



AMERICAN COLLEGE OF
OCCUPATIONAL AND
ENVIRONMENTAL MEDICINE

Dear ACOEM member:

I'm writing today to bring to your attention the results of a recent and important employer survey and research project that has ramifications for occupational and environmental medicine physicians.

Earlier this year, The Benfield Group, a health care market research firm, working with the National Pharmaceutical Council, completed an on-line survey of 75 employers and conducted in-depth interviews with eight of those employers and five additional pharmacy benefits stakeholders on the subject of medication compliance in the workplace. Key conclusions from the study include:

- Medication compliance is among employers' top health management concerns
- 84% of employers are conducting compliance-related analyses with prescription data and the trend is toward more sophisticated analysis and modeling
- 95% of employers are taking action to improve compliance
- Diabetes is the condition employers are most likely to target with medication compliance initiatives, followed by high cholesterol and blood pressure, heart disease, CHF and COPD
- Vendors play a key role in compliance analysis and intervention
- Focused and more sophisticated interventions are perceived as most effective

As occupational physicians, it is incumbent upon us to be on the cutting edge of trends in workplace health. Issues related to filling prescriptions and taking medicines aimed at improving worker health are a key part of the overall OEM equation.

This study is just one of a wide range of resources ACOEM is making available to help members stay ahead of trends related to health and productivity. I hope you will find it useful in your day-to-day practice, and invite you to suggest additional studies or resources that our members would find of interest.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pamela Hymel'.

Pamela Hymel, MD, MPH
President

Employer Medication Compliance Initiatives: Executive Summary

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A White Paper Prepared
For NPC By



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For further information, visit www.thebenfieldgroup.com or call 314-968-0011.

Funded by: The National Pharmaceutical Council. NPC's overarching mission is to sponsor and conduct scientific analyses of the appropriate use of biopharmaceuticals and the clinical and economic value of innovation. The organization's strategic focus is on evidence-based medicine for health care decision-making, to ensure that patients have access to high-quality care. NPC was established in 1953 and is supported by the nation's major research-based pharmaceutical companies.

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BACKGROUND

In May 2009, The Benfield Group (Benfield) invited health and pharmacy benefit decision-makers and influencers from 155 target corporations (see text box) to participate in a 23-item (20-minute) online survey regarding the importance of medication compliance* and employers' efforts to improve compliance. The goal of 75 completed surveys was achieved within 10 days.

Following the survey, 13 in-depth interviews were completed to gather additional insights regarding medication compliance issues and trends. Interviewees included eight employers who had completed the survey, and five other pharmacy benefit stakeholders (two employee benefit consultants, and one disease management company, one health plan and one PBM). Employer interview targets were selected from the survey respondents whose answers indicated they were more advanced in their medication compliance analyses and strategies.

This summary presents notable findings and conclusions from this research, and then outlines potential implications for employers, pharmaceutical manufacturers and other health care stakeholders with an interest in improving medication compliance.

* **Medication Compliance** is the term used with employers and stakeholders in the survey and interviews. The term was explicitly defined as: *"...following a medicine treatment plan developed by an individual's health providers, filling prescriptions and taking medications as prescribed."*

Survey Targets and Respondents

Survey recruitment targeted employee benefit directors, medical directors and other health management professionals with health management and pharmacy benefit decision-making authority or influence in large (5,000 or more employees) self-insured corporations.

Nearly half of the 75 companies surveyed had more than 20,000 employees. Of respondents, 83% indicated they are decision-makers or influencers when it comes to employee health strategy, with the balance indicating they provide input. And, 97% indicated they had at least "some influence/authority" to recommend innovative approaches to managing employee health and health-related benefits.



KEY FINDINGS

The key findings from the research include:

1. Medication Compliance Is Among Employers' Top Health Management

Objectives: Asked to rate the importance of a variety of workforce health management objectives, 89% of employers gave Medication Compliance (described as: *To increase the number of people taking medicines as prescribed to manage their health conditions*) a rating of 4 or 5 on a 1-5 scale of importance. Only Preventive Care (97%) and Lifestyle Behaviors (91%) were rated more highly by survey respondents.

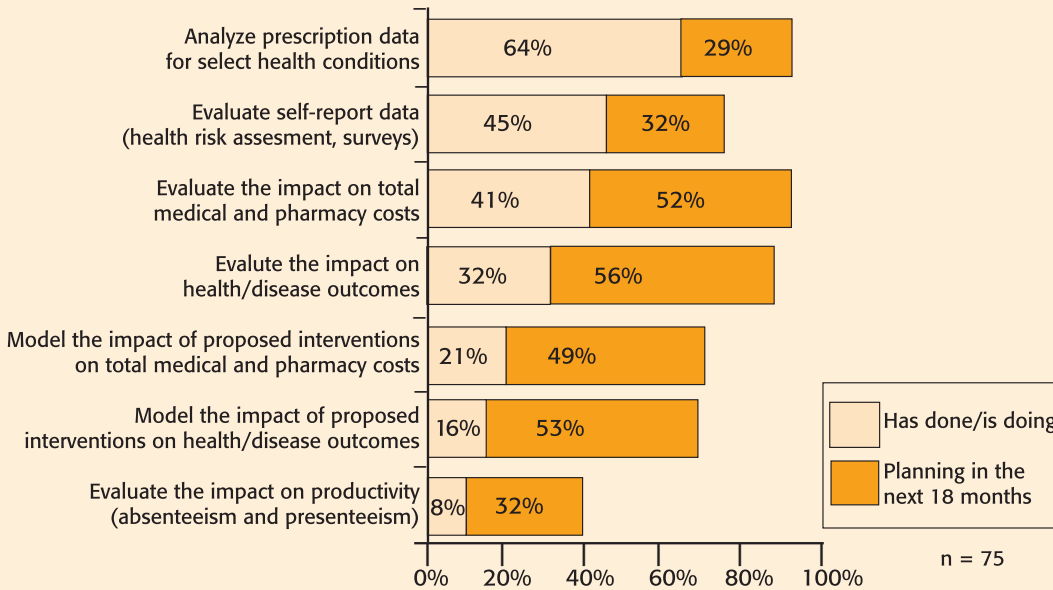
In-depth interviews confirmed interest in and recognition of the long-term value of medication compliance among large self-insured employers, and indicated smaller employers are becoming more engaged, perhaps because health plans and PBMs are working to raise awareness and provide solutions to improve medication compliance.

2. Employers Are Analyzing Prescription Data, and the Trend Is Toward More Sophisticated Analysis and Modeling:

Only 16% of employers surveyed indicated that they are not currently doing any sort of prescription data analysis, and over one-third of those surveyed are doing at least three different types of analyses. As Figure 1 shows, while nearly two-thirds of employers are currently analyzing their prescription data to understand medication compliance for select health conditions, fewer employers are currently using data to evaluate the impact of medication compliance on medical and pharmacy costs (41%) and on health/disease outcomes (32%), and fewer still are using data to model the impact of medication compliance interventions on costs (21%) and outcomes (16%). Finally, only 8% are evaluating the impact of medication compliance on productivity outcomes, including absenteeism and presenteeism.

Notably, Figure 1 also shows that about half of employers surveyed intend to conduct more sophisticated levels of analysis and modeling in the next 18 months, and nearly one-third intend to look at the impact of medication compliance on productivity.

Figure 1
Employer Analysis of Medication Compliance

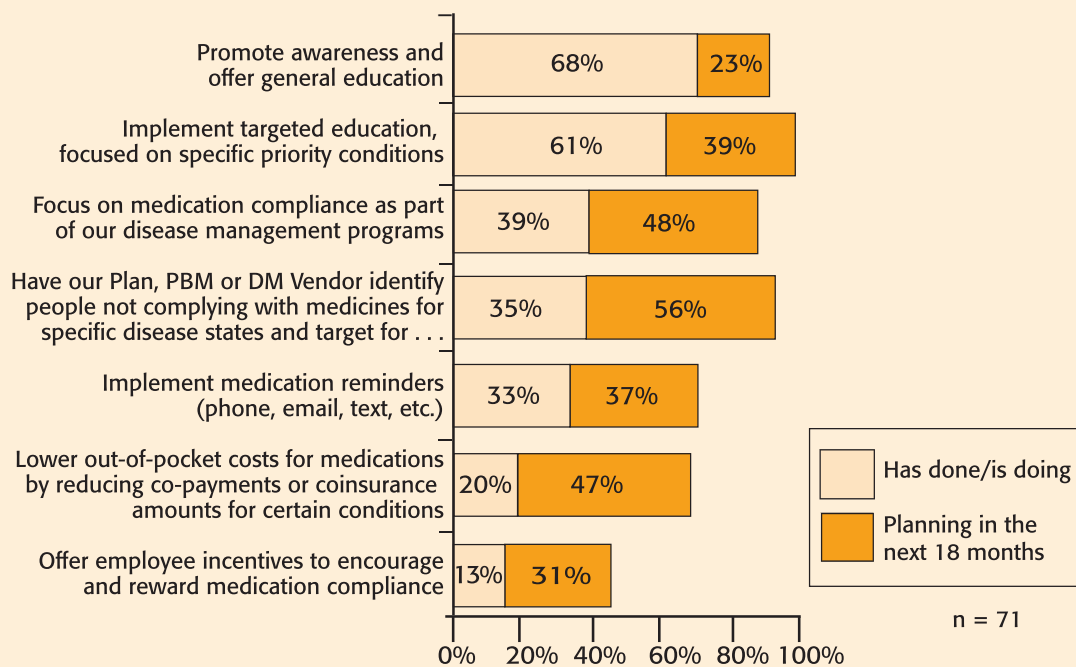


3. Employers Are Taking Action to Improve Compliance, and the Trend Is Toward More Sophisticated Interventions: Only 5% of survey respondents indicated they are currently not taking any action to improve medication compliance, and nearly 6 in 10 are implementing three or more different types of initiatives.

More than two-thirds of employers are currently implementing relatively unsophisticated programs to improve medication compliance (Figure 2), including general education (68%) and education targeted to employees with specific conditions (61%). Fewer employers are implementing relatively more sophisticated (i.e., targeted and complex) intervention programs. About 4 in 10 employers indicate they are focused on medication compliance within their disease management programs, about one-third report that they are working with their plan, PBM or disease management vendor to specifically identify and intervene with people not complying with their

medications, and one-third is implementing medication reminders. Only 1 in 5 is lowering out-of-pocket costs for medications, and 13% are offering employee incentives to reward compliance. As above, the proportion of employers intending to implement more comprehensive and sophisticated solutions in the next 18 months is notable.

Figure 2
Employer Actions to Improve Medication Compliance



4. Diabetes Is Key Focus of Medication Compliance Initiatives: Diabetes is—by far—the condition employers are most likely to target with their medication compliance initiatives. Eight in 10 employers implementing targeted education or focusing on compliance as part of their DM programs are focused on diabetes (though not necessarily exclusively), and 93% of those currently implementing value-based benefit designs (VBBD) to improve compliance are focused on diabetes. Other popular targets for intervention include high cholesterol and blood pressure, cardiovascular disease, congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD), and there is notable activity around a variety of other conditions, ranging from asthma to depression and smoking cessation.

5. While Employers Claim Significant Credit for Their Focus on Medication Compliance, They Acknowledge the Key Role Vendors Play in Analysis and Intervention: Asked to rank the top three stakeholders responsible for their organization's interest in medication compliance, 81% of employers identified their own organizations as 1, 2 or 3. PBMs were credited as next most responsible, followed by health plans and Employee Benefit Consultants (EBCs).

When asked which stakeholder is primarily responsible for initiating various types of analyses of medication compliance, employers point to a variety of stakeholders. Specifically, responses indicate that PBMs are more likely than others to initiate analysis of prescription data for select health conditions; plans often initiate analysis of medication compliance impact on health/disease outcomes and also model the impact of compliance initiatives on health and disease outcomes. EBC involvement is most prevalent where integrated data analysis is required to evaluate the impact of compliance on productivity outcomes and to model the impact of compliance initiatives on health outcomes and costs.

6. Perceived Effectiveness and Evidence of Impact Seems to Favor More Specific and Sophisticated Interventions: Table 1 lists the types of interventions we asked employers about in the survey (top row), and summarizes findings regarding the percent/number currently implementing each intervention, the percent/number who perceive the intervention to be effective at improving compliance, and the percent/number who indicate they have some sort of evidence of effectiveness. Of note:

- A.** Targeted education and awareness/general education—while relatively popular—are not perceived as effective.
- B.** Perceived effectiveness of DM programs and medication reminders is low.
- C.** The interventions perceived as most effective are: vendor-targeted intervention that focuses resources precisely on identified individuals with compliance issues; and VBBD which aligns financial incentives to lower compliance barriers for high-value services. These approaches are perceived to be effective by 65% and 60% of those implementing them, respectively, and 100% of those indicating effectiveness also indicate they have evidence to support the claim.



	Targeted Education	Vendor Targeted Intervention	Part of Disease Management	Awareness/ General Education	VBBD	Medication Reminders	Employer Incentives
% Doing (of 75)	61%	35%	39%	68%	20%	33%	13%
# Doing	46	26	29	51	15	25	10
% Perceived Effective (of those doing)	37%	65%	41%	20%	60%	36%	60%
# Perceived Effective	17	17	12	10	9	9	6
% Having Evidence (of those that perceive as effective)	76%	100%	83%	80%	100%	56%	67%
# Having Evidence	13	17	10	8	9	5	4

7. Employer Focus on Medication Compliance Can Be Increased Through a Variety of Types of Information: Nearly 80% of employers indicate that ROI (return on investment) models projecting the financial impact of investments in medication compliance might influence their organization to increase its focus on medication compliance. And, as Figure 3 demonstrates, several other types of information, including case studies, studies linking poor compliance with health, cost and productivity consequences and best practice guidance were also rated highly (4 or 5 on a 1-5 scale) as potentially increasing organizational focus on compliance. Importantly, only 2 of 75 respondents (3%) did not rank any of the types of information as potentially having any impact on their organization's focus.

During the in-depth interviews, employers and other stakeholders were asked about the role interested parties could play in helping improve medication compliance. Four key recommendations emerged:

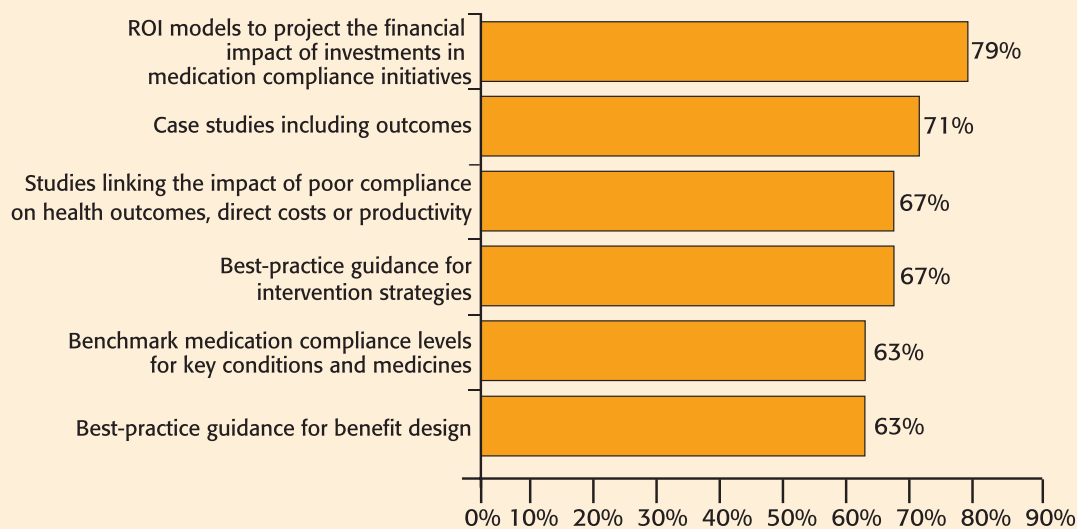
A. Provide Evidence: Provide outcomes information about conditions and the value of treatment/specific medicines that can be used to analyze medication compliance.

B. Support Analysis: Provide information, methods and support for employers and vendors to analyze medication compliance.

C. Patient Education/Support: Provide information (general and condition-specific) and tools that can be used to raise awareness, educate and support employees to improve compliance.

D. Promote/Educate Stakeholders: Provide information for non-clinical decision-makers regarding the issue of medication compliance and potential solutions. Identify and equip medical leaders to educate patients and peers about the importance of compliance.

Figure 3
Information That Might Influence Focus on Medication Compliance



n = 75

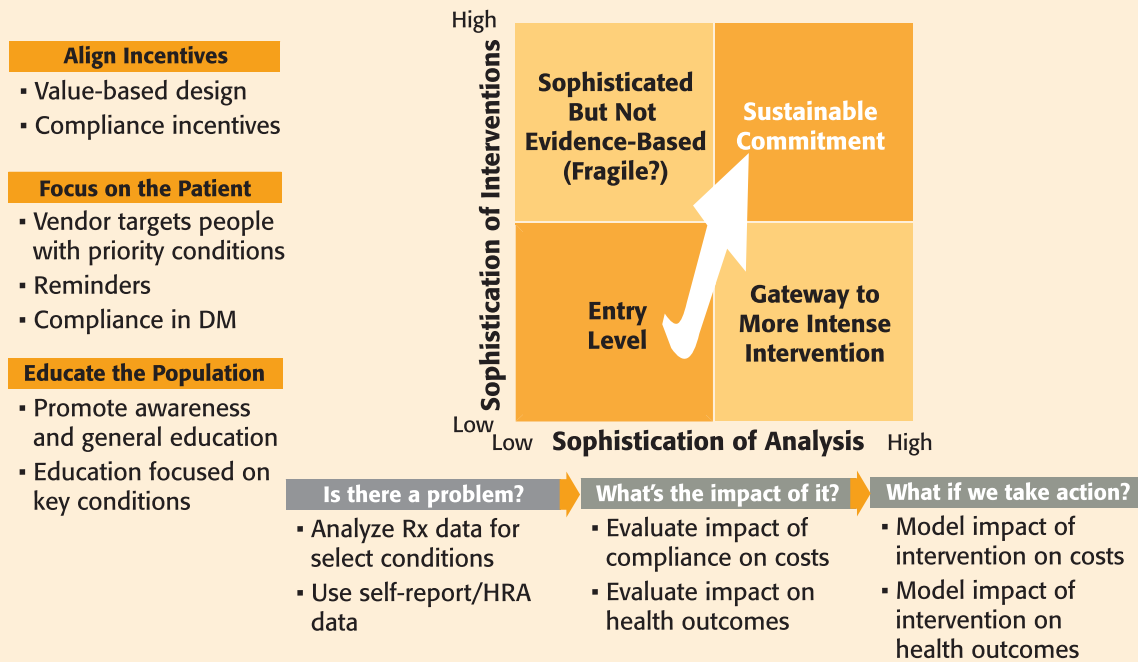
CONCLUSIONS

Based on the findings above (and detailed in the findings document), conclusions of this research are:

- 1. Employers are aware of/interested in/focused on medication compliance.** Survey and interview findings indicate that improving medication compliance is among employers' top workforce health management objectives, and that many employers are working to improve medication compliance through data analysis and programs.

- 2. PBMs, Health Plans, DM Vendors and EBCs are also focused on medication compliance**, seeking to promote and capitalize on employer interest by initiating and supporting data analysis and marketing a range of interventions to improve medication compliance.
- 3. Employer interest is more than talk**, as two-thirds of employers have done at least some analysis of medication compliance, and 100% of employers are currently taking action or are contemplating some action to improve medication compliance in the next 18 months.
- 4. Evidence is beginning to accumulate regarding the effectiveness of various interventions and raises questions about the relative value of different investments.** Based on findings from this research, the most promising interventions appear to be those that are more precise in identifying and intervening with individuals who have compliance issues, and lowering financial barriers to compliance through benefit design. Initiatives that are characteristically more general in their approach are not perceived as being very effective, and evidence is lacking.
- 5. There appears to be a pattern that explains the adoption of medication compliance initiatives by employers.** Figure 4 introduces a two-by-two framework that segments employers based on the sophistication of the analysis they've completed on medication compliance vs. the sophistication level of their interventions. The model suggests that employers that have done little or no analysis or intervention are entry level (lower left). Those who have done more sophisticated analysis, but have yet to implement sophisticated interventions (e.g., targeted interventions, VBBD) are in a gateway to investing more heavily, but have not for some reason (lower right). Employers with little analytic data, but advanced initiatives are at risk due to lack of substantiation for their investment (upper left). Sustainable commitment (upper right) comes when sophisticated interventions are supported by sophisticated analytics to justify and monitor the investment.

Figure 4
Employer Adoption of Medication Compliance Initiatives—Framework

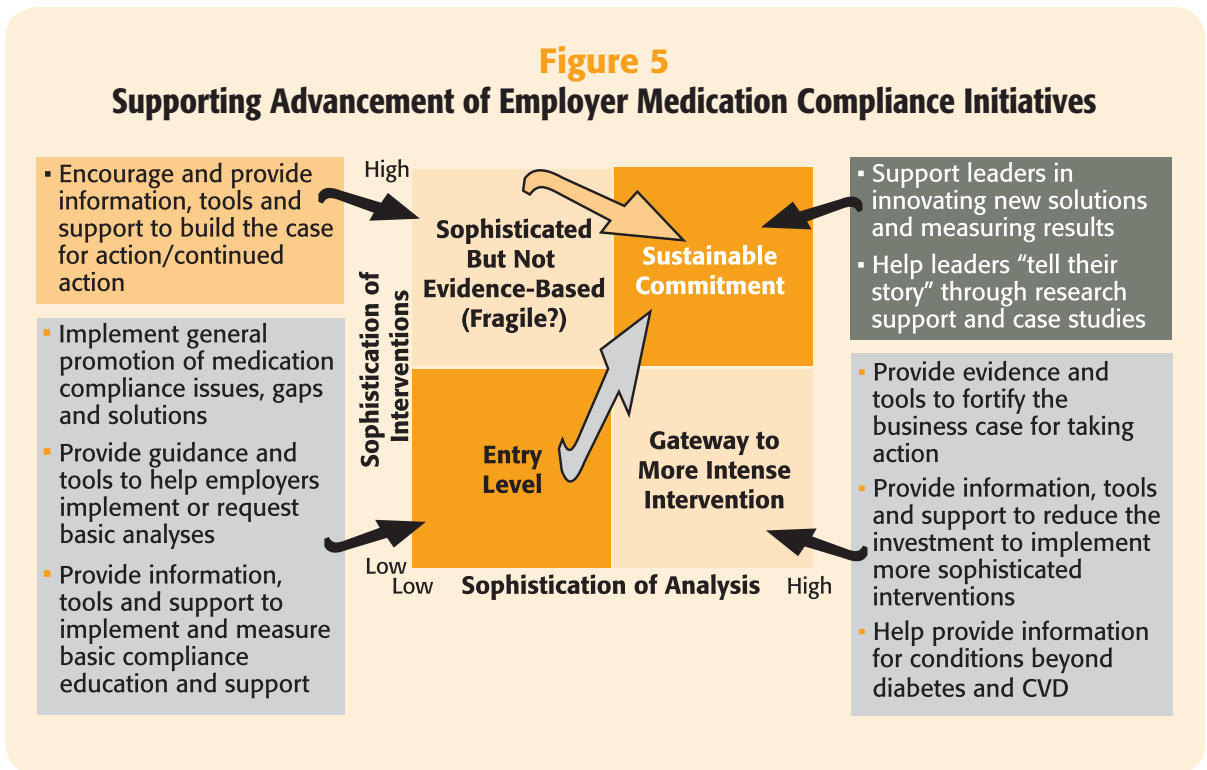


The upward-bending arrow in Figure 4 is descriptive of the movement of employers among segments in the model. Generally speaking, findings suggest that employers begin with less sophisticated (less complex and costly) analyses. The results of even unsophisticated analysis may be enough to stimulate investment in a low cost/low risk intervention, such as general or disease-focused education. Employers who desire to invest in more sophisticated (costly and complex) interventions need more sophisticated analyses to support their investment, so the path to sustainable commitment runs through more sophisticated information.

In-depth interviews support the adoption model, and suggest that it applies not only on an employer basis, but for any employer, on a condition-basis. That is, an employer may have achieved a sustainable commitment to diabetes medication compliance, but be “entry level” with respect to cardiovascular disease or asthma. The relationship between information and action is present at the condition level as well as the company.

IMPLICATIONS

This research implies that there is an opportunity for health care stakeholders to increase the focus on medication compliance, and to promote and support increasingly sophisticated and effective interventions to improve medication compliance. Figure 5 presents the adoption framework once again—this time identifying tactics that can be used to help employers within any segment, with the objective of helping them develop a sustainable commitment approach to improving medication compliance on a disease-by-disease basis.



It is notable that the tactics align to the information opportunities identified in Figure 3. The implication is that employers will welcome sound information and support to improve employee health, productivity and costs through improvements in medication compliance.



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