

Title of Intervention: Study of Cardiovascular Risk Intervention by Pharmacists (SCRIP)

Intervention Strategies: Individual Education, Supportive Relationships, Provider Education

Purpose of the Intervention: To improve the process of cholesterol risk management in patients at risk for coronary heart disease events

Population: Pharmacy clients who are at risk for cardiovascular events

Setting: Network of 54 community pharmacies in two western Canadian provinces; health care facility-based

Partners: Pharmacies, Heart and Stroke Foundation

Intervention Description:

- Individual Education: The pharmacist measured the client's serum total cholesterol. The value was recorded on an information booklet. The pharmacist also distributed brochures and teaching aids according to the client's risk factor status.
- Supportive Relationships: The pharmacist followed up with patients to provide further education, reinforce adherence to medications and answer questions.
- Provider Education: If the client was at risk, the pharmacist completed a Pharmacist-Physician Contact Form. The form was faxed to the client's health care provider along with a cover letter explaining the purpose of SCRIP. The form indicated that the patient was at risk for cardiovascular disease, provided medication history and recommended for further testing, counseling or medication. The form served as a cue to health care providers to address heart disease related issues.

Theory: Not mentioned

Resources Required:

- Staff/Volunteers: Pharmacists
- Training: Not mentioned
- Technology: Computer, printer and fax machine
- Space: Consultation space at pharmacy
- Budget: Not mentioned
- Intervention: Pharmacist-physician contact form, access to patient medical history, serum cholesterol test, information booklets for patients, brochures, teaching aids, telephone
- Evaluation: Survey, access to medical and pharmacy records

Evaluation:

- Design: Randomized multicenter trial
- Methods and Measures:
 - Cholesterol measurement
 - General Satisfaction with Pharmacy Services Scale measured change in satisfaction with pharmacy services
 - SF-12 (short form version of Medical Outcomes Study) questionnaire measured general health status
 - Health care provider feedback interviews assessed utility and methods of communication
 - Patient medical record assessed health care provider actions

Outcomes:

- Short term Impact: A significantly larger portion of the intervention population obtained a measurement of fasting cholesterol and new prescription from their health care providers. Clients reduced their 10-year risk of cardiovascular disease, their total cholesterol and their systolic blood pressure significantly decreased at the end of the 4 month period.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: The results of the program conclusively demonstrate the value of the community pharmacists' intervention on the process of cholesterol risk management in individuals at high risk for cardiovascular events. Individuals reduced their cardiovascular risk. Incremental costs appeared minimal.

Citation(s):

Tsuyuki, R. T., J. A. Johnson, et al. (2002). "A randomized trial of the effect of community pharmacist intervention on cholesterol risk management: the Study of Cardiovascular Risk Intervention by Pharmacists (SCRIP)." *Arch Intern Med* 162(10): 1149-55.

Tsuyuki, R. T., et al. (1999). "Study of Cardiovascular Risk Intervention by Pharmacists (SCRIP): a randomized trial design of the effect of a community pharmacist intervention program on serum cholesterol risk." *Ann Pharmacother* 33(9): 910-9.

Simpson, S. H., J. A. Johnson, et al. (2001). "Economic impact of community pharmacist intervention in cholesterol risk management: an evaluation of the study of cardiovascular risk intervention by pharmacists." *Pharmacotherapy* 21(5): 627-35.

Simpson, S. H., J. A. Johnson, et al. (2004). "Greater effect of enhanced pharmacist care on cholesterol management in patients with diabetes mellitus: a planned subgroup analysis of the Study of Cardiovascular Risk Intervention by Pharmacists (SCRIP)." *Pharmacotherapy* 24(3): 389-94.

Yamada, C., J. A. Johnson, et al. (2005). "Long-term impact of a community pharmacist intervention on cholesterol levels in patients at high risk for cardiovascular events: extended follow-up of the second study of cardiovascular risk intervention by pharmacists (SCRIP-plus)." *Pharmacotherapy* 25(1): 110-5.