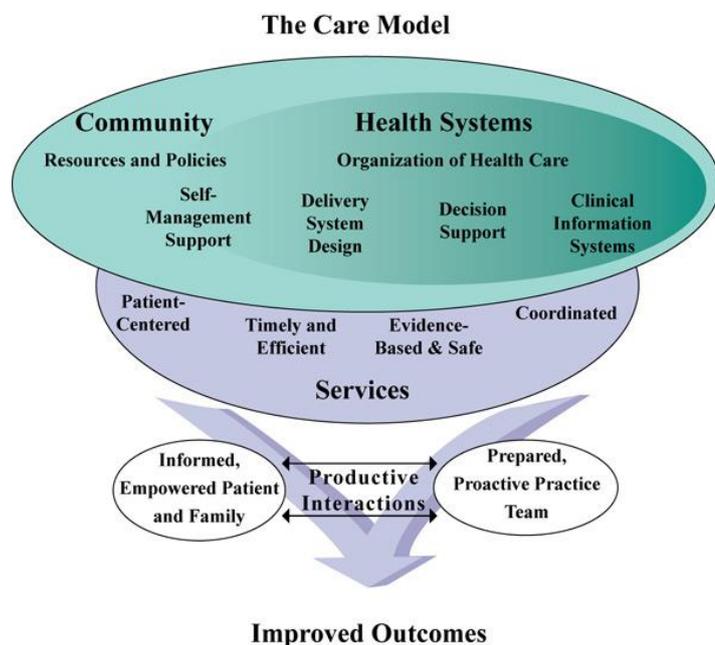


The Expanded Chronic Care Model



Developed by The MacColl Institute

Source: <http://www.improvingchroniccare.org/index.php>

The Chronic Care Model was developed by Ed Wagner, and is often known as the 'Wagner Model'. (image on the left).

This paper provides an overview of the expanded chronic care approach that considers prevention and health promotion in the model of care.

Effective chronic illness care is characterised by productive interactions between activated patients (family & caregivers) and a prepared practice team.

At the level of clinical practice, four areas (elements of care model) influence the ability to deliver effective chronic illness care; self management support, delivery system design, decision support and clinical information systems.

The goal is to deliver care that is safe, effective, timely, patient-centered, efficient and equitable.

There are **six interdependent elements** to consider in redesigning care. These are outlined in summary in this document.

Health System: Create a culture, organisation and mechanisms that promote safe, high quality care.

The Community: Mobilise community resources to meet needs of patients.

Self-Management Support: Empower and prepare patients to manage their health and health care.

Decision Support: Promote clinical care that is consistent with scientific evidence and patient preferences.

Delivery System Design: Assure the delivery of effective, efficient clinical care and self-management support.

Clinical Information Systems: Organise patient and population data to facilitate efficient and effective care.

Health System

Create a culture, organisation and mechanisms that promote safe, high quality care

- Visibly support improvement at all levels of the organisation, beginning with the senior leader
- Promote effective improvement strategies aimed at comprehensive system change
- Encourage open & systematic handling of errors & quality problems to improve care (Barr et al. 2003)
- Provide incentives based on quality of care
- Develop agreements that facilitate care coordination within and across organisations (Barr et al. 2003)

A system seeking to improve chronic illness care must be motivated and prepared for change throughout the organisation. Senior leadership must identify care improvement as important work, and translate it into clear improvement goals and policies that are addressed through application of effective improvement strategies, including use of incentives, that encourage comprehensive system change. Effective organisations try to prevent errors and care problems by reporting and studying mistakes and making appropriate changes to their systems. Breakdowns in communication and care coordination can be prevented through agreements that facilitate communication and data-sharing as patients navigate across settings and providers.

The Community

Mobilise community resources to meet needs of patients

- Encourage patients to participate in effective community programs
- Form partnerships with community organisations to support and develop interventions that fill gaps in needed services and enhance the health of the community
- Advocate for policies to improve population health
- Generating living and employment conditions that are safe, stimulating, satisfying and enjoyable (Barr et al. 2003)

By looking outside of itself, the health care system can enhance care for its patients and avoid duplicating effort. Community programs can support or expand a health system's care for chronically ill patients, but systems often don't make the most of such resources.

A health system might form a partnership with a local senior centre that provides exercise classes as an option for elderly patients. State departments of health and other agencies often have a wealth of helpful material available for the asking - wallet cards with tips for controlling diabetes, for example. National patient organisations such as [Diabetes Australia](#) can help by promoting self-help strategies. Local and state health policies, insurance benefits, civil rights laws for persons with disabilities, and other health-related regulations also play a critical role in chronic illness care. Advocacy by medical organisations on behalf of their patients can make a difference.

Self-Management Support

Empower and prepare patients to manage their health and health care

- Emphasize the patient's central role in managing their health
- Use effective self-management support strategies that include assessment, goal-setting, action planning, problem-solving and follow-up
- Organize internal and community resources to provide ongoing self-management support to patients
- Enhancing skills for personal health and wellness

All patients with chronic illness make decisions and engage in behaviours that affect their health (self-management). Disease control and outcomes depend to a significant degree on the effectiveness of self-management. Effective self-management support means acknowledging the patients' central role in their care, one that fosters a sense of responsibility for their own health. It includes the use of proven programs that provide basic information, emotional support, and strategies for living with chronic illness.

Self-management support can't begin and end with a class. Using a collaborative approach, providers and patients work together to define problems, set priorities, establish goals, create treatment plans and solve problems along the way. Strategies in the community as well as in the health system support personal and social development of individuals and groups to increase options for people to exercise more control over their health (Barr et al. 2003).

Decision Support

Promote clinical care that is consistent with scientific evidence and patient preferences

- Embed evidence-based guidelines into daily clinical practice as well as strategies that assist community's to stay healthy
- Share evidence-based guidelines and information with patients to encourage their participation
- Use proven provider education methods
- Integrate specialist expertise and primary care

Treatment decisions need to be based on explicit, proven guidelines supported by clinical research. Guidelines should also be discussed with patients, so they can understand the principles behind their care. Those who make treatment decisions need ongoing training to stay up-to-date on the latest evidence, using new models of provider education that improve upon traditional continuing medical education.

To change practice, guidelines must be integrated through timely reminders, feedback, standing orders and other methods that increase their visibility at the time that clinical decisions are made. The involvement of supportive specialists in the primary care of more complex patients is an important educational modality.

Delivery System Design

Assure the delivery of effective, efficient clinical care and self-management support

- Define roles and distribute tasks among team members
- Use planned interactions to support evidence-based care
- Provide clinical case management services for complex patients (Barr et al. 2003)
- Ensure regular follow-up by the care team
- Give care that patients understand and that fits with their cultural background (Barr et al. 2003)
- Support individuals and communities in a more holistic way e.g. single page screener for health and social needs

Improving the health of people with chronic illness requires transforming a system that is essentially reactive, responding mainly when a person is sick, to one that is proactive and focused on keeping a person as healthy as possible. This requires not only determining what care is needed, but spelling out roles and tasks for ensuring the patient gets care using structured, planned interactions and requires making follow-up a part of standard procedure, so patients are not left on their own once they leave the office. Complex patients may need more intensive management (care or case management) for a period of time to optimise clinic care and self-management.

Health literacy and cultural sensitivity are two important emerging concepts in health care. Providers are increasingly being called upon to respond effectively to the diverse cultural and linguistic needs of patients. "Such changes in the system would acknowledge the demonstrated connections between health and broader social, political, economic and physical environmental conditions" (Barr et al. 2003).

Clinical Information Systems

Organise patient and population data to facilitate efficient and effective care

- Provide timely reminders for providers and patients
- Identify relevant subpopulations for proactive care
- Facilitate individual patient care planning
- Share information with patients and providers to coordinate care (Barr et al. 2003)
- Monitor performance of practice team and care system
- Inclusion of community data to understand social and economic context within which health and other services are working.

Effective chronic illness care is virtually impossible without information systems that assure ready access to key data on individual patients as well as populations of patients. A comprehensive clinical information system can enhance the care of individual patients by providing timely reminders for needed services, with the summarised data helping to track and plan care. At the practice population level, an information system can identify groups of patients needing additional care as well as facilitate performance monitoring and quality improvement efforts.

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Assessment of Chronic Illness Care (ACIC) is a survey tool used to assist organisations to measure themselves against the Chronic Care Model elements. Primary Care Partnerships across Victoria are supporting their members through this survey. The ACIC provides a guide and focus on quality improvement and helps to track progress over time demonstrating improvements in outcomes for clients with chronic and complex conditions. www.improvingchroniccare.org/index.php?p=ACIC_Survey&s=35

The following table has been modified from Barr et al. (2003) and outlines the components of the original model to the expanded model of chronic care with examples of how these may be demonstrated or measured.

Reference: Barr, V, Robinson, S, Marin-Link, B, Underhill, L, Dotts, A, Ravensdale, D, & Salivaras, S, (2003), The expanded chronic care model: an integration of concepts and strategies from population health promotion and the chronic care model, *Hospital Quarterly*, 7 (1), p. 73-82.

Table 1. The **Expanded** Chronic Care Model

Components of the model	Meaning	Examples
Health System-Organisation of healthcare	<p>Program planning that includes measureable goals for better care of chronic illness.</p> <p>Create a culture, organisation & mechanism that promotes safe, high quality care</p>	<p>Formal Agreements with partner agencies.</p> <p>Annual accreditation processes.</p> <p><i>*Organisation Health literacy policy</i></p>
Self-Management Support <i>*Develop Personal Skills</i>	<p>Emphasis on the importance of the central role that patients have in managing their own care</p> <p><i>*Enhancing skills and capacities for personal health and wellness.</i></p>	<p>Goal directed care planning</p> <p><i>*Establishment of community gardens and kitchens.</i></p>
Decision Support <i>*Decision Support</i>	<p>Integration of evidence based guidelines into daily clinical practice</p> <p><i>*Integration of strategies for facilitating community's abilities to stay healthy</i></p>	<p>National Evidence Based Guidelines for management of Type 2 Diabetes</p> <p><i>*Development of Health Promotion & prevention best practice guidelines</i></p>
Delivery System Design <i>*Re-orient Health Services</i>	<p>Focus on teamwork and an expanded scope of practice to support chronic care</p> <p><i>*Expansion of mandate to support individuals and communities in a more holistic way</i></p>	<p>Shared care planning</p> <p><i>*Emphasis in quality improvement on health & quality of life outcomes Eg Victoria use SCTT12 Single Page Screener for Health and Social Needs</i></p>
Clinical Information Systems <i>*Information Systems</i>	<p>Developing information systems based on patient populations to provide relevant client data</p> <p><i>*Creation of broadly based information systems to include community data beyond the healthcare system</i></p>	<p>Client list and recall process</p> <p>Proactive care for vulnerable groups</p> <p><i>*Use of broad community needs assessment considering poverty rates, public transport, crime rates</i></p>
Community Resources and Policies <i>*Build Healthy Public Policy</i> <i>*Create Supportive Environments</i> <i>*Strengthen Community Action</i>	<p>Developing partnerships with community organisations that support and meet the needs of patients.</p> <p><i>*Development and implementation of policies designed to improve population health</i></p> <p><i>*Generating living and employment conditions that are safe, stimulating, satisfying and enjoyable</i></p> <p><i>*Working with community groups to set priorities and achieve goals that enhance the health of the community</i></p>	<p>Linking patients to community based programs</p> <p><i>*Partner with local council to advocate/develop smoking bylaws, walking trails, restrict new fast food outlets</i></p> <p><i>*Development well lit streets & bicycle paths, community gardens</i></p> <p><i>*Support the community in addressing the need for safe affordable housing.</i></p>

Black= included in the original chronic care model ***Orange** = elements added to achieve the expanded chronic care model