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This Evidence Bulletin summarises a Cochrane systematic review.

In a systematic review the researchers aim to locate, quality appraise and synthesise all of the available evidence related to a specific research question.

Cochrane review authors adopt rigorous methods to minimise bias as a way of producing reliable findings with the ultimate goal of making the evidence more useful for practice. For more information see: http://cccrg.cochrane.org/about.

The intended audience of this Evidence Bulletin is people involved in supporting self-management of long-term health conditions in adults.

Personalised care planning for adults with chronic or long-term health conditions

Cochrane review summary

In this Cochrane systematic review, Angela Coulter and colleagues sought to answer:

> *Does personalised care planning for adults with long-term health conditions improve physical health, psychological health, subjective health status, and capabilities for self-management?*

What is personalised care planning for adults with long-term health conditions?

Personalised care planning is a support strategy provided by health professionals tailored to the needs of individual patients. The process involves a single or series of one-to-one conversations between the clinician and patient aimed at setting goals and planning actions (i.e. shared decision making) for managing the patient's health problems. Additional personalised care planning strategies may include preparing, documenting, coordinating, supporting and reviewing treatment or management plans.

Key findings

This review found there is evidence that personalised care planning strategies for adults with long-term health conditions may:

- probably lead to small improvements in certain indicators of physical health
- probably reduce symptoms of depression
- probably improve people's confidence and skills to manage their health.

The review identified no evidence of any harms arising from personalised care planning. The process worked best when care planning involved more intensive support from health professionals and was integrated into routine care, as well as when preparation, record-sharing, care co-ordination and review were present.

Full citation for this Cochrane review:

Coulter A, et al. Personalised care planning for adults with chronic or long-term health conditions. *Cochrane Database of Systematic Reviews* 2015, Issue 3. Art. No.: CD010523. DOI:10.1002/14651858.CD010523.pub2

Detailed review information

Background

Self-management of one or more long-term health condition(s) is increasingly common. Self-management requires achieving specific health targets, adopting or maintaining a healthy lifestyle, seeking timely medical advice or support, managing medication, monitoring symptoms and adapting to the impact of conditions in the context of a person's daily life. Strategies that engage individuals enable active involvement in treatment and decisions about their own care help to support self-management. One such proactive strategy is personalised care planning.

In personalised care planning, a patient and clinician identify and discuss problems caused by or related to the patient's condition(s), and develop a treatment or management plan by mutually negotiating goals (goal setting) and identifying a course of action tailored for the individual patient (action planning). This process of collaborative goal setting and action planning is formally termed shared decision-making. Other aspects of personalised care planning may include: preparing, documenting, coordinating, supporting and reviewing progress or actions.

Information about this review

Coulter and colleagues conducted a detailed search of studies published up to July 2013. Using pre-determined criteria they looked for:

Types of studies

- Randomised controlled trials (RCTs) and cluster RCTs.

Participants

- Trials involving adults (aged 18 and older) with long-term conditions (diseases of long duration and generally slow progression).

Types of intervention

- One-to-one personalised care planning strategies that explicitly engaged individual patients in a shared decision-making process involving both goal setting and action planning.

Comparisons

- Personalised care planning versus usual care.

Outcomes

- physical health
- psychological health
- subjective health status
- self-management capabilities
- health-related behaviours
- health service use
- adverse effects due to the intervention.

The review excluded trials where participants were simulated patients, or patients requiring treatment for acute or self-limiting problems only, or where there was little or no opportunity for the patient to have meaningful influence on goal selection, choice of treatment and/or support package.

Main results

This review included 16 RCTs and three cluster RCTs. In total, 10,856 people participated in the 19 trials. The majority of trials included participants with diabetes (12 trials), or mental health conditions (3 trials), with individual trials including participants with heart failure; end stage renal disease; asthma; and in one study participants had various conditions (cardiac conditions, respiratory conditions, somatisation and problems of old age).

The participants in five studies were mainly people from lower socio-economic or minority ethnic groups, or both.

About the studies

Thirteen studies were conducted in the United States, and individual trials were based in Australia, China, Denmark, the Netherlands, Taiwan, and the United Kingdom.

The majority of interventions involved face-to-face support or with some delivered primarily via telephone support. The majority of trials were conducted in primary care clinics or community settings, and three trials were based in hospital clinics. All included studies aimed to support behaviour change among patients, and a minority of studies aimed to change the behaviour of both patients and clinicians.

All personalised care planning involved goal setting and action planning. Some included tools such as patient information packages (DVDs, computer programmes, or booklets); prompts for patients (patient-held records, worksheets or decision aids); structured consultations using coaching methods such as motivational interviewing; training or prompts for clinicians; peer support; and both individual and group visits.

The program deliverer also varied. The majority were delivered by nurses and therapists acting as care managers, service coordinators or health coaches and other trials were led by doctors, mental health/social workers or peer coaches.

Effects of interventions

There is moderate certainty evidence that personalised care planning for adults with long-term health conditions may:

- probably improve physical health (better blood glucose levels, lower blood pressure measurements among people with diabetes, and control of asthma)
- probably reduce symptoms of depression
- probably improve people's confidence and skills to manage their health.

However, the review observed the intervention did not affect cholesterol, body mass index or quality of life.

There was no evidence of any harms due to personalised care planning.

The process worked best when it included preparation, record-sharing, care co-ordination and review, involved more intensive support from health professionals, and was integrated into routine care. However, as the quality of evidence was only moderate, further research might change these findings.

What this review does not show

No studies were identified focusing explicitly on patients with multimorbidity. Additionally, studies are lacking that compare outcomes for patients at different levels of health literacy.

Future studies should include measures of costs and resource use, as well as assess longer-term outcomes. Very few studies assessed whether patients attained their personal goals and where this outcome was assessed, goal attainment was determined by clinician or researcher report, rather than by patient self-report.

Qualitative research alongside RCTs or on its own is needed to provide a more in-depth perspective of patients' experience of personalised care planning in order to determine which models work best for specific patient groups and for particular circumstances.

Related Resources

- National Ageing Research Institute (2006) What is person-centred health care? A literature review
- Australian Commission on Safety and Quality in Health Care. (2011). Patient-centred care: improving quality and safety through partnerships with patients and consumers Darlinghurst, NSW: ACSQHC, 2012

Examples of personalised care planning for adults with long-term health conditions

Wagner Chronic Care Model

Key references:

- Wagner EH. Chronic disease management: What will it take to improve care for chronic illness? Effective Clinical Practice 1998;1(1):2-4
- Coleman K, Austin BT, Brach C, Wagner EH. Evidence on the Chronic Care Model in the new millennium Health Affairs (Millwood). 2009; 28(1): 75-85

Kaiser Permanente Model of Care

Comparison of USA and UK implementation of Chronic Care Models

- Feachem RG, Sekhri NK, White KL. Getting more for their dollar: a comparison of the NHS with California's Kaiser Permanente. BMJ 2002; 324(7330): 135-41

Related Cochrane systematic reviews

- Bosch-Capblanch 2007 Contracts between patients and healthcare practitioners for improving patients' adherence to treatment, prevention and health promotion activities
- Dwamena 2012 Interventions for providers to promote a patient-centred approach in clinical consultations
- Legare 2014 Interventions for improving the adoption of shared decision making by healthcare professionals
- Murray 2005 Interactive Health Communication Applications for people with chronic disease
- Stacey 2014 Decision aids for people facing health treatment or screening decisions

Related Evidence Bulletins

- Interventions for providers to promote a patient-centred approach in clinical consultation
- Patient decision aids for people facing health treatment or screening decisions
- Contracts for helping patients adhere to treatment, prevention and health promotion

Evidence Bulletins are available here

Results table: Personalised care planning compared with usual care

	Narrative summary of findings	No. of participants (studies)	Evidence quality (GRADE)#
Physical health: blood glucose	The MD in blood glucose was 0.24% lower (better) in the intervention groups than in the control groups (95% CI 0.35 to 0.14 lower)	1916 (9 studies)	Moderate
Physical health: systolic blood pressure	The MD in systolic blood pressure was 2.64 mm/Hg lower (better) in the intervention groups than in the control groups (95% CI 4.47 to 0.82 lower)	1200 (6 studies)	Moderate
Physical health: cholesterol	The SMD in LDL cholesterol did not differ between the intervention and control groups: 0.01 standard deviations (95% CI -0.09 to 0.11)	1545 (5 studies)	Moderate
Psychological health: depression	The SMD in depression scores was 0.36 standard deviations lower (better) in the intervention groups than in the control groups (95% CI 0.52 to 0.20 lower). In addition, 3 out of 4 studies that used conceptually different measures of psychological outcomes (and so could not be pooled) reported better outcomes for the intervention groups than the control groups. The remaining study was too small to detect an effect	599 (5 studies)	Moderate
Subjective health status: condition-specific	The SMD in condition specific health status scores did not differ between the intervention and control groups: -0.01 standard deviations (95% CI -0.11 to 0.10). In addition 3 studies that measured generic health status (SF-36 or SF-12) found no difference between intervention and control groups: physical component score SMD 0.16 (95% CI -0.05 to 0.38); mental component score SMD 0.07 (95% CI -0.15 to 0.28)	1330 (4 studies)	Moderate
Self-management capabilities: self-efficacy	The SMD in self-efficacy scores was 0.25 standard deviations higher (better) in the intervention groups than in the control groups (95% CI 0.07 to 0.43 higher). In addition, mixed effects were found in 5 studies that measured other attributes that contribute to self-management capabilities. Also, a positive effect on performance of self-care activities was associated with personalised care planning, SMD 0.35 (95% CI 0.17 to 0.52)	471 (5 studies)	Moderate
Adverse effects	Only 1 study reported any adverse events (hospitalisation and deaths), but there were no differences between intervention and usual-care groups and no reason to assume that these were due to the intervention		

For more information about GRADE, see www.gradeworkinggroup.org; ; 95% CI = 95% confidence interval; MD = mean difference; SMD = standardised mean difference; LDL = low-density lipoprotein.

What does this mean for health care in Victoria, Australia?

The broader policy and clinical context	The Australian Institute of Health and Welfare identified that in 2015, one in two Australians have a long-term condition and one in five have two or more long-term conditions. Long term conditions are more common as people age. Long-term conditions increase healthcare use and have significant personal, social and economic impacts. In Victoria populations experiencing worse outcomes and increased costs include Aboriginal Victorians, people with multiple conditions and people in the most disadvantaged areas. Strengthening the autonomy and capacity of adults with long-term conditions to self-manage underpins policy efforts to improve chronic health care and to address health inequalities between socio-economic groups. This review contributes to evidence that demonstrates that personalised care planning leads to improvements in a range of health outcomes and improves confidence and skills to manage health. Taken together, this review and related evidence (see Related Resources above) identify that one-to-one personalised care planning strategies that explicitly engage individuals in a shared decision-making processes are an important component of high quality health care. Nationally, a number of initiatives and policies identify personalised care approaches as a minimum standard of rights, expectations and entitlements within different service settings. These initiatives include the National Primary Health Care Strategic Framework, the National Chronic Disease Strategy; the Fourth National Mental Health Plan, the Sixth Community Pharmacy Agreement and the Australian Safety and Quality Framework for Health Care. Locally, a number of policy documents of the Victorian Department of Health & Human Services are underpinned by personalised care approaches. For example: • Within the subacute care setting, in the Health Independence Program, the Health Independence Program guidelines outline the minimum requirements for developing a personalised care service model. The Health Independence Program components of care are: short term supports, ambulatory rehabilitation, specialist assessment services, care coordination, psycho-social management and self-management education and support. Also informed by personalised care approaches as part of the Health Independence Program are Complex Care Coordination guidelines. • Within the Community Health Program, which delivers allied health, nursing and counselling services to the Victorian community, the Community Health Integrated Program guidelines (and the soon to be released *Care for people with chronic conditions: a guide for the community health program* guidelines) set the expectations for integrated service provision. • Within the acute care setting, the Older people in hospital guidelines are also informed by personalised care approaches and contain evidence-based strategies to minimise the risk of functional decline for older people in hospital.
Relevance of settings and populations	The settings of the trials included in the review (community, primary or hospital care) span the range of health services available to adults with long-term health conditions. They were predominately conducted high income countries i.e. mostly in the United States, with individual trials in Australia, Denmark, the Netherlands, Taiwan, the United Kingdom and China. In addition, some studies sampled people from lower socio-economic or minority ethnic groups, or both. Therefore the review evidence can be applied to a diversity of populations. As the adult participants in the trials included in the review predominately had diabetes or mental health conditions (with only individual trials of participants with other long-term health conditions) some further considerations may be needed when developing or implementing personalised care planning approaches beyond these conditions.

Implications for decision-makers	This review evidence supports the expectations for personalised and coordinated service provision outlined in the Community Health Integrated Program and Health Independence Program guidelines. Like within the personalised care planning review, these programs draw from the Wagner Chronic Care Model, an evidence-based systems framework (see Related Resources above). Given this review identified that personalised care worked best when the process of care planning involved more intensive support from health professionals than shared decision making alone, the findings of the review suggest these additional elements of preparing, documenting, coordinating, supporting and reviewing treatment or management plans need to also be integrated into routine care provided by services. The evidence from this review has direct relevance to Victorian health services because the participants in the trials of the review included people with long term health conditions and the settings of the trials spanned community, primary or hospital care. For example, within the Health Independence Program, those who would benefit from care coordination and self-management support are identified as people who have chronic health conditions and/or complex healthcare needs, are experiencing multiple factors (social, environmental, financial and cultural) impacting on their health, frequently use hospitals or are at risk of hospitalisation.
Implications for clinicians	Within the trials included in this review, whether they were led by case managers, service coordinators, nurses, therapists, doctors, mental health/social workers, health coaches or peer coaches, all personalised care planning interventions involved goal setting and action planning (i.e. shared decision making) delivered face-to-face or via telephone. These shared decision making strategies form the minimum requirements for personalised care planning. This review identifies personalised care planning as an evidence-based approach for a range of providers to adopt to assist adults who have long-term health conditions in their confidence and skills to manage their health and make small improvements in their: control of asthma, glucose levels, blood pressure, symptoms of depression. The effects on health outcomes were small, but when the intervention was more comprehensive, more intensive, and better integrated into routine care the effects on outcomes were greater. The review also observed that personalised care planning interventions did not affect cholesterol, body mass index or quality of life. This suggests that additional strategies could be required for improving these outcomes. As no trials were identified focusing explicitly on patients with multimorbidity, and trials were lacking for people at different levels of health literacy, it is not clear whether a personalised care planning approach on its own will be sufficient in these contexts.

This Evidence Bulletin draws on the format developed for SUPPORT summaries (for more information on SUPPORT summaries see www.supportsummaries.org).

Centre for Health Communication and Participation

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