Visual Impairment and Diabetes
Friday February 11 2005
DEN

A Call for Change…

- 2002 focus group study, conducted at the Cleveland Sight Centre identified three main issues:
  1. A lack of access to up-to-date diabetes information in an accessible format
  2. A lack of understanding by healthcare providers of the needs and competencies of people with both visual impairment and diabetes
  3. A lack of access to nonvisual diabetes self-management equipment

Teaching Techniques

- First assess the person’s visual and non-visual abilities and readiness to learn
- Ensure that the person has been referred to the local resources for blindness rehabilitation and low-vision services (CNIB)
- Handouts must be in accessible format that is preferred by the individual (large print, Braille, audio tape/disc or electronic file).

Teaching Techniques

For people with low vision, materials should be

- Printed in 14-16 point or larger footed font (e.g., Times New Roman), simple, bolded
- Using computer or a black felt-tip marker
- On ivory or light yellow paper (to limit glare)

For people with minimal to no vision

- Tape record sessions

Check out the Concensus Reports for Producing Education Materials in document and video form. The Diabetes Educator 1999; 25(5): 695-715.
Self-management tools: SMBG

- Be aware of the client’s underlying eye conditions and the functional implications of these conditions.
- Determine the client’s prior knowledge and experience with SMBG devices.
- Have the client visually and tactfully explore the equipment and its setup before working through the teaching process.

Self-management tools: SMBG

Challenges with SMBG include:
- Proper orientation of test strip, for some meters
- Inserting the test strip for some meters
- Obtaining and identifying a sufficient blood sample
- Determining the location of the blood sample on the finger
- Proper placement of the blood sample on the strip

Resources for Products

www.LS&Sp.com
- Toll Free 800-468-4789
- TTY 866-314-8533

www.MaxiAids.com
- 1-800-522-6294
- TTY 1-800-281-3555

Others:
www.independentliving.com
www.lowvision.org
www.medicool.com
Science Products/Captek,
Myna Corporation
AutoControl

Self-management tools: SMBG

One Touch Profile®
- Meter is discontinued
- Can still be obtained in limited quantities
- No cost through LifeScan main office following the purchase of the voice box
- Strips are still available

Voice Box
- $200-$400, LS&S, MaxiAids,
AutoControl, Science
Products/Captek, Myna
Corporation
Self-management tools: SMBG

**One Touch Basic®**
- Meter is discontinued
- Can still be obtained in limited quantities
- No cost through LifeScan main office following the purchase of the voice box
- Strips are still available

**Voice Box**
- $200-$400, LS&S, MaxiAids, AutoControl, Science Products/Captek

**Sure Step®**
- Meter is discontinued
- Can still be obtained in limited quantities
- No cost through LifeScan main office following the purchase of the voice box
- Strips are still available

**Digi Voice®**
- $225, LS&S, MaxiAids, AutoControl, Science Products/Captek
Self-management tools: SMBG

Accu-Chek VoiceMate®
- “…the only talking meter available at this time that can be operated 100 percent by a blind individual, without sighted aid.” Voice of the Diabetic
- Can only be ordered from the US
- $495, LS&S, MaxiAids

Sure Drop®
- For use with the One Touch Profile and Basic meters
- Directs hanging drop of blood onto the test strip
- $25, LS&S, MaxiAids, Science Products/Captek

Smart Dot
Self-management tools: SMBG

Sure-Guide®

- For use with the Sure Step meter
- Directs drop of blood onto the test strip
- $25, LS&S, MaxiAids, Science Products/Captek

Self-management tools: SMBG

Tactile Modifications

- Surface savers
- T-shirt paint, Puffy Paint (in bright, contrasty colours)
- Dollar stores, craft stores, CNIB
Tactile Modifications

- Examples

Self-management tools: SMBG

General tips that may help:
- Choose contrast colour strips
- Choose strips with tactile features (notches, curves, raised areas)
- Insert strip ½ way into meter before lancing the finger
- Determine the presence of blood by dabbing on high contrast material first
- Move the monitor and strip to the blood sample
- Use a finger of the non-tested hand to mark the test site
- Repetition, repetition, repetition
Self-management tools: Insulin

Tactile labeling of syringes

- Rubber bands
- Tape

Self-management tools: Insulin

- MagniGuide®
  - Company: B-D
  - Suitable for people with residual vision
Self-management tools: Insulin

Syringe Loading
- Insul-Cap, $8, MaxiAids
- Center-Aid, $5, MaxiAids

Self-management tools: Insulin

Count-A-Dose®
- Cost: $55, LS&S
- Allows for insulin mixing in ½ cc (1cc discontinued)
- Can get difficult to use with larger doses of insulin
Self-management tools: Insulin
Self-management tools: Insulin

Thumb on dial
Self-management tools: Insulin

**Syringe Support®**
- To draw up insulin(s) into a syringe
- Cost: $26, Cleveland Sight Centre’s Eye-Dea Shop (216) 791-8118 ext 278

**Unicalaid®**
- To draw up insulin(s) into a syringe.
- Has 2 dose settings which must be pre-set by a sighted person
- Murakami Clinic (604) 869-5648

I couldn’t find pictures for these...

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**Self-management tools: Insulin**

**Insulin Pens**
- Audible clicks when dialing up insulin dosage
- # of days in use must be recorded
- Can mean more shots

**Insulin Doses**
- Similar features to pens
- Added convenience of a memory for last shot taken
- Relies on batteries
Self-management tools: Insulin

**Insulin Pen Magnifiers**
- May be suitable for people with residual vision

**Pen Needle Removers**
- For safe attachment and removal of needles.

Self-management tools: Insulin

**Injection Aids**
- Instaject II, MaxiAids
- Inject-Ease, B-D
- Needleaid, $20, Needleaid Ltd., can order from any pharmacy in Canada
Education tools: Healthy eating

Tactile Models of Food
- Nasco food models help to give a sense of portion sizes.

Self-management tools: Footcare

Telescoping Mirrors
- Requires vision
- $12, MaxiAids
Recommended References


Recommended References


Tools for Daily Living

Medications
- Portable Pill Box
Medications
- Labeling with rubber bands

Tools for Daily Living cont’d

Labeling items
Tools for Daily Living cont’d

Labeling items

Tools for Daily Living cont’d

Labeling items
Tools for Daily Living cont’d

Labeling items

Tools for Daily Living cont’d

Reading
- Magnifiers
Tools for Daily Living cont’d

Scheduling
- Large print Calendars

Tools for Daily Living cont’d

Scheduling
- Large print day planners
Tools for Daily Living cont’d

Meal preparation
- Extra length oven mitt for safety

Tools for Daily Living cont’d

Meal preparation
- Cup sensors for detecting fluid levels
Tools for Daily Living cont’d

Meal preparation
- Plates

Tools for Daily Living cont’d

Clothing Labeling