RESEARCH ROUNDup

Keep up to date with new Australian primary health care research

ISSN 1839-6348

Issue 9
November 2009

L Isherwood
L Kalucy

Evaluation of chronic disease management in primary health care

Rigorous evaluation of health care interventions can provide the evidence needed to improve patient outcomes and to inform decisions regarding future initiatives. *A Healthier Future for all Australians* emphasises "knowledge-led continuous improvement, innovation and research" and a "greater investment in public health, health policy and health services research including ongoing evaluation of health reforms".[1]

This *RESEARCH ROUNDup* follows on from *RESEARCH ROUNDup: Chronic disease self-management.* It covers evaluation research which is being undertaken within Australian primary health care in the field of chronic disease management (CDM).

What is Evaluation Research?

Evaluation research seeks to determine the quality, value or importance of something. Within primary health care, evaluation research can inform decisions about implementation or continuation of programs, whether improvements are required within existing programs, and the effectiveness of policy implementation.

There are many different types of evaluation research[2] however the strategic purpose of evaluation is usually targeted at one of two ends: *formative (process) evaluation* or *summative (outcomes) evaluation. Formative evaluation* seeks to explore how a particular service or program is working to find potential areas for improvement. To be valuable, formative evaluation needs to assess program strengths and weaknesses, whether outcomes are being met, and any difficulties regarding implementation. *Summative evaluation* seeks to determine the overall impact or value of an intervention. Rigorous summative evaluation requires a controlled study design so that results can properly be attributed to the interventions.

Evaluation of CDM

Evaluation research in the field of chronic disease has been increasing its prominence in health service policy and interventions. Because evaluation plays such an important role in expanding the knowledge base about effective CDM, evaluation research should be viewed as an integral part of an initiative rather than an add-on,[3] with costs factored into the initiative and appropriate data collected throughout the program. Whilst evidence of the effectiveness of CDM interventions is growing, research is required about transferring approaches to real-world settings and developing programs that promote the engagement of patients, clinicians, and organisations in primary health care.[4]

Published evaluation studies within journals tend to describe evaluations of national or state initiatives. However the great majority of evaluation research in health is not published or disseminated widely as most evaluations are conducted on a small-scale on locally based services with modest funds.[5] This impedes shared learning about what works, and what doesn't, amongst policy makers and health service providers.

Recent Australian studies within the primary health care setting have focused on formative evaluations of diabetes programs,[6,7,8] mental health care,[3] incontinence,[9] asthma,[10] heart failure management,[11,12] coordinated care,[12] multi-disease initiatives,[13,14] and chronic disease self-management projects.[15,16] These evaluations utilised a variety of quantitative and qualitative methods: key informant interviews and focus groups, questionnaires, program data, and cost estimations. As is necessary for a formative evaluation, many studies sought the perspective of the different stakeholders affected by the intervention (GPs, program staff, clients, carers).

Lessons from CDM evaluation research

BARRIERS AND ENABLERS FOR CDM PRACTICE

Despite the range of topics, these evaluations identified a number of common factors influencing CDM practice in Australian PHC initiatives.

Enabling factors were:

⇒ strong relationships with local health services[15]
⇒ multidisciplinary care involving nursing and allied health[17]
⇒ successful collaboration between health providers[7,12]
⇒ CDM being congruent with clinicians' values and roles[16,18]
⇒ observed positive patient outcomes[7,9,16]
⇒ having a systematic approach to clinical care[8]
⇒ practice accreditation.[8,10]

Barriers to implementing CDM initiatives included:

⇒ lack of GP engagement due to time constraints[9,15]
⇒ uncertainty regarding CDM program sustainability[16]
⇒ competing priorities for service delivery[10,16]
⇒ lack of awareness of CDM programs[4]
⇒ workforce shortages[3,16]
⇒ additional paperwork.[3,10,16]

TO CONTACT PHC RIS:

Web: www.phcris.org.au
PHC RIS Assist: 1800 025 882
Email: phcris@flinders.edu.au

Primary Health Care Research & Information Service

SUSTAINABILITY OF CDM INITIATIVES

Evaluations raised some difficulties in the sustainability of successful projects. For example, the evaluation of a CD treatment program for patients with renal disease and hypertension in remote indigenous communities highlighted the difficulties of sustaining health benefits once the 'research' phase of the intervention was completed and program activities were incorporated into routine service delivery.[13] To ensure that CDM interventions are sustained, it is essential to ensure that key features of successful interventions are 'institutionalised' and incorporated into systems and processes whilst taking account of the needs of specific health services or populations.

Another factor influencing sustainability of CDM is the engagement of both the participants and the health professionals providing the intervention. For example, treatment interventions in three different continence projects resulted in increased awareness and interest regarding incontinence among health care providers, but without any increase in the extent to which patients sought help.[9] This example highlights that local projects alone may not be able to influence health behavior; programs may have greater impact when coordinated with national awareness-raising campaigns.

AN INTEGRATED APPROACH TO CDM

Evaluations of CDM programs have indicated that an integrated care approach can have beneficial patient outcomes, particularly for diabetes,[7,19] hypertension,[19] lipid disorders,[19] anxiety and depression.[3] Evaluations have questioned the validity of single-condition incentive programs and recommend the need for a more integrated approach to CDM in general practice which is characterised by care of the whole patient, often with multiple morbidities.[8,10]

The *Restoring Health Program* (RHP), part of the *Hospital Admission Risk Program* in Victoria, demonstrated the benefits of a multidisciplinary model of care for patients with chronic lung disorder, heart failure and diabetes across acute and primary care settings.[14] An evaluation of the program four years after implementation indicated that RHP provides an effective multi-disease model for CDM with improved patient outcomes. This is attributed to the building of relationships between hospital and community healthcare services, effective IT systems, staff with disease-specific expertise, and meeting the needs of the local culturally and linguistically diverse population.

CDM IN RURAL AND REMOTE AREAS

The needs of individuals with CD in rural and remote areas require specific consideration as access to CDM services may be limited. A national evaluation of chronic heart failure management programs across Australia found that successful programs using a multi-disciplinary approach and focusing on patient education and self-care management strategies could have a positive impact on patient outcomes. These programs, however, were available only in capital or large regional cities.[11]

Technology can sometimes assist in overcoming geographical boundaries in the provision of CDM. The *Chronic Health Failure (CHF) Assistance by Telephone Study* (CHAT) is attempting to assist in developing an effective management strategy for individuals with CHF.[20] Initial evaluations show that health care via technology is an approach that can be successfully utilised in the provision of CDM to remote and rural communities.

Summary

Evaluation research of CDM interventions in primary health care is a developing field. Further research is required to ensure that CDM initiatives are engaging participants (especially hard-to-reach groups), clinicians and healthcare organisations, and are implemented in such a way that they are effective and sustainable in real-world primary health care settings. Adequate funding is essential for formative and summative evaluation of all CDM initiatives. Making evaluation findings public through journals or other means is necessary to build a strong evidence base in this field.

References

1 National Health and Hospitals Reform Commission. (2009). *A Healthier Future for All Australians*. Canberra: Commonwealth of Australia.

2 Patton MQ. (1997*). Utilisation-focused Evaluation: The New Century Text*. 3rd Ed. Thousand Oaks, California: Sage Publications Inc.

3 Winefield HR, Seiboth C, Taplin JE. (2007). Evaluating a program of psychological interventions in primary health care: consumer distress, disability and service usage. *Aust NZ J Pub Health,* 31 (3), 264-269.

4 Glasgow NJ, Jeon YH, Kraus SG, et al. (2008). Chronic disease self-management support: the way forward for Australia. *MJA*, 189(10), S14-16.

5 Brophy S, Snooks H, Griffiths L. (2008). *Small-Scale Evaluation in Health*. London: Sage Publications Ltd.

6 McRae IS, Butler JRG, Sibthorpe BM, et al. (2008). A cost effectiveness study of integrated care in health services delivery: a diabetes program in Australia. *BMC Health Services Research*, 8, 205-215.

7 Grimmer-Somers K, Dolejs W, Atkinson J, et al. (2008). Integrated GP and allied health care for patients with type 2 diabetes. *Aust Fam Physician*, 37(9), 774-779.

8 Saunders M, Schattner P, Mathews M. (2008). Diabetes 'cycles of care' in general practice - do government incentives help? *Aust Fam Physician*, 37(9), 781-784.

9 Byles JE, Ciarelli P, Hacker AH, et al. (2005). An evaluation of three community-based projects to improve care for incontinence. *Int Urogyn J*, 16, 29-38.

10 Zwar NA, Comino EJ, Hasan I, et al. (2005). General practitioner views on barriers and facilitators to implementation of the asthma 3+ visit plan. *MJA*, 183(2), 64-67.

11 Clark R, Driscoll A. (2009). Access and quality of heart failure management programs in Aust. *Aust Crit Care*, 22(3), 111-116.

12 Hurley C, Kalucy E, Battersby M. (2002). General practitioners' collaboration with service coordinators: what makes it work? Lessons from the SA Healthplus Coordinated Care Trial. *Aust J Prim Health*, 8(1), 45-51.

13 Bailie R, Robinson G, Kondalsamy-Chennakesavan S, et al. (2006). Investigating the sustainability of outcomes in a chronic disease treatment programme. *Soc Sci Med*, 63(6), 1661-1670.

14 Howard R, Sandars R, Lydall-Smith S. (2008). The implementation of restoring health - a chronic disease model of care. *Chron Respir Dis*, 5(3), 133-141.

15 Francis CF, Feyer AM, Smith BJ. (2007). Implementing chronic disease self-management in community settings: lessons from Australian demonstration projects. *Aust Health Rev*, 31(4), 499-509.

16 Williams A, Harris M, Daffurn K, et al. (2007). Sustaining chronic disease management in primary care: lessons from a demonstration project. *Aust J Prim Health*, 13(2), 121-128.

17 Harris MF, Williams AM, Dennis SM, et al. (2008). Chronic disease self-management: implementation with and within Australian general practice. *MJA*, 189(10), S17-20.

18 Zwar NA, Hermiz O, Comino EJ, Shortus T, Burns J, Harris MF. (2007). Do multidisciplinary care plans result in better care for type 2 diabetes? *Aust Fam Physician*, 36: 85-9.

19 Dennis S, Zwar N, Griffiths R, et al. (2008). Chronic disease management in primary care: from evidence to policy. *MJA*, 188 (8), s53-S56.

20 Clark R, Yallop J, Piterman L, et al. (2007). Adherence, adaptation and acceptance of elderly chronic heart failure patients to receiving healthcare via telephone-monitoring. *Eur J Heart Fail*, 9 (11), 1104-1111.