

**Panel Discussion: Chronic Disease Management in Private General Practice: What is the Future?  
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**REJUVENATING CHRONIC DISEASE MANAGEMENT IN MALAYSIAN PRIVATE GENERAL PRACTICE  
– A GLOBAL PERSPECTIVE**

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**ABSTRACT**

Rapid epidemiological transition globally has witnessed a rising prevalence of major chronic diseases such as hypertension, diabetes, hyperlipidaemia, obesity, chronic respiratory diseases and cancers over the past 30 years. In Malaysia, these conditions are commonly managed in primary care and published evidence has consistently shown suboptimal management and poor disease control. This in turn, has led to the massive burden of treating complications in secondary care, burden to the patients and their families with regards to morbidity and premature death, and burden to the country with regards to premature loss of human capital. The crushing burden and escalating health care costs in managing chronic diseases pose a daunting challenge to our primary care system, as we remain traditionally oriented to care for acute, episodic illnesses. This paper re-examines the current evidence supporting the implementation of Wagner Chronic Care Model in primary care globally; analyses the barriers of implementation of this model in the Malaysian private general practice through SWOT (strengths, weaknesses, opportunities and threats) analysis; and discusses fundamental solutions needed to bridge the gap to achieve better outcomes.

**Keywords:** Chronic disease management, chronic care model, private general practice, Malaysia.

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**INTRODUCTION**

The rising epidemic of chronic diseases globally presents emerging challenges to primary care work force, especially in the low and middle countries.<sup>1</sup> Caring for chronic diseases is intrinsically different from care for acute problems, as it does not involve the decisive process of precise diagnosis, definitive treatment and cure. In the absence of cure, chronic disease care requires comprehensive, coordinated and continuous management across time and setting.<sup>2</sup> In a middle income country like Malaysia, most attention has remained traditionally directed towards the control of acute outbreak of infectious diseases and management of acute episodic illnesses.<sup>3</sup> There is an apparent lack of focus in addressing the need for long-term management of chronic conditions in primary care; despite strong evidence for the magnitude of its burden on the already strained health care systems.<sup>3,4</sup>

**Implementing the Wagner Chronic Care Model in primary care**

Over the past decades, several high quality chronic disease management models in primary care have been developed. The most notable is the Wagner Chronic Care Model (CCM),<sup>5-6</sup> which has greatly influenced reorganization of chronic disease care in many developed countries such as Australia and the United Kingdom.<sup>7-9</sup> This model was developed based on extensive evidence with the goal to produce system reform in which informed, motivated patients interact with prepared, proactive care teams.<sup>6</sup> A growing body of evidence has now shown that primary care practice redesigned in accord with the CCM generally improve the quality of care and the outcomes for patients with various chronic conditions.<sup>10,11</sup> Evidence has also shown that system approaches which address even one of the components were helpful in improving quality.<sup>10</sup> Evidence on the cost-effectiveness of CCM is

**Table 1: Key elements of chronic care model and the evidence for implementation in primary care**

| Key elements                        | Implementation strategies   | Evidence  |
|-------------------------------------|---|---|
| Delivery system design              | <ul style="list-style-type: none"> <li>Redesign the delivery system using care teams, supported by mutually understood care plan and pathways.</li> <li>Define roles and tasks of team members.</li> <li>Stratify patients by risk and provide multidisciplinary management for those who are most at risk.</li> <li>Involve secondary care specialists and create mutually agreed shared care plans for patients with severe complications and end-stage disease.</li> </ul>   | <ul style="list-style-type: none"> <li>Multidisciplinary care teams, centred on primary health care, are highly effective to improve coordination of care, disease control and health outcomes.<sup>13</sup></li> <li>The 'teamlet' model consisting of a primary care physician and medical assistants may be practical for chronic disease care in resource-constrained settings.<sup>14</sup></li> <li>Shared care between primary and specialty care physician clearly improves medication management in chronic disease.<sup>15</sup></li> </ul>   |
| Clinical information systems        | <ul style="list-style-type: none"> <li>Develop national and local chronic disease registries.</li> <li>Use electronic medical record and appointment system.</li> <li>Use electronic prescribing, reminder and alerts on potential drug interactions and test results.</li> <li>Create paper-based registries and medical records in resource-limited setting.</li> </ul>   | <ul style="list-style-type: none"> <li>Well-designed, locally relevant and sustainable clinical information systems are essential to achieve the goal of coordinated long term care - to organize patient information, tracking and planning patient care, appointment system and continuous follow-up.<sup>16</sup></li> </ul>   |
| Decision support                    | <ul style="list-style-type: none"> <li>Embed evidence-based clinical guidelines recommendations into the structure of day-to-day decision making process e.g. electronic reminders, academic detailing, etc.</li> <li>Make patients aware of the evidence-based guidelines recommendations e.g. treatment targets, choice of therapy, etc.</li> </ul>   | <ul style="list-style-type: none"> <li>Integration of locally relevant evidence-based clinical guidelines into the fabric of patient care are fundamental to putting evidence into practice.<sup>17</sup></li> </ul>  |
| Patient self-management support     | <ul style="list-style-type: none"> <li>Empower patients and their families with knowledge, skills and confidence to take effective control over their chronic conditions.</li> <li>Provide self-management tools, and routinely assess problems and accomplishments.</li> <li>Develop an ongoing collaborative relationship between care team and patients for long term benefit.</li> </ul>  | <ul style="list-style-type: none"> <li>Self-management support has been shown to reduce the severity of symptoms and improve self-efficacy in patients with chronic conditions,<sup>18</sup> and was also found to be cost-effective.<sup>19</sup></li> </ul>   |
| Healthcare organization involvement | <ul style="list-style-type: none"> <li>Become the agent of change to transform chronic disease care.</li> <li>Restructure health care system and policy with a clear focus to improve chronic disease outcome.</li> <li>Create universal funding mechanism to improve access and equity.</li> <li>Provide incentives for achieving clinical targets, enhancing preventive care, or other quality improvement activities.</li> <li>Perform ongoing clinical audit as part of quality assurance programme to improve chronic care quality.</li> </ul> | <ul style="list-style-type: none"> <li>Primary care physicians must advocate for patient-centred chronic disease care and take leadership role in system redesign from grassroots' perspectives.<sup>20</sup></li> <li>Clinical audit and feedback has been proven to be effective in improving quality and outcomes.<sup>21</sup></li> <li>The introduction of financial incentives under Quality Outcome Framework (QOF) in the UK has contributed to a reduction in inequalities in the delivery of primary care related to deprivation,<sup>22</sup> and also resulted in substantial long-term quality improvements in chronic disease care.<sup>23</sup></li> </ul> |
| Community resources                 | <ul style="list-style-type: none"> <li>Develop collaborative network with community resources which provide self-management support e.g. self-help groups, non-governmental organizations (NGOs), etc.</li> </ul>   | <ul style="list-style-type: none"> <li>Building a collaborative network with community resources can help to address complex health issues in chronic disease care.<sup>24</sup></li> </ul>   |

**Table 2: SWOT analysis of chronic disease management in Malaysian private general practice based on the CCM**

| CCM Elements                        | Strengths  | Weaknesses  | Opportunities   | Threats   |
|-------------------------------------|--|---|---|---|
| Delivery system design              | <ul style="list-style-type: none"> <li>Extended opening hours provide better access to patients.</li> </ul>  | <ul style="list-style-type: none"> <li>Majority are single-handed practices, without the complement of allied health care team.</li> <li>Lack of compulsory patient registration with a primary care doctor.</li> <li>Lack of gatekeeper functions for GPs.</li> <li>Lack of appointment system, reminder mechanism and defaulter tracing.</li> </ul>   | <ul style="list-style-type: none"> <li>Opportunities to create awareness and promote multidisciplinary team care.</li> <li>Opportunities to develop collaborative partnership between GPs and private allied health professionals.</li> </ul>   | <ul style="list-style-type: none"> <li>Lack of government funding to support employment of multidisciplinary team.</li> <li>Free choice for patients result in uncoordinated care</li> </ul>  |
| Clinical information systems        | <ul style="list-style-type: none"> <li>Higher degree of electronic medical record (EMR) usage.</li> </ul>  | <ul style="list-style-type: none"> <li>Discreet EMR – not designed to communicate.</li> <li>Lack of disease registries.</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunities to design EMR to support coordinated care.</li> </ul>  | <ul style="list-style-type: none"> <li>Lack of funding to support further expansion.</li> </ul>   |
| Decision Support                    | <ul style="list-style-type: none"> <li>Availability of evidence-based clinical practice guidelines (CPG).</li> </ul>   | <ul style="list-style-type: none"> <li>CPG are not widely disseminated.</li> <li>CPG are not embedded in the structure of day-to-day decision making process.</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunities to embed CPG in the EMR.</li> </ul>  | <ul style="list-style-type: none"> <li>Lack of government funding to disseminate CPG to private GPs.</li> </ul>   |
| Patient self-management support     | <ul style="list-style-type: none"> <li>Increasing expectations from patients for better chronic disease care.</li> </ul>   | <ul style="list-style-type: none"> <li>Lack of patient empowerment to self-care.</li> <li>Lack of training in communication skills and behavioural change techniques amongst health care providers.</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunities to develop chronic disease management training programme for health care providers.</li> </ul>   | <ul style="list-style-type: none"> <li>Lack of multidisciplinary care team to support patient self-management.</li> </ul>   |
| Healthcare organization involvement | <ul style="list-style-type: none"> <li>Higher number of primary care doctors in the private system, i.e. &gt;8000 general practitioners (GPs).</li> <li>Academy of Family Physicians Malaysia (AFPM) is championing GP education and training.</li> <li>Quality Improvement Programme (QIP) is already being advocated by AFPM.</li> </ul> | <ul style="list-style-type: none"> <li>Lack of postgraduate qualifications amongst GPs.</li> <li>Lack of skills and incentives to perform clinical audit.</li> <li>Poor remuneration for preventive care and disease management under current fee-for-service funding mechanism (out-of-pocket payment, private insurance and employers).</li> <li>Absence of universal funding mechanism.</li> </ul> | <ul style="list-style-type: none"> <li>FRACGP/MAFPM examination has now been recognized as a specialist qualification in Family Medicine.</li> <li>Diploma in Family Medicine (DFM) has been introduced as the first tier qualification.</li> <li>Increasing interest in chronic disease management in private sector.</li> <li>New structural reform to integrate private and public sectors, and to create national health insurance scheme.</li> </ul> | <ul style="list-style-type: none"> <li>Lack of government funding for GP education and training.</li> <li>Lack of legislation to make training compulsory.</li> <li>Expensive for patients to access chronic disease care in private sector.</li> <li>Competing interests with private secondary care sector.</li> <li>New structural reform may be under threat due to competing political priorities in other areas.</li> </ul> |
| Community resources                 | <ul style="list-style-type: none"> <li>Wide range of community resources are already available e.g. self-help groups and NGOs.</li> </ul>  | <ul style="list-style-type: none"> <li>Lack of collaboration between GPs and community resources.</li> </ul>  | <ul style="list-style-type: none"> <li>Opportunities to build better collaborative networks.</li> </ul>   |   |

accumulating, and more research is needed in this area.<sup>11</sup> Table 1 summarizes the key elements of CCM – re-examining the evidence for implementation in primary care.<sup>12</sup>

### Chronic disease management in private general practice: what is the future?

In Malaysia, the dual silo primary health care system (public vs. private) is often ineffective in addressing chronic disease care as it remains fragmented, inefficient and poorly coordinated.<sup>3</sup> The question remains, however, as how can we overcome the many obstacles to implement the CCM in the dual primary system in Malaysia, especially in the private general practice? Table 2 summarizes the SWOT (strengths, weaknesses, opportunities and threats) analysis of chronic disease management in private general practice based on the elements of CCM.

### CONCLUSION

Much progress has been made in the Malaysian private general practice over the past decades. However, the rising epidemic of chronic conditions puts the private general practice in demand to play a greater role in chronic disease management. Challenges to provide high quality chronic disease care based on the Wagner CCM are mounting as described in the SWOT analysis. While we need a top-down structural reform to address many of the issues highlighted, the solution also lies in every person at all levels to become an agent of change by embracing a new way of thinking regarding chronic disease care. Serious actions must be taken on each of the problems highlighted if we were to improve outcome for chronic conditions.

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