

# Current and Future Directions in Medi-Cal Chronic Disease Care Management: A View From the Top

L. Elizabeth Goldman, MD, MCR; Margaret Handley, PhD; Thomas G. Rundall, PhD;  
and Dean Schillinger, MD

**C**hronic disease care management (CDCM) improves quality of care across a range of chronic conditions<sup>1-11</sup> and enables more frequent and productive patient interactions, leading to improved patient outcomes.<sup>12</sup> Such results have even been observed for more vulnerable “hard-to-reach” populations such as those with limited literacy or limited English proficiency.<sup>13-15</sup> Physician organizations and managed care plans serving non-Medicaid commercially insured populations are implementing CDCM strategies.<sup>2,16</sup>

There is a need for CDCM in Medicaid programs as well. Federal and state governments spend almost \$300 billion per year on behalf of Medicaid recipients, 70% of which is spent on disabled and aged populations.<sup>17</sup> As states continue to enroll disabled beneficiaries, many with chronic illnesses, into Medicaid managed care (MMC), CDCM for low-income vulnerable populations will be critical to providing quality care.<sup>18,19</sup> Experts recommend incorporation of cultural and linguistic competency and health literacy principles into CDCM to enhance provider and system efforts to engage diverse patients within their own cultural context.<sup>20-22</sup> However, the extent to which CDCM strategies are tailored for and implemented with Medicaid recipients or those with limited literacy or limited English proficiency is unknown.<sup>23,24</sup>

We designed a study with California MMC plan executives to (1) assess the extent to which MMC plans in California are using CDCM, (2) evaluate the extent to which MMC plans that use CDCM target their efforts toward vulnerable populations, (3) identify MMC plans that anticipate expanding CDCM in the future, and (4) describe perceived barriers to the expansion of CDCM.

## METHODS

### Design

We administered an online survey to California MMC plans between September and October 2005. The study was approved by the University of California, San Francisco, Committee on Human Research.

### Study Population

Executives from all 23 general (nonspecialized) MMC health plans in California were eligible to participate, including local initiative commercial plans, county-organized health system plans, and geographically defined plans (designations particular to the California health plan market). The 7

**Objective:** To determine the extent to which Medicaid managed care (MMC) organizations are engaged in chronic disease care management (CDCM), tailor CDCM for diverse populations, or plan to expand CDCM.

**Study Design:** Web-based survey of 23 eligible California MMC health plan executives in fall 2005.

**Methods:** Frequency distributions of survey responses.

**Results:** Nineteen (83%) of 23 executives responded, representing 2.5 million beneficiaries. Eighteen (95%) MMC plans reported implementing 1 or more elements of CDCM. Although plans used a wide range of CDCM strategies to reach performance goals, most implemented provider awareness activities such as offering guidelines or disease-specific feedback to physician groups. More than half of the plans reported interest in expanding CDCM to include more active interventions such as disease registries, pay for performance, telephone counseling to patients, and other self-management support programs. Few plans reported tailoring their CDCM to vulnerable member populations such as those with limited literacy or limited English proficiency. Executives reported that insufficient financial resources at the plan level, lack of organizational leadership and commitment in physician organizations, and limited information technology in physician offices were barriers to CDCM expansion.

**Conclusions:** California MMC health plans reported substantial interest in CDCM and a desire to increase CDCM. Representatives reported intentions to expand to strategies that more directly engage providers and patients. To ensure that the growing number of vulnerable enrollees with chronic disease receive high-quality care, policy efforts should focus on enabling MMC health plans to more consistently implement and target population-based strategies such as CDCM.

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**For author information and disclosures, see end of text.**

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specialized MMC plans serving specific populations or services (eg, dental, behavioral health, and persons with human immunodeficiency virus) were excluded. We surveyed the medical director or the quality director from each eligible MMC plan.

### Recruitment

An e-mail describing the goals of the survey was distributed by the California Department of Health Services office to the medical directors and the quality directors of all 23 eligible MMC plans. The message referred consenting individuals to a confidential web-based survey on CDCM. A reminder e-mail was sent to nonresponding plan directors. We contacted directors who did not respond to either e-mail by telephone and, if requested, sent them paper surveys.

### Survey Design

The web-based survey explored the following 4 content areas: (1) current CDCM goals and activities, including whether the plan had implemented any of 11 specific CDCM strategies; (2) whether these CDCM activities were targeted to specific populations such as those with limited literacy or limited English proficiency; (3) future goals and planned implementation of CDCM activities; and (4) perceived barriers to future development or expansion of CDCM activities. The survey incorporated content from previous surveys and conceptual work on chronic illness care, health literacy, and cultural and linguistic competence.<sup>20,21,25,27</sup> An external MMC executive reviewed the survey to improve its clarity and appropriateness. The design used closed-ended questions requiring a response to continue to the next item. The 26-item survey can be viewed in the online [Appendix](#) (available at [www.ajmc.com](http://www.ajmc.com)).

### Analysis

We performed descriptive analyses of responses to the survey questions. For convenience of presentation and interpretation, we organized the 11 CDCM strategies into the following 3 overarching categories, grouping together strategies that feature broadly similar approaches to quality improvement: (1) increasing provider awareness of best practices and current performance, (2) developing provider skills or creating enabling structures within physician organizations such as provider or staff training, or (3) improving patient and provider engagement with CDCM activities directly such as supporting self-management support groups and connecting patients to community resources. Although we are aware that the current research support for some of these strategies is weak and that the groupings do not reflect the actual group-

ings of CDCM strategies or the order in which they might be implemented by health organizations, these strategies are frequently mentioned as potentially useful for treating patients with chronic illness, and grouping similar strategies together makes it easier to compare response patterns.<sup>28</sup> Our analyses describe the extent to which these strategies were targeted to vulnerable populations (such as those with limited literacy or limited English proficiency) and indicate the future direction of CDCM in MMC.

## RESULTS

Executives from 19 (83%) of 23 eligible managed care plans completed the survey, representing approximately 76% of the 2.5 million California MMC members in the nonspecialty-based plans.<sup>29,30</sup> Plan size ranged from 14 000 to 744 000 members, with beneficiaries representing 21 (84%) of 25 California counties. There were no substantial differences in plan size, geographic areas, or plan organization between participating and nonparticipating plans.

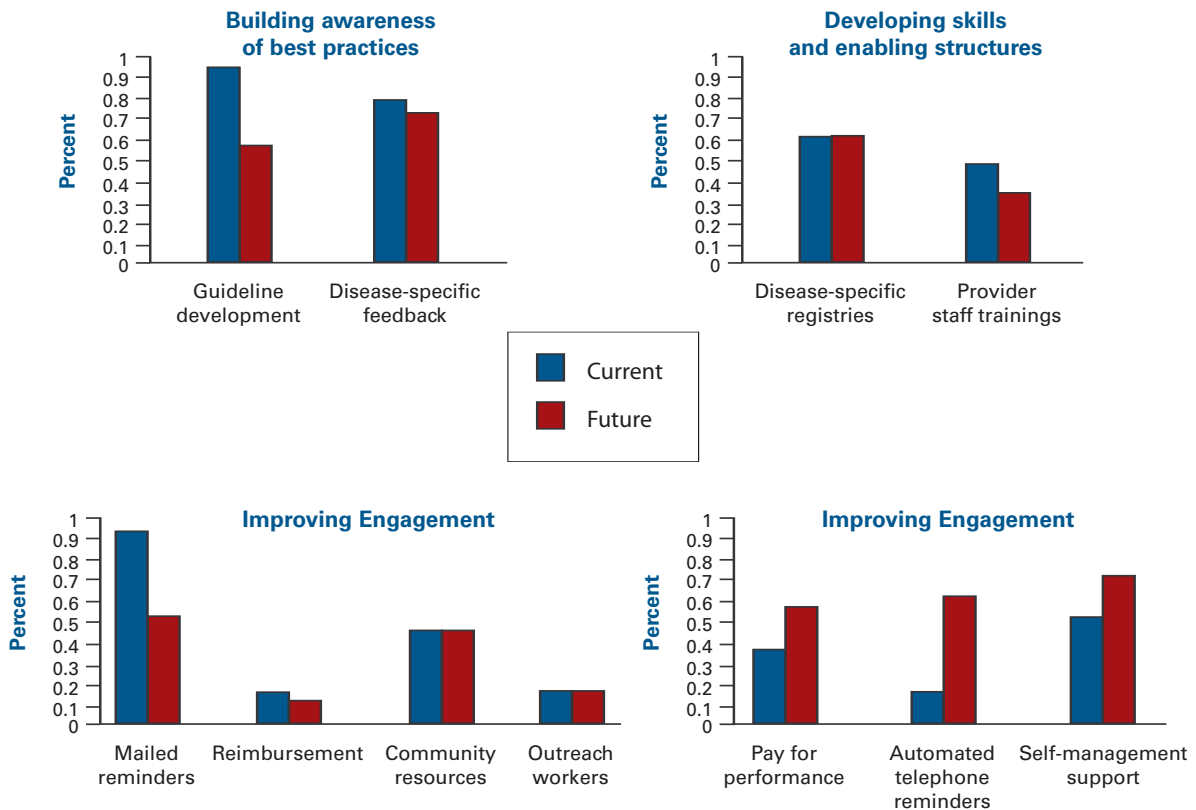
### Current CDCM Strategies

The MMC plan executives reported a wide range of current CDCM strategies ([Figure](#)). Eighteen (95%) of 19 respondents reported that their plan was engaged in 1 or more component of CDCM, and 14 (74%) reported CDCM programs were among their plan's top 3 current quality improvement objectives. Most MMC plans supporting any CDCM activities were offering strategies that built provider awareness of best practices and current performance. These included developing and disseminating guidelines to providers (95%) and providing feedback directly to providers (79%). A substantial number of MMC plans also supported strategies developing providers' skills and enabling structures. Twelve plans (63%) supported the generation of disease-specific registries, and 9 (47%) supported provider or staff training about CDCM. The MMC plans frequently attempted to improve directly patient and provider engagement with CDCM through mailed patient reminders (95%), self-management support programs (53%), and connecting patients to community resources (47%). Automated telephone support and reminders (26%), reimbursement for group medical visits (16%), pay for performance (37%), and financial support for outreach workers (16%) were used less frequently.

Although most plans reported targeting CDCM strategies for diabetes mellitus (84%) and asthma (100%), few plans reported targeted CDCM strategies for congestive heart failure (21%), coronary artery disease (21%), or depression (21%). Moreover, few plans had defined priority populations

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**Figure.** Percentage of Medi-Cal Managed Care Plans Engaging in Chronic Disease Care Management Strategies, Current Practices, and Future Intentions



to receive CDCM strategies (Table). Five MMC plans (26%) reported targeting CDCM strategies toward populations with limited English proficiency and 1 (5%) toward populations with limited literacy.

### Future CDCM Strategies

All but 1 MMC plan executives reported intentions to expand their CDCM programs. Although 22% planned to continue expanding their CDCM programs without focusing on particular beneficiary populations, most reported intentions to expand CDCM toward specific groups such as those with Supplemental Security Income or disabilities (53%), patients with multiple chronic diseases (47%), and frequent users of the medical service (42%).

### Barriers to CDCM Expansion at MMC Health Plan and Provider Group Levels

The MMC plans reported different barriers at the health plan, physician organization, and physician office levels. The most common barriers to expanding CDCM faced by MMC plans were the prohibitive cost of implementing the CDCM strategies at the health plan level (37%), absence of physician

leadership support for implementing CDCM at the physician organization level (42%), and lack of information technology (IT) at the provider level (37%).

## DISCUSSION

Most California MMC executives reported that their health plans are engaged in CDCM and that they intend to shift the focus of their programs to incorporate more CDCM strategies that directly engage providers and patients. The MMC plans incorporated many of the CDCM strategies that are used by other commercial plans, particularly those focusing on guideline dissemination,<sup>31,32</sup> physician feedback,<sup>33</sup> disease registries, and mailed patient reminders. Although useful as educational and benchmarking tools, these strategies have only modest effects on physician and patient behaviors when used alone.<sup>32,34,35</sup> However, their effectiveness would likely be increased if multiple mutually reinforcing strategies such as registries, guideline dissemination, and physician feedback, were implemented.<sup>36</sup>

Our results indicate that the strategies aimed at increasing provider awareness were likely to be in place already.

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**■ Table.** Current Beneficiary Populations and Medical Conditions That Medi-Cal Managed Care Chronic Disease Care Management Programs Target and Number of Plans With Intentions to Expand\*

Variable	Current (n = 19)	Intentions to Expand (n = 19)
<b>Beneficiary population</b>		
Prenatal and postpartum	13 (68)	4 (21)
Children and adolescents	13 (68)	5 (26)
New enrollees	7 (37)	4 (21)
Multiple chronic diseases	6 (32)	9 (47)
Frequent users	6 (32)	8 (42)
Supplemental Security Income and disabled	4 (21)	10 (53)
Limited literacy	1 (5)	2 (11)
Limited English proficiency	5 (26)	3 (16)
Racial/ethnic minority	6 (32)	5 (26)
<b>Condition</b>		
Asthma	19 (100)	11 (58)
Diabetes mellitus	16 (84)	13 (68)
Congestive heart failure	4 (21)	6 (32)
Coronary artery disease	4 (21)	5 (26)
Depression	4 (21)	5 (26)
Human immunodeficiency virus or AIDS	1 (5)	3 (16)
Substance abuse	1 (5)	4 (21)
*Data are given as number (percentage).		

Strategies to develop provider skills and to create enabling structures such as establishing disease-specific registries and training providers in CDCM, were less consistently adopted, with about half of the plans reporting these activities. Strategies that directly aimed to improve provider and patient engagement and that require more intensive patient-plan interactions or financial expenditures (such as automated telephone reminders, reimbursement to providers for group medical visits, pay-for-performance programs, and financial support for outreach workers) were the least likely to be implemented.

With regard to future plans, most MMC plan executives reported intending to implement or expand pay-for-performance programs, automated telephone reminders, and self-management support. Only a small number indicated that they planned to reimburse for group medical visits or to provide financial support for lay outreach workers.

It has been estimated that more than one half to two thirds of Medi-Cal beneficiaries have limited English proficiency or limited literacy,<sup>37</sup> which are strongly correlated with higher

rates of chronic illness and worse chronic disease control.<sup>38-42</sup> Unfortunately, only a few MMC plans reported targeting or tailoring their CDCM interventions to patients with limited English proficiency or limited literacy, and few executives reported intentions to expand or tailor CDCM programs to specifically address the needs of these populations. Increasing the focus of CDCM programs to address language and literacy needs of MMC beneficiaries may help reduce healthcare disparities observed between vulnerable and less vulnerable populations.<sup>43</sup>

The most important barriers to expanding CDCM programs reported by MMC plan executives were the cost of implementing the CDCM strategies, the lack of physician leadership support for implementation CDCM, and the perceived absence of IT at

the provider level. These are similar to barriers reported among physician organizations to the expansion of CDCM.<sup>44</sup> There are potential remedies for each of these barriers. Recent changes in federal regulations allow hospitals and health systems to pay for some of the software, implementation, and training costs associated with installing IT in physicians' offices, reducing the effective cost to physicians.<sup>45</sup> Leadership development programs and technical assistance for implementing CDCM strategies are available from external quality improvement organizations such as the Institute for Healthcare Improvement.<sup>46</sup> These activities are encouraged by federal or state funded pay-for-performance programs that provide incentives at the MMC plan level or at the individual provider level to acquire appropriate IT and to implement CDCM strategies.

Our study has several limitations. We surveyed only California MMC executives, potentially limiting the generalizability to other states. We were unable to validate the beliefs and opinions of executive representatives. The fact that the California Department of Health Services was involved in the

recruitment of health plans for the survey may have biased the executives' responses, motivating them to report higher levels of involvement in CDCM than actually exist or to exaggerate their intentions to expand CDCM strategies. However, the fact that we maintained the anonymity of the respondents may have reduced this bias. Although our response rate of 83% was high and was consistent with that of other surveys of high-level executives, not all plans responded.<sup>47</sup> While we did not find differences in plan size or design between respondents and nonrespondents, nonrespondents may have differed in their CDCM strategies and goals. Finally, our closed-ended survey, while permitting more uniform responses to specific questions, did not allow for more detailed questioning and deeper understanding of CDCM strategies.

In conclusion, MMC health plan executives report that their plans are engaging in various CDCM strategies, particularly those aimed at increasing provider and beneficiary awareness and at developing skills and enabling structures. Plan executives report a desire to shift future CDCM strategies to those that would directly engage providers and beneficiaries but face barriers to this expansion, including limited plan finances and perceived lack of physician organization leadership and IT infrastructure. Despite the interaction between social and clinical factors that is common among Medi-Cal beneficiaries, few plans report focusing their CDCM efforts toward vulnerable beneficiaries such as those with limited literacy and limited English proficiency. To ensure that the growing number of vulnerable enrollees with chronic disease receive high-quality care, policy efforts should focus on enabling MMC health plans to more consistently implement and target population-based strategies such as CDCM.

**Author Affiliations:** From the University of California Department of Medicine, San Francisco (LEG, MH, DS), Department of Family Medicine (MH) and University of California, Berkeley School of Public Health, Department of Health Policy and Management (TGR).

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**Correspondence Author:** L. Elizabeth Goldman, MD, MCR, University of California, San Francisco, 533 Parnassus Ave, Box 0131, San Francisco, CA 94143. E-mail: goldmanl@medicine.ucsf.edu.

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### Take-away Points

As Medicaid managed care (MMC) expands to vulnerable patients with chronic conditions, there is a growing need among plans to incorporate chronic disease care management (CDCM) strategies.

- Experts recommend incorporation of cultural and linguistic competency and health literacy principles into CDCM to engage diverse patients within their own cultural context.
- The most common barriers to expanding CDCM faced by MMC plans were prohibitive cost, absence of physician leadership support, and lack of information technology.
- Recent changes in federal regulations allow hospitals and health systems to pay for some of the costs associated with installing information technology in physicians' offices.

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