



Patient and Physician Views on Electronic Chronic Disease Management for Vascular Health

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INTRODUCTION

COMPETE (Computerization Of Medical Practices for the Enhancement of Therapeutic Effectiveness) is Canada's original electronic health record (EHR) and decision support research network and specializes in the rigorous development, implementation and evaluation of clinical e-health technologies.

The COMPETE III study enrolled 1102 patients from 50 physician practices across Ontario. Patients were randomized to receive the COMPETE III Vascular Tracker (Intervention) or usual care (Control), and were followed for 12 months.

BACKGROUND

Chronic disease management programs using electronic technologies are being implemented in healthcare but little is known about the benefits and preferred use by patients and physicians. The COMPETE III (CIII) program developed a Web-based, individualized vascular tracker (VT) providing current findings and results, brief advice and best evidence related to 16 key vascular risk variables (see screen shot). The tracker system was shared by the patient, their physician and a clinical care coordinator (CCC).

PURPOSE

This sub-study was designed to apply 2 qualitative methods - in-depth individual interviews and structured focus group sessions, to evaluate the benefits and limitations of our electronic vascular risk management program.

METHODS

The interviews were conducted by telephone with patients and in-person with physicians. The interviewer explored the likes, dislikes, benefits and suggested improvements to the program. Twenty patients and sixteen physicians were interviewed by the time saturation was reached.

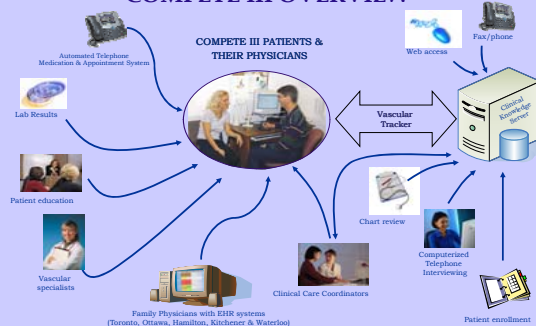
The focus group sessions, explored similar themes plus potential future use of such systems. The focus groups conducted in person with a moderator consisted of 3 separate physician groups; COMPETE EMR using, Non-COMPETE EMR using and Non-EMR using physicians. There were 2 separate patients groups representing both the control and intervention arms of the COMPETE III study. Twenty-one patients and fifteen physicians participated in the focus groups.

Both qualitative formats used theme saturation to define sample size.

RESULTS

Although the face-to-face interviews were more direct in capturing key points on where the program excelled or could use improvement, the focus groups revealed a more detailed description of the positive and limiting attributes of the COMPETE III Program, as well as suggested improvements and financial support.

COMPETE III OVERVIEW



COMPETE III VASCULAR TRACKER



The CCC and VT were seen as the best features of the COMPETE III Program. The two tables below describe some similar themes that emerged from both (Qualitative) methods (n = 41 patients, 33 physicians) in total.

BENEFITS	
PHYSICIANS	PATIENTS
Qualitative Questionnaire	
<ul style="list-style-type: none"> All physicians (16) felt they learned important clinical and organizational lessons from COMPETE III participation Seeing patients more often resulted in modifications to their vascular disease management accomplishments, even in "well managed" patients 	<ul style="list-style-type: none"> Patients did realize real health benefits from study participation Patients felt seeing the physician more often was valuable to their health
Focus Groups / Workshops	
<ul style="list-style-type: none"> CIII Vascular Tracker displayed standardized, organized patient information in one place Patient visits were more focused The ability to easily share results Their patients felt more empowered 	<ul style="list-style-type: none"> Patients noted an increased sense of responsibility to monitor their health Improved communication with their physicians in reviewing their health status (using VT) Empowered them with information and explanations and were encouraged with goal setting (by CCC)

LIMITATIONS	
PHYSICIANS	PATIENTS
Qualitative Questionnaire	
<ul style="list-style-type: none"> Slow start up inhibited some physicians developing good practice habits and allowing patients to engage in good health behaviors Additional effort required by physicians to review and act on the additional information provided Technology limited, expectations not met 	<ul style="list-style-type: none"> Slow start to the study Intervention, made some patients more passive and less motivated to change The perception that the communication about their health was uni-directional, not two way Personal data was not always up to date
Focus Groups / Workshops	
<ul style="list-style-type: none"> Physicians did not want to take on the burden of paying for and training the CCC-it takes time Some physicians felt the data entry "hump" at the beginning was a challenge Time needed to organize charts for EMR use and input data in templates 	<ul style="list-style-type: none"> Patients were concerned about the cost and their ability to use the computer Some patients were concerned the CCC would need to know what the physician did and their ability to correctly interpret this was questioned

IMPROVEMENTS

Patients suggested that support groups would be beneficial for comparison discussions and a source of patient advocacy.

The media and public relations were suggested as drivers to help promote/adopt the COMPETE III program.

Templates and display of data could be enhanced slightly for improved useability. Financial support from the government for the COMPETE III program was suggested by both physicians and patients, to improve quality of vascular risk management.

CONCLUSIONS

High quality qualitative research is valuable to supplement quantitative results when examining reasons for success, failure and sustainability of e-health technologies.

