Aligning Financial Incentives With "Get With The Guidelines" to Improve Cardiovascular Care

John T. Berthiaume, MD; Patricia A. Tyler, RN, CCRN; Jacqueline Ng-Osorio, MPH; and Kenneth A. LaBresh, MD

Objective: To describe the impact of a commercial insurer's financial incentives to hospitals in conjunction with collaboration with the American Heart Association (AHA) to accelerate implementation of Get With The Guidelines–Coronary Artery Disease (GWTG-CAD), a quality improvement program to rapidly improve cardiovascular secondary prevention in hospitalized patients.

Study Design: Observational assessment of quality improvement program participation and implementation in response to financial incentives.

Methods: The study population included all hospitals that participated with the Hawaii Medical Service Association (HMSA, Blue Cross Blue Shield of Hawaii) Hospital Quality and Service Recognition Program and had more than 30 annual admissions for acute coronary artery disease. These 13 hospitals were given encouragement and financial incentives to implement GWTG-CAD. Financial incentives were determined by a prorated amount of the total HMSA hospital reimbursement for all acute services, as part of a more comprehensive hospital "pay for performance" program.

Results: Incentives to 10 of 13 eligible hospitals included reimbursement for half the annual cost of the AHA Patient Management Tool. In addition, HMSA's pay for performance program—the Hospital Quality and Service Recognition Program—distributed monetary awards totaling $354 883, based on points awarded for GWTG-CAD workshop attendance documentation (10 hospitals), recognition by the AHA as a GWTG-CAD hospital, and attainment of 85% adherence to the GWTG-CAD performance measures (4 hospitals).

Conclusions: Community-based promotion of GWTG-CAD and financial incentives provided by a commercial insurer resulted in the rapid implementation of a secondary prevention program for coronary artery disease in most hospitals in the State of Hawaii within a single year.

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The American Heart Association (AHA) and The American College of Cardiology have established cardiovascular secondary prevention guidelines recommending several behavioral and pharmacologic interventions for hospitals to reduce the risk of recurrent cardiac events.[1] When these interventions are implemented in a hospital, recurrent events have been markedly reduced.[2-4] Despite this evidence, national studies, as well as Hawaii Medical Service Association (HMSA) claims data, reveal that secondary prevention interventions including the use of aspirin, β-blockers, angiotensin-converting enzyme inhibitors, lipid-lowering agents, and smoking cessation counseling are applied inconsistently in hospital and outpatient settings.[5-9] Barriers to implementation of these interventions include lack of knowledge, financial resources, or time; poor communication; conflicting organizational objectives; and lack of timely data feedback.[10]

To help hospitals close this gap, the AHA designed and implemented a hospital-based program called Get With The Guidelines–Coronary Artery Disease (GWTG-CAD) using a collaborative learning model[11] and an Internet-based Patient Management Tool for data collection, reporting, and decision support.[12] The components of the program have been described previously and include the development of community-based consensus, a series of collaborative learning sessions, and support of collaborative problem solving between sessions using conference calls, e-mail, and AHA staff facilitation.[13]

The major costs for a hospital to implement the GWTG-CAD program are the personnel costs to attend meetings, collect data, and create meaningful system change to improve care. As a result, lack of financial incentives, cited as a common barrier to adoption of quality improvement initiatives, is likely a barrier for GWTG-CAD as well.[10]

The goal of this study was to determine how well financial incentives to hospitals translated into compliance with the Hawaii GWTG-CAD program processes by enabling hospitals to build the necessary infrastructure.

From the Hawaii Medical Service Association, Honolulu, Hawaii (JTB, JNO); American Heart Association, Irvine, Calif (PAT); MassPRO, Inc, Waltham, Mass (KAL); and Brown University School of Medicine, Providence, RI (KAL).

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Address correspondence to: John T. Berthiaume, MD, Hawaii Medical Service Association, 818 Keeaumoku Street, Honolulu, HI 96814. E-mail: john_berthiaume@hmsa.com.

METHODS

Hospitals were awarded points as part of a payer-based financial incentives program for various activities in GWTG-CAD (**Table 1**). These activities included the building of the hospital team, attending the collaborative meetings, and using the Patient Management Tool to submit data, as well as improving guideline adherence levels for eligible patients. Most of the incentive points were provided for process measures during the first year as infrastructure was being developed. Participation in GWTG-CAD for the development of this infrastructure has been shown to lead to significantly increased performance of acute care and secondary prevention measures.[14,15] Hospital participation and measures of system change including clinical champion identification, multidisciplinary team creation, baseline and follow-up data collection, and the use of preprinted orders and protocols were tracked. GWTG-CAD hospital recognition based on these process measures, as well as adherence to the GWTG-CAD measures, were also tracked as criteria for incentive payments. Thirteen hospitals that provided care for HMSA patients were eligible for the incentive program.

RESULTS

In February 2002, The AHA convened a stakeholder meeting for GWTG-CAD, which including key Hawaii organizations and opinion leaders. The HMSA was a stakeholder collaborating with the AHA to provide encouragement and incentives to hospitals for meaningful participation in the program. These activities included cosponsorship of meetings, hospital recruitment, and reimbursement to participating hospitals for half of the yearly $900 fee for use of the Patient Management Tool.

The financial incentive program was announced at the first hospital workshop, reviewed in subsequent workshops, and communicated directly to hospital chief executive officers and chief financial officers in other meetings and by written correspondence. Scoring for the initial year made 140 points of the 1670 total potential points in the Hospital Quality and Service Recognition Program available to hospitals for GWTG-CAD; 60 of the 140 potential points were awarded. In some cases hospitals met the point criteria for incentives after the deadline for the incentive program or failed to provide documentation of their activities as required; these hospitals did not receive incentives for these elements. A maximum of 10 points was available to each hospital. Points earned and financial incentives paid to each hospital are summarized in **Table 2.**

These GWTG-CAD points resulted in $354 883 awarded. This modest amount of dollars assigned to participation correlated with a high level of participation totaling 85% of Hawaii's eligi-

Table 1. Scoring Criteria for Get With The Guidelines Incentive Points, 2003

Program Component	Component Details and Points Awarded
1. Signing up and participating in a *Get With The Guidelines–CAD* workshop	• No attendance–**0 points** • One or more staff members with documented attendance–**2 points**
2. Use of the PMT	• Hospital does not use–**0 points** • Attend PMT training teleconference and enter >30 baseline charts–**1 point** • Fulfilled above criteria and validated accuracy of data entered–**2 points**
3. Recognition by the AHA as a *Get With The Guidelines–CAD* hospital	• Not recognized–**0 points** • Recognition received–**2 points**
4. *Get With The Guidelines–CAD* performance measure achievement: At least 85% of eligible patients receiving: • Smoking cessation counseling • Aspirin on discharge • β-blockers on discharge • ACEI on discharge • Lipid-lowering therapy on discharge	• Not recognized–**0 points** • Achieved 85% in 3 of the measures–**2 points** • Achieved 85% in all of the measures–**3 points** • Achieved the above and received the AHA Performance Achievement Award–**4 points**

A maximum of 10 points was available to each hospital.
ACEI indicates angiotensin-converting enzyme inhibitor; AHA, American Heart Association; CAD, coronary artery disease; PMT, Patient Management Tool.

ble hospitals. Interviews with hospital administrators indicated that the incentives were used to support in the hospital quality improvement staff salaries and travel costs for hospital staff to attend GWTG-CAD workshops and related meetings.

In workshops and conference calls, hospitals shared solutions to program implementation barriers, leading to substantial changes in the systems of care.They continue to collect patient data and use the decision support, communication tools, and reminders that are embedded in the Patient Management Tool.[12] Thus far more than 2000 patients have been included in this program in Hawaii.

Table 2. Hospital Characteristic Points Earned by Category, and Incentives Received

Hospital	CAD Discharges (n)	Points Earned				Incentive
		Workshop	PMT	Recognition	Performance	
A	126	2	0	0	0	$5514
B	186	2	1	2	0	$12 835
C	246	2	2	2	0	$93 938
D	78	2	1	2	3	$9882
E	424	2	0	0	0	$10 492
F	321	2	2	0	0	$21 445
G	63	0	0	0	0	$0
H	770	2	2	2	0	$114 574
I	272	2	2	2	3	$49 098
J	160	2	2	2	3	$13 917
K	344	0	0	0	0	$0
L	158	2	2	2	3	$23 188
M	45	0	0	0	0	$0
Total	3193	20	14	14	12	$354 883

CAD indicates coronary artery disease; PMT, Patient Management Tool.

DISCUSSION

In this study, we demonstrated that by providing financial incentives, the Hawaii GWTG-CAD program was able to secure active institutional participation in implementation of system changes to support more uniform adoption of cardiovascular guidelines.

Based on previously published outcome data[2-4] and the progress of other GWTG hospitals in improving guideline adherence,[14,15] a significant and measurable improvement in secondary prevention of coronary artery disease in Hawaii is anticipated. Factors that correlate with improvement including multidisciplinary teams, collaborative support, and the use of the Patient Management Tool for data, reporting, and decision support are now in place. The GWTG-CAD program has become the standard to improve cardiovascular care and is now being used in all but 1 hospital in Hawaii. The full participation of more than 85% of hospitals is much higher than would be predicted by models of "diffusion of innovation" in healthcare.[16,17] Typically such programs attract early adopters and the early majority that would account for somewhat less than half of the hospitals in a market. In fact, 30% to 50% penetration of GWTG-CAD has been commonly seen in most markets. Involvement of more than 85% would suggest significant engagement of the late majority as well. This finding suggests that the presence of financial incentives tied to the steps of participation may play an important role in speeding the adoption of innovative programs such as GWTG-CAD.

This report documents the first, important steps to reach the goal of improved patient outcomes. We believe that financial incentives geared toward an established and successful process to improve care is a novel and important approach as the healthcare system begins to explore the alignment of financial incentives, generally referred to as "pay for performance." Perhaps this effort to help hospitals build the critical infrastructure in a larger proportion of hospitals in Hawaii than is commonly seen could play a role in accelerating the transformational change called for by the Institute of Medicine.[18]

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