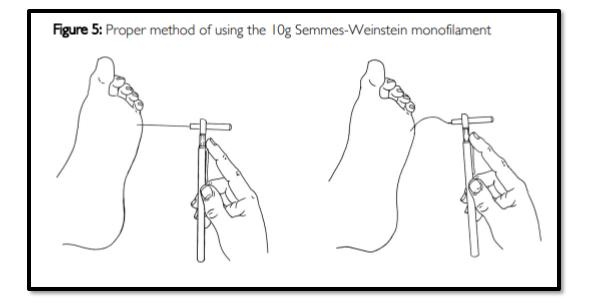


Risk Classification	Clinical Indicators	Screening Frequency	Recommendations and Actions**
Low Risk (Category 0)	Presence of diabetes. No LOPS, PAD or deformity	Screen every 12 months	Education on healthy foot habits and risk factors ¹ Daily self-inspection of feet Appropriate foot and nail care Welf-fitting shoes, exercise as able
Moderate Risk (Category 1)	LOPS	Screen every 6 months	Education on LOP51 Daily self-inspection of feet Daily self-inspection of ret Professional foot care, fitted shoes, custom full-contact orthotics and diabetic socks Referral to a rehab specialist to provide a plan for fitness (exercise prescription) based on risk factors
High Risk (Category 2)	LOPS ± PAD/deformity/ evidence of pressure/ onychomycosis	Screen every 3–6 months	Education on PAD, deformity, pressure and/or onychomycosis ¹ Daily self-inspection of feet Professional floot care, fitted shoes, custom full-contact orthotics and diabetic socks Viscular studies 2: referral if appropriate Pain management for ischemic pain if, present Deformity addressed if present with orthotic shoes Orthopedic referral if requires with orthotic shoes Orthopedic referral if approved Referral to a rehab specialist to provide a plan for fitness (exercise prescription) based on risk factors
Very High Risk (Category 3)	Presence of diabetes with previous history of ulceration/amputation	Screen every 1–3 months	Education on risk of recurrence ¹ Dialy self-inspection of feet Dialy self-inspection of rect Referal to a rehab specialist to provide a plan for fitness (exercise prescription) based on risk factors Modified footwara and/or prosthesis based on level of amputation
Urgent Risk	Ulcer ± infection, active Charcot, PAD (gangrene, acute ischemia)	Urgent care required	Referral to services such as a wound or limb salvage clinic
manage their professional a Tools and edu For patients: I	glycemic levels, triglycerid assistance in the event of ar acational materials are avail	es, weight, hy nurgent foot o able online fr a.ca/for-patie	om Wounds Canada: hts-public/240-diabetic-healthy-feet-and-you/for-patients-and-public/267-information-about



Inlow's Testing







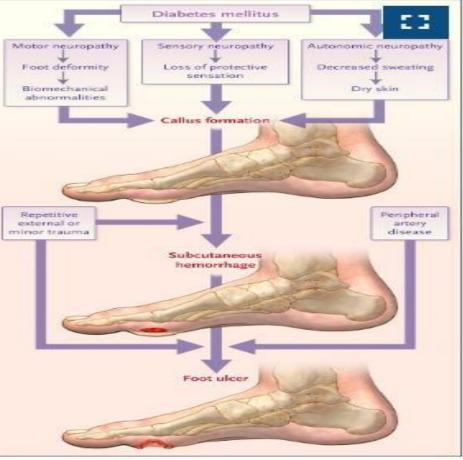
How Diabetic Foot Ulcers Develop

- Peripheral Neuropathy
- Peripheral Arterial Disease
- Diagnosis of end-stage renal disease
- Presence or progression of foot deformity
- Limited foot and ankle joint mobility
- Excess Callus
- Any pre-ulcerative lesion or ulcer on the foot (i.e. blisters, fissures or bruising)
- Minor Trauma (ill-fitting footwear, walking barefoot)
- Poor glycemic control

(International Working Group of the Diabetic Foot, 2023)



How Diabetic Foot Ulcers Develop





Prevention of Diabetic Foot Ulcers

- Identification of the at-risk foot (risk stratification)
- Regular inspection and examination of at-risk foot
- Education of patient, family and health care providers
- Routine wearing of appropriate footwear
- Treatment of pre-ulcerative signs (callus removal and regular footcare)

(International Working Group of the Diabetic Foot, 2023)



Risk Management

"Screening foot examinations are unlikely to reduce the incidence of foot complications unless they eventuate in appropriate specialist referral"

(Singh, Armstrong & Lipsky, 2005)

Shoes and Socks Off





Patient Assessment

- Vascular
- Neurological
- Dermatological
- Biomechanical
- Footwear



(Broken Shoe.JPG - Wikimedia Commons)

• Indoor, outdoor, activity related, occupational etc..



Nine "C's" of Wound Assessment

- 1. Causes of the Wound
- 2. Clear picture of what the wound looks like
- 3. Comprehensive picture of the patient
- 4. Contributing factors
- 5. Components of wound care plan
- 6. Communication to the other healthcare providers
- 7. Continuity of care
- 8. Centralized location for wound care information
- 9. Complications from the wound



https://www.mdedge.com/familymedicine/article/65979/foot-ulcer



Wound Assessments

Wound

Odour Ulcer category, staging or classification Necrotic Tissue Dimension

Pain Induration Colour of Wound Bed Tunneling Undermining Redness Edge of Skin



Measurement Exudate Appearance of the Wound Bed Suffering Undermining Re-evaluate Edge (Keast, D. H. et al., 2004)



Treatment Goals

Category	Description
Healable	 Factors interfering with healing <u>HAS</u> been addressed/removed Wound healing can occur in a predictable way
Maintenance/ Non-healing	Factors interfering with healing has <u>NOT</u> been addressed/removed
Non-healable	 Factors interfering with healing <u>CANNOT</u> be removed Usually related to lack of blood supply/perfusion



Wound Classification Systems

- DFU classification systems allow wound care clinicians to adequately assess and classify the stage and grade of diabetic foot ulcers
- Classification systems act as a guide for clinicians to select appropriate treatment
- Provides a common language
- Many to choose from



Wagner	U of Texas		
 Grade 0-5 Depth Presence of gangrene 	 0-3 = Depth B = Infection C = Ischemia D = Both 		

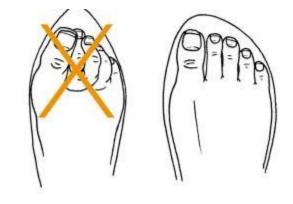
PEDIS	WIfi	SINBAD	
 <u>P</u>erfusion (1-3) <u>E</u>xtent/Size <u>D</u>epth of tissue loss (1-3) <u>Infection (1-4)</u> <u>S</u>ensation (1-2) 	 W = Extent of wound (0-3) If = Extent of infection (0-3) I = Toe pressure/TcPO₂ Predicts I-yr likelihood of amputation Predicts I-yr benefits of surgery 	 <u>Site</u> <u>I</u>schemia <u>N</u>europathy <u>B</u>acterial infection <u>A</u>rea <u>D</u>epth Score out of 6 (3/6 is significant) 	

DFU

- Diabetes Management
 - Optimise glycaemic control, if necessary, with insulin
 - Treat edema or malnutrition, if present
 - Treat cardiovascular risk factors
 - Treat depression or other psycho-social difficulties

Find the cause

- Footwear, self care, trauma
- Callus Buildup
- Biomechanical Issues
- Bony/Structural Deformities (changes in feet, previous amputations)
- Educate
- Ulcer
 - Location
 - Size (length, width, depth)
 - Exudate
 - Odour



(International Working Group of Diabetic Foot 2023)



VIPs

- Vascular Supply
 - Pulses, ABIs, TBIs, arterial dopplers
 - Peripheral artery disease (PAD) is present in up to 50% of patients with a DFU (Schaper et al., 2015)

Infection

- Clinical signs & symptoms
- Bacterial Balance
- Wound swabs, deep tissue/bone culture
- Imaging

Pressure Relief

- Pressure is a factor in 90% of plantar ulcers (Orsted et al., 2006)
- Appropriate Footwear
- Offloading devices
- Decrease weightbearing activities



VIPs

Sharp Debridement

• Reduction of callus and non-viable tissue (Sibbald et al., 2003; IWGDF,2023)



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Offloading

- Total contact casts
- Removable Cast Walkers
- Below Ankle-High Offloading Device (i.e post-op healing shoe)
- Felted Foam (i.e. semi-compressed felt)



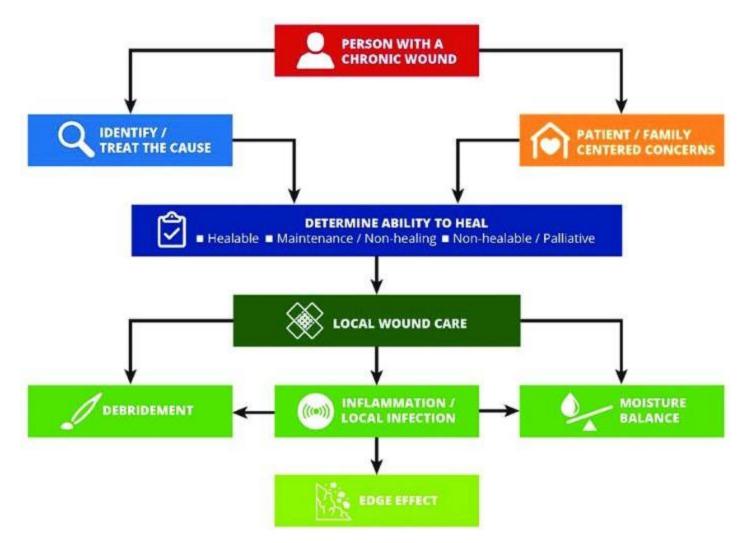
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Role of Chiropody in Wound Care

- Determine the severity of wounds and develop personalized treatment plans tailored to each patient's needs
- Oversee ongoing wound management and maintenance
- Sharp Debridement
- Application of Dressings and other interventions to facilitate healing
- Offloading Devices/Customizing Devices (i.e. foot bed of air cast boot)
- Follow up and ongoing care
- Prevention and Education
- Part of Interprofessional team (coordinate and connect) → Improved patient outcomes!!! (Alleyne, 2023)



Wound Bed Prep/Local Wound Care



WOUND BED PREPARATION 2021 PARADIGM



References

- 1. https://www.ontariochiropodist.com/Public/frequent-questions.html#chiropodist August 20th, 2024
- 2. 2019 Oct 23;107840. 9. Singh N, Armstrong DG, Lipsky BA. Preventing Foot Ulcers in Patients With Diabetes. JAMA. 2005 Jan 12;293(2):217–28
- 3. Compromised Wounds in Canada [Internet]. Ottawa: Canadian Institute for Health Information; 2013 Aug. Available from: https://secure.cihi.ca/free_products/AiB_C ompromised_Wounds_EN.pdf
- 4. Diabetes Canada Clinical Practice Guidelines Expert Committee. Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. Can J Diabetes [Internet]. 2018 [cited 2019 Oct 28];42. Available from:
- 5. Public Health Agency of Canada, Pan Canadian Public Health Network, Statistics Canada, Canadian Institute of Health Information. Pan-Canadian Health Inequalities Data Tool, 2017 Edition [Internet]. Public Health Agency of Canada. 2019 [cited 2019 Oct 31].
- 6. https://www.woundscanada.ca/about-dhfy/19-healthcare-professional/resources-health-care-professionals/Inlow's 60 second diabetic-foot-screen
- 7. International Working Group on the Diabetic Foot (IWGDF) Guidelines (2023 update) IWGDF Guidelines 2023 Guidelines (2023 update) IWGDF Guidelines
- Schaper NC, Van Netten JJ, Apelqvist J, Lipsky BA, Bakker K, International Working Group on the Diabetic Foot. Prevention and management of foot problems in diabetes: a Summary Guidance for Daily Practice 2015, based on the IWGDF Guidance Documents. Diabetes Metab Res Rev [Internet]. 2016 Jan [cited 2018 Jan 31];32:7–15. Available from: <u>http://www.ncbi.nlm.nih.gov/pubmed/26335366</u>
- 9. Orsted HL, Searles G, Trowell H, et al. Best practice recommendations for the prevention, diagnosis and treatment of diabetic foot ulcers: update 2006. Wound Care Canada. 2006;4(1):57-71.
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- 11. Bus, S. A., Armstrong, D.G., Crews, R.T., Gooday, C., Jarl, G., Kirketerp-Moller, K., Viswanathan, V. & Lazzarini, P.A. (2023). Guidelines on offloading foot ulcers in person with diabetes IWGDF 2023 update
- 12. Botros M, Kuhnke J, Embil J, Goettl K, Morin C, Parsons L, et al. Best practice recommendations for the prevention and management of diabetic foot ulcers. In: Foundations of Best Practice for Skin and Wound Management. A supplement of Wound Care Canada; 2017. 68 pp. Retrieved from: www.woundscanada.ca/docman/public/health-care-professional/bpr-workshop/895-wc-bpr-preventionandmanagement-of-diabetic-foot-ulcers-1573r1e-final/fil

Integrated Lower-Limb Preservation CoP Webinar

Wrap Up

Subscribe to Updates



Integrated Lower-Limb Preservation CoP

This CoP is for all providers of LLP care and their system partners to work together and leverage the OHT model to deliver a full and coordinated continuum of care to improve outcomes and experiences for patients at risk for non-traumatic major lower-limb amputation.

This CoP brings together local and regional interprofessional teams including, but not limited to, clinical leads, change management leads, project managers, and front-line clinicians from primary care, home & community care, and acute care, as well as patients and caregivers with lived experience, using a collaborative approach to accelerate integrated, LLP care in Ontario.

This CoP is facilitated by the Ontario Health provincial LLP team, in collaboration with the OH Regions, and will be operationalized via this interactive online space that includes a discussion forum, document library of tools and resources, and a member directory for networking. The CoP also includes live touchpoints (i.e., interactive webinars) relevant to either the larger LLP community and/or subgroups within the CoP.

195	Mon Jan 09 2023	
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Click here to subscribe and get notifications of CoP activities

Amanda Singh Hi members, Click on the "Subscribe to updates" button above 4 to be notified by email when new posts are added.

Looking for previous CoP webinar recordings. Below is the link to our YouTube playlists. We will continue to post here for future webinars, stay tuned for more!

HF CoP Playlist: https://youtube.com/playlist? list=PLmh_Q_RMQa8BlhpLBwVCEtKO5SQxnPDnS&si=eQvLfjwLBxTBaMSV

LLP CoP Playlist: https://youtube.com/playlist?list=PLmh_Q_RMQa8B3tX8rcUo7VvTYkjE-WFXv&si=3LEZQ34zUz4B0xzM

COPD CoP Playlist: https://youtube.com/playlist?list=PLmh_Q_RMQa8CxKimz-_mJ3P0oG0iQImXn&si=L1qZOI3IC6RDjZIw

All OHT Webinar Playlist: All OHT - ICP Community of Practice Webinars - YouTube

If would like to view a copy of the relevant webinar slide deck, you can find them by going to Attachments and clicking the "Webinar" folder for respective CoPs.

ICP Youtube Playlists Poster638591671280752563.pdf

Integrated Lower-Limb Preservation CoP Webinar

Housekeeping

LLP YouTube Playlist

LLP CoP Playlist: https://youtube.com/playlist?list=PLmh_Q_R <u>MQa8B3tX8rcUo7VvTYkjE-</u> <u>WFXv&si=3LEZQ34zUz4B0xzM</u>

We will continue to post here for future webinars, stay tuned for more!

Want to learn more about ICPs?

Visit the ICP Community of Practice Webinars YouTube Playlists to learn more about the HF, LLP & COPD Demonstration Sites.

Playlists currently available

- HF CoP Playlist
- LLP CoP Playlist
- <u>COPD CoP Playlist</u>
- <u>All OHT Webinar Playlist</u>

...we will continue to post here for future webinars, stay tuned!

Link to poster pdf: <u>click here</u>

Sharing of Demonstration Site Resources

LLP demonstration program teams have requested sharing of Demonstration Site Resources on the Community of Practice (CoP) online shared space.

Reminder:

The <u>September 14, 2023 CoP webinar</u> includes an overview from every LLP demonstration program of their planned change initiatives/pathways

Activity	Members	Attachments			
Folders		Integrated Lo	ower-Limb Pr > 07. Webinars > Live webinars		
		Enter key	word to search filenames	0	
 Integrated Lower-Limb Preservation CoP 1. Clinical Best Practice and Pathways 02. Patient Reported Measures 03. Indigenous Health 		Views	Actions		
_	 O4. Integrated Care O5. Experience-Based Co-Design O6. Demonstration program shared resources O7. Webinars Drop in Sessions Apr_May Live webinars 			Name	Date modified
				📙 2023-06-09 - LLP CoP Webinar .pdf	7/4/2023 11:10 AM
				2023-07-13 - LLP CoP Webinar.pdf	7/17/2023 10:57 AM
				2023-08-09 - LLP CoP Webinar.pdf	8/15/2023 9:45 AM
			🚡 2023-09-14 - LLP CoP Webinar.pdf	9/15/2023 11:15 AM	
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Thank You

OH LLP Project Team