

Applying Usability Principles in Developing a Clinical Screening Tool for Poverty in Primary Care

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CONTEXT

Printed educational materials (PEMs) can be used to communicate clinical information to primary care providers (PCPs) to effectively address their patients' unique needs. Elements of user-centred design were applied to enhance an existing point-of-care clinical tool to screen for poverty in primary care practice.

This work was undertaken by the Centre for Effective Practice (CEP). CEP is collaborating with the Ontario College of Family Physicians (OCFP) and the Nurse Practitioners' Association of Ontario (NPAO) on the Knowledge Translation in Primary Care Initiative. The purpose of the Initiative is to improve engagement and enhance communication with primary care providers across Ontario.

OBJECTIVE

- To describe the application of user-centred design elements in the development of a clinical tool for primary care practice.
- To educate primary care providers on the use of a point-of-care clinical tool that proposes a three-step approach to addressing poverty in a primary care office: screening, adjusting risk, and intervening.

APPROACH

A rigorous framework that incorporates elements of integrated knowledge translation and user-centred design (UCD) was utilized to enhance an existing version of a poverty screening tool. A comprehensive search and appraisal of the literature was conducted, and evidence-based recommendations were developed in partnership with a clinical lead. Several UCD-based evaluations were conducted, including the System Usability Scale (SUS), heuristic testing, and prototyping sessions with target end users. These activities were conducted in consultation with a user designer to draft a revised version of the tool. The overall process of revising the clinical screening tool is displayed in Figure 1.

Participants

Iterative testing of several prototypes were conducted with primary care providers as well as with external stakeholders to develop the final version of the clinical tool (Figure 1). Primary care providers were engaged throughout this process, through their participation in focus groups (n = 11) as well as prototyping sessions (n = 6). Initial focus groups with PCPs allowed for the determination of existing gaps and barriers within primary care clinical practice, while subsequent rounds of one-on-one prototyping sessions revealed valuable insight and information on target end user needs and preferences. User feedback was incorporated into design considerations as prototypes of the tool were revised and finalized.

Intervention

The clinical tool is designed as a point-of-care tool to assist providers in identifying patients affected by poverty (Figure 2). The tool utilizes a simple, 3-step approach to:

- assist providers in initiating discussions with patients using a validated screening question;
- consider the health impacts due to poverty and appropriately adjust risk, and importantly
- provide options for intervening and advocating on behalf of their patient.

RESULTS

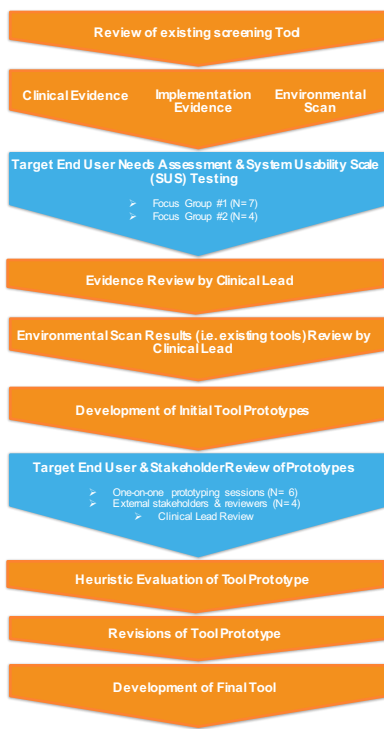


Figure 1. Process of adapting an existing clinical screening tool. An integrated knowledge translation and user-centred design approach was utilized to revise an existing clinical tool. Both internal processes as well as the engagement of target end users and key stakeholders was conducted.

Figure 2. The Poverty: A Clinical Tool for Primary Care Providers. The clinical screening tool was adapted from the 2013 version: *Poverty: A Clinical Tool for primary care in Ontario*. The current clinical tool is designed as a point-of-care tool to assist providers in identifying patients affected by poverty. The tool utilizes a simple, 3-step approach to address poverty in a primary care office: screening, adjusting risk, and intervening. Key resources and programs for both providers and patients are included in the tool, and can be tailored for each province.

CONCLUSIONS

The enhanced *Poverty: A Clinical Tool for Primary Care Providers* was launched November 2015, and is designed to effectively support primary care providers in their approach to screening for poverty within primary care practice. Key resources and programs for both providers and patients are included in the tool.

The clinical tool has been incorporated into workshops, CME sessions and accredited Mainpro sessions to educate and train both family physicians and primary care nurse practitioners in screening their patients, appropriately adjusting risk and intervening on behalf of their patients. Further dissemination activities, as well as evaluation of the uptake and use of the clinical screening tool, are ongoing and planned throughout the coming year.

Get Involved

CEP engages providers and stakeholders as often as possible in our tool development processes and related projects. If you would like to:

- Provide feedback on clinical tools
- Receive our newsletter
- Participate in Clinical Working Groups

Please visit effectivepractice.org and join the conversation.

www.effectivepractice.org/poverty