

**Nursing and Allied Health Abstracts**

**Title:** THE DEVELOPMENT OF LOWER EXTREMITY SKIN EVALUATION AND EDUCATIONAL TOOLS BASED ON A NATIONWIDE SURVEY OF SPINA BIFIDA CLINICS

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**Background:** At Gillette Lifetime Specialty Healthcare Clinic, a chart review of over 100 patients with spina bifida showed that 90% of patients aged 16 and above had at least one area of insensate lower extremity (L/E) skin. 78% of these patients had had previous significant L/E injuries and 7.5% had undergone L/E amputations.

When we first started to see spina bifida patients in 2002, only the physical therapist evaluated patient's feet and provided face-to-face education. We had no formal evaluation or educational tools and wanted to learn what tools might work best.

**Method:** In order to determine best practices in the USA, surveys about L/E skin evaluation and educational practices were sent to 100 spina bifida clinics in the US, and returned by 45. There were both multiple choice and free text questions to see what was and was not working well in lower extremity skin care programs, in addition to questions about which providers performed the L/E evaluation and education, what was assessed or instructed, and how often feet were evaluated and education was provided.

**Results:** 62% of clinics reported that feet were examined at each visit, and 27% provided education at each visit. 58% of clinics provided L/E education based on presenting issues. Nurses provided skin care education at 64% of clinics, PT's at 56% and MD's at 78% of clinics. A majority of clinics had multiple providers examining and educating about L/E skin care.

None of the responding clinics utilized any type of formal examination or educational tools.

Based on these findings, foot screening and foot evaluation forms were developed. In addition, an entire L/E educational packet was developed, including a Gillette-made 11' long skin care DVD, a 10-page long skin care brochure and a bath thermometer. This packet is offered to all patients with spina bifida, in conjunction to direct education by nursing and PT. During every evaluation, skin color, hygiene, vascularity, sensation using a 5.07 gram monofilament, shoe and sock selection and fit are examined

**Conclusion:** A team approach, where multiple providers examine feet and provide education seems to work well. This reinforces the importance of L/E skin care and may help to overcome executive functioning difficulties which are common in those with SB. It is essential to have handouts and helpful to have a visual tool, such as the skin care DVD to help with follow through. Foot evaluations are best done in a formal manner, with consistent documentation.