Physiotherapy - Prevention, Assessment & Treatment of Skin & Wound Care Issues

Survey Results & Analysis

Friday, January 08, 2010

Alison Hoens
Physical Therapy Knowledge Broker
UBC Department of Physical Therapy, Faculty of Medicine
Physiotherapy Association of British Columbia
BC Rehabilitation Sciences Research Network
Executive Summary

This report contains a detailed statistical analysis of the results to the survey titled *Physiotherapy - Prevention, Assessment & Treatment of Skin & Wound Care Issues*.

Background

The Practice Guideline Advisory Task Force from The Physiotherapy Association of BC (PABC) identified the prevention, assessment and management of skin & wound issues as one of three foci for 2009/2010. PABC, together with several partners (UBC Dept of Physical Therapy and the Interdisciplinary and OT Vancouver Coastal Health/ Providence Health Care Skin & Wound Care Committees and the VCH/PHC Physiotherapy Skin & Wound Knowledge Translation Group), are working to provide physiotherapists in BC with evidence-based, practical information and tools for skin & wound prevention, assessment & treatment.

The *purpose* of this survey was to ascertain current practice patterns for skin & wound care issues and needs and preferred strategies for supporting practice in this field. The information obtained from this survey will be used to inform a knowledge translation plan to enhance physical therapy prevention, assessment and treatment of skin & wound issues in BC.

Summary of results

The results analysis includes responses from 243 participants who completed the survey in the 33 day period from Friday, November 13, 2009 to Tuesday, December 15, 2009.

- **Experience**: The greatest percentage of respondents graduated 26 or more years ago (35.1%); the least percentage was those who graduated less than 2 years ago (6.2%).

- **Practice Setting**: Respondents practiced in the following order of settings – Acute care (45.3%), community (28.6%), private practice (18.9%), rehabilitation (15.6%), residential (13.6%) and other (8.6%).

- **Prevention of wounds**: 27.1% of respondents report that they currently undertake risk assessments for wounds. Of those who assess patients for risk of developing wounds, the two most commonly used risk assessment tools were the Braden Pressure Ulcer Risk Assessment (17.7%) and pressure mapping (5.8%).

- **Assessment of wounds**: 9.7% of respondents undertake a detailed assessment of wounds. The two most common sources of training for detailed assessment of wounds are theory-based inservices (9.9%) and practical workshops (6.8%). A total of 1.2% of respondents reported training at the recognized Canadian Association of Wound Care courses. With respect to use of recognized wound assessment tools the two most commonly used tools were the Ankle Brachial Index (4.9%) and Pixalere (4%).

- **Treatment of wounds**: With respect to treatment of wounds using electrophysical agents, the four most commonly utilized modalities (in descending order) were: hydrotherapy (12%), Low level laser therapy (9.3%), Ultrasound (4.8) and electrical stimulation (3.6%). Interestingly, this utilization pattern is a reversal to the evidence of effectiveness: electrical stimulation > ultrasound > LLLT.
Where PTs currently seek guidance on skin & wound care issues: The three most commonly reported sources (in descending order) were: other disciplines (81.5%), PT colleagues (42%) and practice guidelines (30%).

How PTs would like to learn more: Respondents reported preference (in descending order) for the following methods of learning more about skin & wound care issues: theory-based inservices (39.9%), practical workshops (36.2%), working with a mentor (34.6%), videoconferencing (28.6%), DVDs (20.6%), online courses (14.8%) and joining a network of colleagues (12.6%).

Second level of analysis: Association between years since graduation and prevention / assessment / treatment of skin & wounds

In order to ascertain whether there was an association between years since graduation with prevention, assessment and treatment of skin & wound care issues, cross-tabbing was undertaken.

Prevention: There was a tendency to greater use of a risk assessment tool with increased experience.

Assessment: There was no evident association between undertaking a detailed assessment and increased experience.

Treatment: There was no association for use of UVL, tendency to increased use for LLLT and US, and a reverse relationship for use of electrical stimulation more recently graduated therapists reported using electrical stimulation.

RECOMMENDED OBJECTIVES

- To increase the awareness of BC PTs re the importance of preventing wounds.
- To increase the number of BC PTs who utilize a wound risk assessment tool ie. Braden Pressure Ulcer Risk Assessment.
- To increase the number of BC PTs who utilize electrical stimulation for management of wounds.
- To provide BC PTs with access to skin & wound care resources in order to aid evidence-informed decision-making for prevention, assessment and treatment.

RECOMMENDED STRATEGIES TO ACHIEVE OBJECTIVES

- Develop and disseminate targeted messages to be distributed through PABC and via public and community practice avenues regarding the importance of preventing wounds.
- Develop and disseminate learning resources to support use of the Braden Pressure Ulcer Risk Assessment Tool.
- Develop and disseminate learning resources to support use of electrical stimulation for management of wounds.
- Develop and post on the PABC and UBC Dept of PT websites an inventory of skin & wound care resources which include links to websites, tools to guide application of estim, listing of courses and a directory of experienced PTs who may be contacted as ‘mentors’.
1) How many years have you worked since graduating as a physiotherapist?

![Number of Years Since Graduation](chart)

2) What is your area of practice? (choose all that apply)

![Practice Setting](chart)

Other Responses:

<table>
<thead>
<tr>
<th>Practice Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convalescent Geriatric</td>
</tr>
<tr>
<td>Outpatient physio in hospital</td>
</tr>
<tr>
<td>Outpatients and cast clinic, hospital</td>
</tr>
<tr>
<td>Outpatient Rehab</td>
</tr>
<tr>
<td>Neonatal follow up clinic</td>
</tr>
<tr>
<td>Research and Evaluation as well.</td>
</tr>
<tr>
<td>Mostly outpatient and arthritis clinics</td>
</tr>
<tr>
<td>Clinical Educator in public hospital</td>
</tr>
</tbody>
</table>
3) Do you currently aid in prevention of wounds by assessing patients for risk of developing wounds (e.g. use a risk assessment tool such as the Braden Pressure Ulcer Risk Assessment)?

<table>
<thead>
<tr>
<th>Assessing for Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Percentage of respondents</td>
</tr>
<tr>
<td>27.1</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

- Hospital outpatient department
- Outpt dept of health unit
- Out Patient Ortho
- Orthotics only
- On study leave
- Hands
- Athletic trainer for a hockey team
- Workers’ Compensation
- Combo outpatients, LTC, community
- Outpatient rheumatology
- Hand Therapy
- Convalescent care/hospital outpatients
- Sole charge
- University clinic
- Practice Leader
- General practice in hospital and community
- Transitional care/ discharge planning
- General Practice (Acute, rehab and private practice)
- Primary health care
4) If you answered yes to the previous question, which wound risk assessment tool(s) do you currently use?

<table>
<thead>
<tr>
<th>Risk Assessment Tool</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braden</td>
<td>17.7%</td>
</tr>
<tr>
<td>Norton</td>
<td>0%</td>
</tr>
<tr>
<td>Semmes</td>
<td>2.4%</td>
</tr>
<tr>
<td>Monofilament</td>
<td>3.7%</td>
</tr>
<tr>
<td>ABPI</td>
<td>5.8%</td>
</tr>
<tr>
<td>Pressure Mapping</td>
<td>3.7%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Other Responses:
- VIHA's Skin Integrity Risk Assessment
- OTs in our hospital do this
- OTs responsible for this on site.
- Lower extremity assessment from Alberta
- Observation
- Education for outpatient + skin monitor
- Nursing do this routinely on my ward
- When equipment is available
- Observation and client/parent concern
- Not using a standardized ax tool, help OTs
- OT on team does Braden Assessment
- Experience, observation, interview
- Visual skin inspection
- Don't use any
- SIRA
- Sharp/Dull Testing, 2 pt discriminator
- Report observations back to OT/RN
- No formal tool - knowledge + experience
- Assessing w/c cushions and footwear
5) Assessment of wounds can be basic (e.g. deep/superficial, approximate size) or very detailed (e.g. staging system for pressure ulcers [NUPAC]; measure size, depth or volume, determine presence of undermining; determine type of wound [pressure, arterial, venous or mixed] etc). Do you undertake detailed assessments of wounds?

![Detailed Assessment of Wound](chart)

6) If you answered yes to the previous question, what specific training have you had the opportunity to take? (Choose all that apply)

![Training for Wound Assessment](chart)

**Other Responses:**

<table>
<thead>
<tr>
<th>Type of Training</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team does this together or nurses alone.</td>
<td></td>
</tr>
<tr>
<td>Capital Health in house training, AB</td>
<td></td>
</tr>
<tr>
<td>Previous training at work, Hand Unit WCB</td>
<td></td>
</tr>
<tr>
<td>CAWC course</td>
<td></td>
</tr>
<tr>
<td>Royal Alex Debridement group</td>
<td></td>
</tr>
</tbody>
</table>
Collaborate with hand therapists
Worked in USA - more physio wound care
American Burn Conferences
Nurses on team document wound assessment
Interprfsnl Wnd Mgt: Adj Mods (U of Wes.)

7) There are a number of wound assessment tools. Please indicate how familiar you are with each of the following:

![Awareness of and Use of Wound Assessment Tools](chart)

Comment Responses:

PPG
I work with acute not chronic wounds
Also use Toe ppgs
This hospital uses Pixalere
This is done by the RN's & Wound care RN
Rarely see wounds in my job.
Never treated wounds... don't want to.
Nurses on team do Pixalere entries
I work in paeds- these tools not used
8) Please indicate how familiar you are with the use of the following electrophysical agents (EPAs - e.g. Ultrasound, LASER etc.) to treat wounds.

<table>
<thead>
<tr>
<th>Electrophysical agent</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not familiar</td>
<td>27.2</td>
<td>1.8</td>
<td>23.6</td>
<td>39.2</td>
<td>4.8</td>
<td>3.6</td>
<td>42.7</td>
<td>45.3</td>
<td>12</td>
</tr>
<tr>
<td>Familiar, not use</td>
<td>71.1</td>
<td>67.1</td>
<td>67.1</td>
<td>55.9</td>
<td>53.4</td>
<td>53.4</td>
<td>45.3</td>
<td>45.3</td>
<td>12</td>
</tr>
<tr>
<td>Use</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Comment Responses:

- Used to use UV ++ years ago
- We have wound nurse who assesses wounds
- Used hydrotherapy in acute care
- VAC is also available in our HA.
- We rarely have ulcers on our ward.
- No equipment available in my facility
- Work in community pediatrics.
- Hydro - isn't that old school?
- No access to some equip
- Rarely any more
- No access to any of these in acute care
- Not appropriate in pediatrics
- Haven't needed to rx a wound but could
- Aware of UV, laser, and US not details
- Took e-stim course, equip not available
- I don't actually treat wounds
- For use in Hand Therapy
- Residential care is not equipped
9) If you are uncertain as to the best intervention to treat a patient’s wound, where do you go to obtain guidance? (Choose all that apply).

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT colleague</td>
<td>42</td>
</tr>
<tr>
<td>PT supervisor</td>
<td>16.9</td>
</tr>
<tr>
<td>PT educator</td>
<td>16.9</td>
</tr>
<tr>
<td>Other disciplines</td>
<td>81.5</td>
</tr>
<tr>
<td>Texts</td>
<td>25.5</td>
</tr>
<tr>
<td>Articles</td>
<td>25.9</td>
</tr>
<tr>
<td>Practice Guidelines</td>
<td>30</td>
</tr>
<tr>
<td>Internet</td>
<td>15.2</td>
</tr>
<tr>
<td>PABC librarian</td>
<td>11.1</td>
</tr>
<tr>
<td>Other librarian</td>
<td>12.3</td>
</tr>
<tr>
<td>Other</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Other Responses:
- VIHA Wound and Skin Care intranet site
- Wound care consultant for region
- Home care nurse
- Cochrane Collaboration and DARE
- Wound nurse, plastic surgeon available
- CAWC
- Wound specialist. OT for seating
- A nurse or OT
- Ask the doctor in charge
- I have never been asked to do wound tx
- Nursing Wound Care Specialist
- I would need to take a course
- OTs or wound care nurse
- University Professor
- Wound Care Nurse
- Don't treat wounds directly
- Outreach seating & positioning /SunnyHill
- Don't
- Refer elsewhere
- I do not treat wounds
- Wound Care Clinician, clinical team
Physiatrist
Cochrane review
Occupational therapy colleague
Course info - Pamela Houghton
Consult Van Coastal H. Com Physio Dept
Nursing staff
OT
Refer them to another treatment source
Do not treat wounds
Again I don't treat wounds
Consult our team physician
OT Senior
Plastic Surgeon at Hand Clinic
OCCUPATIONAL THERAPY

10) Please rate how likely you would be to use one of the following methods to obtain more information/guidance on preventing, assessing and treating skin & wound issues

**Preferred Method for Education on Skin & Wound Issues**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inservice, theory</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>Videoconf., theory</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>Workshop, practical</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>Mentor</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>Network</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>Online course</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
<tr>
<td>DVD</td>
<td>Highly unlikely 30%, Possibly 40%, Highly likely 30%</td>
</tr>
</tbody>
</table>
The following section explores the association between the responses regarding prevention, assessment and treatment and the years of experience indicated by years since graduation.

1. Prevention: Assessing for Risk

![Years since graduation by assessing for risk](image)

2. Assessment: Detailed Assessment

![Years since graduation by doing a detailed assessment](image)

3. Treatment: Use of Ultraviolet Light

![Years since graduation by use of UVL](image)
4. Treatment: Use of Low level laser light (LLLT)

5. Treatment: Use of Ultrasound (US)

6. Treatment: Use of electrical stimulation (Estim)