To the Point: the development and evaluation of a website about Diabetes for adults with intellectual disability and their care providers

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Purpose

• To develop information about diabetes and diabetes management for people with intellectual disability (and diabetes) and their care providers

Living with diabetes

• Everybody is susceptible to diabetes
• People with intellectual disability generally have poorer health and poorer activity regime
• Having diabetes can cause feelings of being overwhelmed for the person
• Burden of care is higher whether care provider or the person with diabetes

Literature/web search

• No easy-to-access information about diabetes and disease management for people with cognitive impairment
• Website review - patient education on diabetes mellitus - 214 sites of which none had information suited to people with cognitive impairment.

Method - design

The design process was collaborative with adults with intellectual disability, care providers, and professionals (n=76) in 39 focus groups.

Web vs Print

• Advantage of web-based information - low cost, de la moda
• Disadvantage - computers may not be commonly used by people with intellectual disability; access to computers is limited by poverty; if person needs assistance from support workers to use a computer, it may compromise privacy.
• We produced BOTH
Trial of printed information

15 people with intellectual disability and diabetes
31 care providers

"Delivering diabetes care to people with intellectual disability"

Tool outcome

• To the Point information kit for people with intellectual disability who have diabetes and their carer providers.
• Printed format was revised for website design.
• Web design of To the Point was devised using the W3C Guidelines [http://www.w3.org/TR/WCAG10/].

Information needs

For people with intellectual disability and often for their care providers:
– specific educational needs such as repetitive and graphic information;
– plain language & jargon free;
– time in a daily schedule to take in new information is limited;
– any information has to be easy to access;
– information has to be relevant;
– information has to be utilisable by a range of educational backgrounds

Development - content

• Material available for the general public
• Recognised websites, journals, books and pamphlets
  – Special educator
  – Graphics design
  – Editor
  – Diabetes educators
  – Copyright lawyer
  – Endocrinologist
  – General practitioner
  – Occupational therapists
  – Nurses
  – Nutritionists
  – Podiatrists
  – Service managers
  – Pharmacist
  – Clinical biochemist
Web pages design
Web page designer assisted with:

- Fitting it to W3C international guidelines for people with disability;
- Making it bright, positive and easy-to-negotiate;
- Putting in all graphics;
- Making it interactive with action plans;
- Presenting people with intellectual disability in a positive way;
- Making it easily printable;
- Ensuring Google search top listing.

Web pages - useability

- Utilitarian for varied audiences;
- Look standardised;
- Useability frameworks applied;
- Style sheets to match assistive readers;
- Increase the contrast of text and text size;
- Bigger fonts - low vision and glaucoma;
- Level of contrast - white space;
- Graphics four times bigger than printed version;
- More than one sensory channel for input;
- Colours matched for colour blindness.
Moving through pages

- Navigation is uncomplicated
- Lengths of text on one page per topic to avoid losing the reader by forcing them to skip to the next page;
- Because not every user has wide screen, the pages are designed to fit any size screen through any browser and across platforms (IBM, Macintosh);
- User can track back via ‘bread crumb’ system to main menu.

Printing web pages

- Print icon is clearly legible at all times and remains the same position;
- When print command chosen, graphic components disappear & document printed coherently + page numbers + current date.

Different audiences

- Distinction made in information type, presentation and language between the information for the person with intellectual disability and the care provider.
Limitations
- Depends on access to computer/internet
- Potential improvements include:
  - With 30% of people with intellectual disability having hearing impairment, audio boards with a voice-over could make the tool more attractive to many
  - Font could be increased for the severely visually impaired
  - More interactive in style

Success
- Where none existed, now there is a web page specifically for people with diabetes who also have intellectual disability
- End-user involved in development
- Targeted at needs of person and their direct care provider rather than professionals
- Accessed 850 times per month on average

Applicability
- Given ready accessibility of information, may prove useful to people with low English literacy


thank you! any questions?