The 2\textsuperscript{nd} All Ireland Lymphoedema Conference

Wednesday 13\textsuperscript{th} November 2019
An Grianán, Termonfeckin, County Louth
HSE
LYMPHOEDEMA/LIPOEDEMA SERVICES
Kay Morris, MISCP, MSc HCM
Project Manager
A multi-disciplinary cross divisional HSE Lymphoedema Working Group was established in January 2016 to develop a model of care for lymphoedema services and national standards in relation to the provision of Lymphoedema garments based on best practice guidelines.
Work so far

• The Model of Care has been signed off by the HSE

• The guideline for provision of compression garments is still in progress and in the final stages

• The tender process for compression garments is on going and will hopefully start in 2020
National Lymphoedema Oversight Team

• The initial implementation of the model of care is being led by the National Lymphoedema Oversight Team which includes representation from primary care strategy and planning, primary care operations, National Cancer Control programme and acute services.

• A National Clinical Lead position is currently being interviewed for and should be in post by the end of the year.
Summary of the MOC

- Service provision for lymphoedema/lipoedema is inadequate with significant gaps across the country and inequity of access for non-oncology related lymphoedema.
- Inconsistency in the prescribing and provision of compression garments
- Very limited lymphoedema/lipoedema education in healthcare-related undergraduate courses.
Outline of the model of care

• The model of care for lymphoedema and lipoedema treatment recommends an integrated service between acute care and community care

• Acute services will provide screening and early detection of lymphoedema

• Primary care services will provide treatment services for all patients with lymphoedema regardless of what type of lymphoedema
Primary Care

• On full implementation of the Model of Care each CHO will have a fulltime Lymphoedema Specialist Clinic (LSC) for assessment and intensive treatment.

• Maintenance will be provided in local community services for maintenance treatment and support with direct access back to the LSC
• Each clinic to have access/links to support services e.g. obesity clinics, vascular consultants, dermatology, psychology/counselling, genetics

• There will be one clinic with a speciality in paediatrics and follow up treatment will be available in the local clinics.
Acute services

• Oncology services and other high risk areas will provide every patient with information and education on the risk of lymphoedema,

• There will be screening, early detection and treatment pathways
Staffing

• Using calculated service demand there is a need for 56.2 WTEs nationally to provide a comprehensive service.

• There are currently 11.1 WTEs this would involve the recruitment of 45.1 additional staff, plus support staff.
Current projects

• There is approval for;
  – One proof of concept Specialist Lymphoedema Clinic in Primary Care
  – One proof of concept early detection service in the Mater hospital
  – Development of Clinical Guidelines
Early Detection- Mater Hospital

- Detection of subclinical lymphoedema
- Early intervention and monitoring during oncology treatment
- Education of risk and risk reduction
- Services to start in December 2019

Outcome to reduce the incidence of lymphoedema in oncology patients
Primary Care project- Laois/Offaly

• A Specialist Lymphoedema Clinic requiring 2 full time lymphoedema therapists and 0.5 multitask attendant to treat all lymphoedema patients in that LHO area.

• Clinic to open in 2020

Outcomes; Improved quality of life, reduced cellulitis/acute admissions/antibiotics/GP visits
Clinical guidelines

• In conjunction with the HSE NMPDU, HSCP and LNNI a clinical guideline development team is being established.

• The guidelines will inform the education plan for all aspects of lymphoedema management.

• There are UK clinical guidelines for Lipoedema 2018
Next steps

• There is a 3 year plan for the overall implementation of the Model of Care for which a funding request will be submitted in the 2020 Estimates process
Information

• Model of Care for lymphoedema and lipoedema
  – www.hse.ie/publications

• Lipoedema Guidelines
  – www.wounds-uk.com
Connecting via Yammer

November 2019
What is Yammer?

Yammer is an internal communications tool connecting staff across the HSE.
How can I use Yammer?

1. Collaboration
   Join and create groups

2. Information sharing
   Ask & answer questions

3. Keep up to date
   Post and read updates

4. Share and search
   Add docs, photos and files

5. Showcase great work & achievements
Collaborate in a community to share ideas, and solve problems in half the time.
Lymphoedema Network

- To Join Yammer go to the Yammer web page and search HSE.
- Enter your HSE email address and you will be asked to verify
- New group Lymphoedema Network
Obesity related chronic lymphoedema like swelling – overview & research

13th November 2019
Emer O’ Malley
Senior Physiotherapist
Weight Management Service
St. Columcille’s Hospital
Loughlinstown, Co. Dublin
Outline

• Obesity - Background
• Lymphoedema and obesity
• Cause, Prevalence & Impact
• WMS - Our journey
• Assessment
• Referral options
• ORCLLS treatment & pathway
• Case studies: Trial and error
• Research & our learning
• Weight Management Strategies
• The 5As approach
• Conclusion & References
Background

• “6 out of 10 Irish adults are OW or obese”  
  (NANS, 2011)

• BMI>40 kg/m² = 1.9% of Irish adults  
  (Flynn, 2011)

• Highest average BMI in Europe – OW  
  (Lancet 2016)

• €1.1 billion in healthcare cost  
  (Perry, 2012)

• 85% ↑ in mortality, 8x ↑ risk of poor physical function, reduced QOL  
Drivers of the obesity epidemic

- Calorie balance problem
- Societal influences
  - Individual psychology
  - Individual activity
  - Activity environment
- Biology
- Food Production
- Food Consumption
A genetic propensity for **weight** gain and obesity must be present for the environment to precipitate an overweight/obese phenotype.

Environmental exposures, stresses, diet, and lifestyle can all induce epigenetic changes that determine whether genes are turned on or off.
Obesity related complications

Abdominal pressure → impaired venous & lymphatic return. Incr. risk of oedema/lymphoedema, ulcers, DVTs.
Lymphoedema and obesity: Is there a link?

- Risk factor: Obesity & post-op weight gain
- **Severe obesity** can lead to impaired lymphatic function *without Sx or injury*
- BMI threshold for LL lymphatic dysfunction
- Many have normal lymphoscintigraphy
- **Cause:** Multifactorial, ? Overwhelmed lymphatic system, external compression of lymphatics by adipose tissues or direct injury to the lymphatic endothelium.

Todd M, 2009,
Mehrara B & Green A, 2014
Lymphoedema Prevalence

• 5 million Americans UL/LLs, 200 million worldwide 
  (Mehrara and Greene, 2014)

• ~15,000 people in Ireland

• Challenge of diagnosis

• Incidence: 74% in severe obesity  (Fife & Carter et al, 2008)
  “Epidemic in plain sight”

• 1 in 3 weight management patients suffer with swollen legs  (O’ Malley et al, 2015)
Impact of swelling & skin changes

• Reduced mobility & pain
• Increased risk of cellulitis
• Irregular skin folds
• Lymphorrhoea
• Hyperkeratosis/Papillomatosis

• Isolation & reduced QoL
• Physical activity & increase challenge of weight management

Todd, M (2009)
Our journey...

- Identifying a problem
- Review of referral options
- Rx: A lot of trial and error!
- Research attempts
- Patient access, challenges and consultation
Physiotherapy Assessment

### Physiotherapy Weight Management Programme

#### Initial Assessment

<table>
<thead>
<tr>
<th>Objective Measures</th>
<th>Initial Assessment</th>
<th>Repeat Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max HR (75%)</td>
<td>/</td>
<td>/</td>
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<tr>
<td>BPM</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Ankle Circ. 10 cm super medial mall</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Left: cm</td>
<td>Right: cm</td>
<td></td>
</tr>
</tbody>
</table>

#### Screening

<table>
<thead>
<tr>
<th>Screen Time</th>
<th>Have you Swollen Legs?: Y/N</th>
<th>Increased Girth in PM: Y/N</th>
<th>Skin Changes: Y/N</th>
<th>Ulcer/Cellulitis: Y/N</th>
</tr>
</thead>
</table>

#### Social History

- Surgical Preference
- Physical Activity Levels
- Readiness & barriers
- QOL, Falls, ADLs
- PARQ
- Sleep & OSA: ESS & STOPBang

#### Musculoskeletal

- Low back pain: Knee Pain: Other: None
- Duration: / / 2019
- Type: 
  - Initial: 
    - Frequency: Cons < 11/10
    - Duration: 6/10
  - Cons < 11/10
  - 10/1

#### Surgical Preference

- Sub-maximal fitness Ax & repeat:
  - Cardiorespiratory health, Balance, Strength & function - TUAG, 90 sec step test, 6MWT

#### Goal Planning, SM strategies
Student Study – Services (2011)

- HSE hospitals (93% response rate)
- PCCC (35% response rate)
- Lymphoedema service ± Patients with obesity
- SJH: Vascular Clinic: Mary-Paula Colgan & Jean Marc Monseux (Senior Physiotherapist)
Treatment options

• Monitored exercise programmes can decrease the severity of lymphoedema  
(Kwan et al, 2011)

• Weight management programmes including dietetic support & bariatric surgery may decrease the rates or severity of lymphoedema  
(Mehrara and Greene, 2014)

• Best practice for the management of Lymphoedema (2004): Ax, Skin care, MLD, Multilayer bandaging, Exercise & Elevation, Garments
Slow beginnings & challenges

- Identifying the problem
- Discussing the problem
- Practical application
- Training & resources
- Products
  - Length
  - Cost (Bandages only)
- Physical challenges
  - LL weight
  - Patient access (all Ireland)
- Compression garments
ORCLLS pathway

Subjective Assessment:
1: Swollen legs/Incr. girth in pm 2: Skin changes 3: Cellulitis/Ulcers

Objective Assessment:
1: Ankle circumference measurement, 2: Skin Integrity, 3: Distal pulses

No signs of ORCLLS
Mild: ACM <35cm, absence of other S&S
Moderate: ACM <35cm presence of other S&S or ≥35cm
Severe: ACM >40cm, +/- other S&S

Clinical decision making

Education (All)
Compression Tx: Suitability, Readiness, Funding
Referral:
Above Knee, Vascular service
Education & resources

Swollen Legs

1 in 3 weight management patients suffer with swollen legs. It can cause pain, make moving harder, and lead to skin infections.

4 Steps to better management:

- Skin care: Moisturise daily to keep skin supple
- Exercise: Move regularly, take lots of little walks
- Elevation: At night-time raise your feet up on pillows
- Compression: Wearing flat knit compression can really help

Off the shelf

Made to measure

FarrowWrap

Lymphoedema Ireland

Free phone helpline:
1800 200 700
www.lymphireland.com
Common presentation & Case Studies:

- Increased LL volume
- Primarily below knee
- Reverse shouldering
- Colour changes
- Hx of cellulitis
- Mobility difficulty/Decr. PALs

Measurement & Compression

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:  /  / 20</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Left:</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Dorsum</td>
<td>Y / N</td>
</tr>
<tr>
<td>Posterior Tibialis Pulse</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

- Education
- Bandaging
  +/ - 1-2 days/wk
- Dry weight
- Measure
Compression therapy & MDT approach

- 36 yr old male
- Increased LL volume
- T2 Diabetes
- Incr. isolation/decr. PALs
- Conservative programme & ORCLLS mgt
- On BSx list x 4yrs
- DM & ORCLLS resolution
Holistic approach:
Conservative programme & bariatric Sx

• 46 yr old female
• Psoriasis, dog bite & cellulitis
• Lots of trial & error
• Behaviour change support
• Incr. PALs & had BSx
• No longer requiring garments
Challenges & adaptations

• 52yo ♀, LL swelling & cellulitis hx
• <1000 steps/day, SOBOE/pain mobilising
• Access difficulties & weight bias
• Multiple garment failures: OTS/MTM
• Course of bandaging/compression to knee
• Now 4000 steps/day, travelling, teaching & presenting at obesity conferences
• Self-managing, occ. re-measurement, purchases own stockings
Wound management

• Referred from diabetes service
• Importance of MDT approach
• Ongoing vascular and nursing support & co-ordination
• Behaviour change support
Complex case

- 56 yo male, in-patient stay
- Renal failure, sepsis & rhabdomyolysis
- Compression therapy & garments provided
- Declined BSx
- Attended NRH for rehab progression
- Struggled with maintaining lifestyle changes & progressive deterioration
ORCLSS - Post bariatric surgery

- 44yr old male
- Initial appt: 243Kg, BMI: 86Kg/m²
- MDT programme & Roux-en-Y
- 7yrs later: 130Kg, BMI: 46Kg/m²
- Wound mgt, compression
Compression garments options

Ongoing modifications

Off the shelf: Ready to wear, flat knit, class 3. Uniphar, JOBST, Mediven, Seronova, Cost: €60 - 74

Made to measure:
- Measured to fit, flat knit, T-heel & silicone band
- Compression class 3
- Cost: Pair €240 (June ‘19), Healthcare21 (HC21)

FarrowWrap:
- Measured to fit, Velcro straps
- Cost: Pair €250 (June ‘19), HC21
- Available in beige, black, dark blue, grey, dark brown
What we have learned

• Additional access & treatment bias
• Importance of readiness & MDT support
• Holistic approach – collaborative Ax & Rx planning

Practical application:
– Feet often unaffected
– Utilisation of gastrocnemius as a shelf
– Can be applied weekly
– Mobility improves very quickly/easier to apply

• Compression garments
  – A to D measurements
  – Utilise T-heel & inner silicone band
  – Reduce by 1-2cms
  – Modify & adapt for 2nd pair
  – Guidance with application
Aim: To determine the relationship between the presence of lymphoedema-like swelling and physical function in the severely obese.
Methodology & Results

• **Methodology:**
  Severe obesity, presence of ORCLLS, ACM, 50 step test, 500m walk

• **Results:**
  n=330, 33% ♂️, Age: 43.4yrs & BMI of 51.7kg/m².
  ORCLLS (n = 108) ~1/3
  – Hx of cellulitis & VTE was more common (RR 6.16 & 3.86)
  – Higher ACM (35 vs. 32.4cm)
  – Slower step speed (0.40 vs. 0.43steps/s)
  – Slower walking speed (0.97 vs. 1.08 m/s) P < 0.05
Participant characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>N</th>
<th>ORCLLS present (n=102)</th>
<th>ORCLLS absent (n=222)</th>
<th>All participants (n=324)</th>
<th>P-value&lt;sup&gt;a&lt;/sup&gt;</th>
<th>P-value&lt;sup&gt;b&lt;/sup&gt;</th>
<th>P-value&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>324</td>
<td>46.4 ± 11.3</td>
<td>41.7 ± 12.8</td>
<td>43.2 ± 12.5</td>
<td>0.002</td>
<td>&lt;0.001</td>
<td>0.034</td>
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<tr>
<td>BMI (kg/m&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>324</td>
<td>54.1 ± 9.5</td>
<td>50.4 ± 7.6</td>
<td>51.6 ± 8.4</td>
<td>0.452</td>
<td>0.155</td>
<td>0.433</td>
</tr>
<tr>
<td>Male</td>
<td>324</td>
<td>36 (35.3)</td>
<td>69 (31.1)</td>
<td>105 (32.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>314</td>
<td>24 (24.5)</td>
<td>38 (17.6)</td>
<td>62 (19.7)</td>
<td>0.334</td>
<td>0.728</td>
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<tr>
<td>Chronic illness</td>
<td>324</td>
<td>80 (78.4)</td>
<td>163 (73.4)</td>
<td>243 (75.0)</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior VTE</td>
<td>324</td>
<td>13 (12.7)</td>
<td>8 (3.6)</td>
<td>21 (6.5)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Prior cellulitis</td>
<td>319</td>
<td>36 (35.3)</td>
<td>13 (6.0)</td>
<td>49 (15.4)</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LL symptoms</td>
<td>324</td>
<td>93 (91.2)</td>
<td>113 (50.9)</td>
<td>206 (63.6)</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>SC (cm)</td>
<td>323</td>
<td>35.6 ± 7.1</td>
<td>32.1 ± 4.8</td>
<td>33.2 ± 9</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>&lt;0.009</td>
</tr>
<tr>
<td>SC &gt; 35 cm</td>
<td>323</td>
<td>46 (45.5)</td>
<td>57 (25.7)</td>
<td>103 (31.9)</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>&lt;0.009</td>
</tr>
<tr>
<td>Step speed (step/s)</td>
<td>310</td>
<td>0.38 ± 0.12</td>
<td>0.44 ± 0.10</td>
<td>0.42 ± 0.11</td>
<td>&lt;0.001</td>
<td>&lt;0.001</td>
<td>0.008</td>
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<tr>
<td>Fifty steps completed</td>
<td>313</td>
<td>49 (50.0)</td>
<td>154 (71.6)</td>
<td>203 (64.9)</td>
<td>0.019</td>
<td>0.072</td>
<td>0.002</td>
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<tr>
<td>Completer step speed (steps/s)</td>
<td>203</td>
<td>0.44 ± 0.09</td>
<td>0.47 ± 0.09</td>
<td>0.46 ± 0.09</td>
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<td></td>
<td></td>
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<tr>
<td>Walking speed (m/s)</td>
<td>311</td>
<td>0.89 ± 0.38</td>
<td>1.13 ± 0.30</td>
<td>1.05 ± 0.34</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Able to walk 500 m</td>
<td>316</td>
<td>67 (67.7)</td>
<td>187 (86.2)</td>
<td>254 (80.4)</td>
<td>&lt;0.001</td>
<td>0.157</td>
<td>0.175</td>
</tr>
<tr>
<td>Completer walking speed (m/s)</td>
<td>254</td>
<td>1.09 ± 0.23</td>
<td>1.20 ± 0.22</td>
<td>1.17 ± 0.22</td>
<td>0.001</td>
<td>0.013</td>
<td>0.035</td>
</tr>
<tr>
<td>Activity level (min/week)</td>
<td>222</td>
<td>65.9 ± 108.6</td>
<td>120.3 ± 163.8</td>
<td>104.4 ± 151.6</td>
<td>0.015</td>
<td>0.053</td>
<td>0.027</td>
</tr>
</tbody>
</table>

VTE: Venous Thromboembolism, SC: Supramalleolar circumference
“Nurses are committed to developing patient-focused treatment plans to address chronic oedema, but lack of compliance with exercise and weight reduction is causing frustration and disillusionment” (Todd, 2009)

“Management of the lymphedema requires that the obesity be addressed in a frank and supportive way. Many exhibit a strong element of denial regarding the disease of obesity. Treatment must be linked to the treatment of obesity for long-term success”.

“When the clinician and patient develop a collaborative approach to care, lymphedema in morbidly obese patients can be managed with good results”.

(Fife & Carter, 2008)
Realistic expectations: Weight change

Overall
N=65
Mean ± SD: -4.3 ± 5.2%
(-6.3 ± 7.8 kg)
Range: -21.2 to 5.3%
(-37 to 9.1 kg)

‘Weight stable’
N=35 (53.8%)
-1.1 ± 2.2%
-1.8 ± 3.2kg

‘Weight gainers’
N=2 (3.1%)
+5.2 ± 0.3%
+7.6 ± 2.2kg

‘Weight losers’
N=28 (43.1%)
-9.0 ± 4.1%
-13.1 ± 6.4kg

Chronic relapsing disease...
Realistic expectations...5-10%

“Focus on best weight”

Significant changes:
ACM, PALs, Physical function:
TUAG, Step no, Gait distance & QOL
Key considerations in obesity

- **Obesity is a chronic condition**
  Think sustainable strategies

- Management is about improving health & well-being – not just the number on the scales
  Modest ↓ in weight = significant ↑ health

- **Intervention means addressing root causes & removing roadblocks**
  Explore & support

- **Success is different for every individual**
  Weight / physical or mental health gains

- A patient’s ‘best weight’ may never be ‘an ideal weight’
  Think realistic goals
Building a rapport starts before we even say hello!

- Waiting area / consultation room seating
  - Weight capacity
  - Arms
  - Equipment
- Opportunity to display positive, non-stigmatising health messages
- Pace walk to consultation room (gait speed)

http://www.imagebank.worldobesity.org/
The 5 A’s approach

**Ask** for permission to discuss weight. Weight is a sensitive issue. Many people are embarrassed or fear blame and stigma.

**Assess** obesity-related risk and potential ‘root causes’ of weight gain.

**Advise** on obesity risks and discuss benefits and options.

**Agree** on realistic weight-loss expectations and on a SMART plan to achieve behavioural goals.

**Assist** in addressing drivers and barriers, offer education and resources, refer to provider, and arrange follow-up.

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Our journey...what we have learned

• Identifying a problem:
  – Readiness & Support
  – Categorisation
  – Appropriate treatment planning

• A lot of trial and error!

• Positive outcomes & new developments

• Patient access, challenges and need for adequate funding!
EASOCOM
EASO Collaborating Centre for Obesity Management

Obesity: Living Well with a Chronic Disease
St Columcille’s Hospital Weight Management Service
Annual Study Day
Friday 29th November, 08:30 – 16:00
St Columcille’s Hospital, Loughlinstown, Dublin, D18 E365

Thank you for listening
References

Improving Prevention and Management of Simple Oedema in Primary Care

Pippa McCabe – Lymphoedema Clinical Lead, SEHSCT
Vivienne Murdoch – Chronic Oedema Liaison Nurse, SEHSCT
Susan Patterson – Pharmacy Advisor, Health and Social Care Board
Regional

• 1 in 200 patients over 65 present to the GP with oedema per year
• Prevalence increases with age
• Northern Ireland has highest number of over 85s in UK
• Cost to treat venous leg ulcer £5700 per year per patient
• Cost of oedema management approximately £100 per year per patient
• Over 50% of community nursing time is spent treating chronic oedema and leg ulcers (Lymphoedema Network Wales)

Trustwide

• 17/18 leg/foot cellulitis admissions = 580 patients with 4992 bed days at an estimated cost of £2 million
• Short snapshot audit of district nursing caseload showed 35% with chronic oedema, 60% of these untreated.
• Diverse and uncoordinated approach to care remit for patients with oedema
Lymphoedema

- Increase in non-oncology related lymphoedema and reduction in oncology related lymphoedema
- Increased complexity and level of obesity
- 37% of lymphoedema caseload could be categorised as 'simple oedema'
- Increased inappropriate referral of simple oedema from primary care.

Tissue Viability

- Lack of provision in primary care leading to patients being referred inappropriately.
- Audit of Cardiovascular Framework standards for lower limb ulceration demonstrated poor compliance with key performance indicators e.g. 16% patients having received doppler and diagnosis of causative factors.
- Small pilot with funding from pharmacy had demonstrated prescribing savings in GP practices for ongoing compression hosiery use.
Local enhanced service funding offered to all surgeries in the Trust area.
Results from the past 15 months

PATIENTS SEEN
255+ patients have attended healthy leg clinics

PRESCRIBING
51 prescribing changes made to optimise compression hosiery

EDUCATION
36 GP’s
15 Practice Nurses

DEPRESCRIBING
31% of patients deprescribed diuretics

GP PRACTICES
29 Practices agreed to take part
Patient Reported Outcome Measures

- 69% indicated a reduction in pain and limb tightness
- 70% very pleased with the service
- 94% identified provision of information on how to help their condition was the best aspect of the service
- 100% patients found the negative impact of their swelling was reduced with intervention
Service user and GP feedback

https://www.youtube.com/watch?v=t1eKdcdvDcQ
BJN Awards 2019: chronic oedema nurse of the year runner up. Murdoch, V. British Journal of Nursing 2019, Vol 28, No 20; TISSUE VIABILITY SUPPLEMENT
Questions?
Healthy legs - Background

Increased number of referrals to the clinic for chronic oedema patients

Developed as a service improvement project to manage these patients

Focus is on education and exercise

Promotes self management
Lymphotoedema Referrals

Analysis of Referrals to Lymphotoedema Clinic
Jan-Oct 2018

Origins of swelling

Non-lymphatic
196
54%

Lymphatic
165
46%
Non-lymphatic breakdown

Analysis of referrals to Lymphoedema Clinic
Jan - Oct 2018
Swelling: Non-Lymphatic in Origin

- Obesity: 21
- Chronic venous insufficiency: 60
- Cardiac: 9
- Neurological: 10
- Dependency: 27
- Orthopaedic: 7
- Not specified: 16
Healthy Legs Class Structure

• One to one assessment with lymphoedema specialist physiotherapist
• If suitable patients commence 4 week programme
• Patient reported outcome measures
• Objective measures
• Patient goals and expectations discussed and recorded
## Healthy Legs Class Structure

### Healthy Legs Class Content

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<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes of swelling</td>
<td>Self-management</td>
<td>Principles of healthy eating</td>
<td>Role of compression garments</td>
</tr>
<tr>
<td>Signs and symptoms</td>
<td>Skin care/foot care</td>
<td>Food labelling</td>
<td>Donning/doffing aids</td>
</tr>
<tr>
<td>Complications associated with</td>
<td>Positioning</td>
<td>Weight control</td>
<td>General care advice</td>
</tr>
<tr>
<td>swelling</td>
<td>Physical activity</td>
<td>Onward referral</td>
<td></td>
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<tr>
<td><strong>EXERCISES</strong></td>
<td><strong>EXERCISES</strong></td>
<td><strong>EXERCISES</strong></td>
<td><strong>EXERCISES</strong></td>
</tr>
</tbody>
</table>
Healthy Legs Class Structure

• Post class questionnaires
• Onward referral
  – Podiatry
  – Dietetics
  – Dermatology
  – Tissue viability

• Referral to exercise schemes
Costs

• Staff band: Senior clinician and support staff
• Equipment (bariatric chairs, small exercise aids)
• Venue Hire

• 1 WTE specialist physiotherapist and I WTE physio assistant can deliver 29 Groups with 1 years treatment and follow up

• Based on full capacity classes 290 patients could be managed via the Healthy Legs Class per year.
So far...

- Running since 2016
- Numbers through service
- Complex patient group
- Improved patient concordance
- Attendance rates (Wolff et al., 2019)
- Time savings

<table>
<thead>
<tr>
<th>Time</th>
<th>Total no of referrals</th>
<th>No of HLC referrals</th>
<th>% HLC of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 17-Mar 18</td>
<td>187</td>
<td>25</td>
<td>13.3</td>
</tr>
<tr>
<td>Apr 18-Sept 18</td>
<td>237</td>
<td>48</td>
<td>18.6</td>
</tr>
<tr>
<td>Oct 18-Mar 19</td>
<td>225</td>
<td>36</td>
<td>16</td>
</tr>
<tr>
<td>Apr 19-Sept 19</td>
<td>257</td>
<td>60</td>
<td>23.3</td>
</tr>
</tbody>
</table>
Outcomes

• Telephone review

![Six Month Telephone Review chart]

- Review appointment required?
- Episodes of cellulitis?
- Have you attended GP/Nurse?
- Swelling well controlled?
- Wearing garments?

Legend:
- Red: No
- Blue: Yes

Count: 0, 5, 10, 15, 20
Patient Stories

**Patient A (initial assessment)**

- 39 year old female
- Family history of CVI
- Sedentary job
- BMI 41.2
- Weight increasing
- Not active at all
- Bilateral leg oedema

**Patient A (on telephone review)**

- Not wearing garments...
- Exercising three times weekly
- Healthy eating
- 2 stone weight loss
- BMI 34
- Leg oedema resolved
Patient Stories

**Patient B (initial assessment)**
- 72 year old male
- CVI
- BMI 37
- Inactive lifestyle

**Patient B (six month review)**
- Completed exercise scheme
- Joined and attending gym
- Wearing garments
- 1 stone weight loss
- BMI 34.5

“The class was very comprehensive. Thoroughly enjoyed the class – Staff made it fun while giving us the tools to look after ourselves and what to look for if further help is needed”
Patient Stories

Patient C
• 48 year old man
• Obesity related leg oedema
• BMI 68 on assessment
• Social isolation
• Long history of recurrent cellulitis and ulceration
• Poorly compliant
• Frequent non attender

“the class was the best thing I ever went to…”

Patient C
• Enjoyed social interaction
• No further cellulitis or ulceration
• BMI 64 after 6 months
• More active
• Compliant with skincare and compression therapy
• Empowered to self manage
Patient feedback

“I learned why my legs are swelling, importance of exercise ... I found the group exercises helpful”

What have you learned from your time at ‘Healthy Legs’?

“I have learned to keep exercising and wear my garments and to look out for any signs of infection. I found the classes very informative and enjoyed the exercises I did and will continue to do them”

“I now understand the problem with my legs and how to look after them. Enjoyed the class very much and was glad to have been referred to it.”

“Really enjoyed the class especially the exercises & hearing about other people’s legs problems & how they manage theirs”
Evidence for Healthy Legs Class

Does the evidence support a different treatment pathway?

Group based patient education for patients with chronic conditions
A literature scoping review identified that participants experienced the programs as beneficial according to less symptom distress and greater awareness of their own health, improved self-management strategies, peer support, learning and hope (Stenberg et al., 2016). Barlett (1995) showed for every dollar spent on patient education, four is saved.

Exercise in the management of venous leg ulcers
Kirsner 2018 produced a meta analysis of 5 small studies, and it suggested exercise offers an additional healing benefit in patients with leg ulcers (61% healed at 12 weeks in comparison to 41%)

Exercise in the management of arterial insufficiency
Cochrane systematic review by Lane et al., 2017 concluded there was high-quality evidence showing that exercise programmes provided important benefit compared with placebo or usual care in improving both pain-free and maximum walking distance in people with leg pain from intermittent claudication who were considered to be fit for exercise intervention.

Telephone reviews
Literature scoping review examined telephone consultations for people with chronic conditions. 47 articles were reviews and found this model can improve health behaviour, self-efficacy and health status. The review found that telephone-based coaching can enhance the management of chronic disease, especially for vulnerable groups. (Dennis et al., 2013)

Cost
For every £1.00 spent on lymphoedema treatments that limit swelling and prevent damage and infection, the NHS saves an estimated £100 in reduced hospital admissions (NCAT, 2013).
Review of recent referrals

- 57 referrals
- 25 referrals noted BMI

<table>
<thead>
<tr>
<th>BMI</th>
<th>Number of Patients</th>
</tr>
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<tbody>
<tr>
<td>20-24.99</td>
<td>1</td>
</tr>
<tr>
<td>25-29.99</td>
<td>6</td>
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<tr>
<td>30-39.99</td>
<td>6</td>
</tr>
<tr>
<td>40-49.99</td>
<td>6</td>
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<td>50-59.99</td>
<td>4</td>
</tr>
<tr>
<td>60+</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Diagnosis from referral</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipoedema</td>
<td>2</td>
</tr>
<tr>
<td>Cancer related lower limb</td>
<td>6</td>
</tr>
<tr>
<td>Cancer related upper limb</td>
<td>12</td>
</tr>
<tr>
<td>Chronic oedema</td>
<td>21</td>
</tr>
<tr>
<td>Chronic venous insufficiency</td>
<td>11</td>
</tr>
<tr>
<td>Dependency</td>
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</tr>
<tr>
<td>Neurological</td>
<td>1</td>
</tr>
<tr>
<td>?primary</td>
<td>1</td>
</tr>
<tr>
<td>Upper limb MSK</td>
<td>1</td>
</tr>
<tr>
<td>total</td>
<td>57</td>
</tr>
</tbody>
</table>
Thoughts?

• Lymphoedema/chronic oedema/obesity related oedema

• How do we develop our service to meet the changing needs of our patients?

• Are we sufficiently addressing the causative and contributing factors?

• Wider benefits to our patients – health promotion, peer group support?
Thoughts?

- Based on our findings and the evidence could this model be transferred to all our patient groups within lymphoedema?
- Way forward...?
References


