

# 'Build versus Buy' in Disease Management

## Separating Fact from Myth

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### Abstract

This article exposes and corrects some of the major myths about outsourcing disease management to a specialised expert vendor. Currently, a number of health plan medical directors feel that outsourcing costs more than building internally, will not provide a return on investment, and requires a large budget. None of these beliefs are true.

Outsourcing usually provides guaranteed savings and, because most chief financial officers will allow the costs to flow through medical losses, it does not require a separate budget. Even when faced with these facts, some people persist in their beliefs that the guaranteed savings are somehow fallacious. In reality, legitimate vendors guarantee savings which could withstand any biostatistical and contractual scrutiny. These guaranteed savings are far from trivial; in total they often exceed 2 to 4% of all medical losses. Furthermore, quality is not sacrificed in the vendors' quest for savings. Cost savings are achieved through quality enhancement; a cost-quality trade-off does not occur. In fact, the cost and quality enhancements that are achievable through disease management make it such a powerful weapon for a health plan that it suffers from its own success; possibilities often look too good to be true. The possibilities are real and most claims are quite true, once they are distinguished from the mythology discussed in this article.

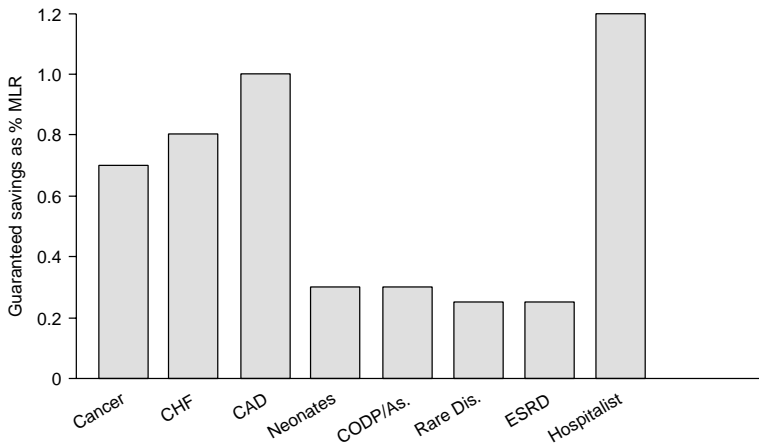
With the possible exception of protocols mailed out to physicians *en masse*, there is nothing more useless in disease management than presentations on calculating return on investment from programmes. It is the source of more mythology than any other aspect of disease management. This article exposes that mythology, which centres around the 'build versus buy' argument, and provides some definitive rules for measuring returns from disease management programmes.

**Myth: disease management programmes don't save money at all**

**Fact:** the truth or lack thereof of this assertion is quite different for the 2 major sources of pro-

grammes: 'home-grown' and outsourced. This statement is quite true, for home-grown programmes. According to Duran<sup>[1]</sup> of MidAtlantic Medical Services Inc., Rockville, Maryland, USA, implementation times can take 18 months. Staff must be added, enrolments are uncertain, and few home-grown plans even measure the savings they achieve. They usually measure clinical or self-assessment indicators, rather than financial results.

However, outsourced disease management (defined more broadly as outsourced medical management) is the single biggest source of untapped savings available to most health plans today. Health plans which know how to contract for disease man-



**Fig. 1.** Disease management prioritisation by guaranteed savings (1 health plan). **CAD** = coronary artery disease; **CHF** = congestive heart failure; **COPD/As.** = chronic obstructive pulmonary disease/asthma; **ESRD** = end-stage renal disease; **MLR** = medical loss ratio; **rare dis.** = rare diseases.

agement programmes using guaranteed savings in their contracting (fig. 1) and avoiding all major sources of biostatistical bias can realise savings in excess of 3 to 4% of total medical losses. Although these programmes do need to be undertaken for compliance and marketing purposes, this is no excuse for not saving money on them.

**Myth: medical directors may think these programmes save money; however, the chief financial officers (CFO) and actuaries will never buy their argument**

**Fact:** if the vendor makes a hard guarantee of a specific level of savings in excess of fees, the savings are legitimate and the Chief Financial Officer (CFO) should accept the argument. Most vendors know how to phrase their value propositions in the terms in which a CFO is familiar with. However, actuaries have a poor understanding of disease management, so they may not accept the arguments. Many vendors and internal health plan disease management programme directors find they spend much more time educating actuaries than they do CFOs.

**Myth: 'even if the CFO accepts the argument, there is a budget freeze on and we would have to wait quite some time to get the money, if we ever do'**

**Fact:** most health plans pay for these programmes out of medical spending, not out of the administra-

tive budget. The idea is that because all the savings accrue 'below the line' and because the savings are guaranteed, it is only logical and fair to have the fees come out of medical spending as well.

**Myth: vendors can say they save money, or even that they guarantee savings, but they really do not**

**Fact:** there are 2 major sources of apparent but invalid approaches in disease management outcomes measurement. One is regression to the mean, caused by selecting only moderately and severely ill members for inclusion in the programme, where 'moderately and severely ill members' is defined as those who were high utilisers in a previous period. Simply stated, last year's high utilisers may not be this year's high utilisers, whether or not a programme is in place. By selecting on the basis of last year's utilisation, a programme will automatically see improvement because of random variation. But that improvement is truly 'smoke and mirrors' because quite a number of other members who did not have emergency or inpatient claims last year, will have them this year. This would, for example, increase asthma costs which would offset alleged reductions experienced by programme participants.

This is especially a problem in chronic nonprogressive diseases like asthma, and to a lesser degree

in chronic but more slowly progressive diseases like diabetes mellitus. In congestive heart failure (CHF), any regression to the mean impact is probably outweighed by a secular underlying deterioration in the patient's condition.

The other source is sample selection bias caused by measuring the results of only the voluntary enrollees into a programme and not the population of patients with the disease in question as a whole. Although less widely identifiable than regression to the mean, this is actually the faster growing fallacy. An excellent example of it is chronicled in the article by Diamond.<sup>[2]</sup>

Most of the reputable vendors in the disease management industry (27 out of the 160 total vendors) avoid both of the above fallacies through the simple expedient of proposing a bid which measures the entire population of people with the disease(s) in question, even people who refuse, people they didn't identify and people who cannot be found.

**Myth: 'the vendors make more money than we do. That is not acceptable'**

*Fact:* how much the vendor makes is irrelevant to how much a health plan saves. For instance, if a vendor says: 'if you give me a dollar, I will save you \$10', you have made 10 times what the vendor has made. If a vendor says: 'give me 90% of your current medical spending and I will pay all your claims and guarantee improvements in health status and satisfaction', the vendor has 'made' (although they also have costs) 9 times what you have saved. But which programme raises the stock price of the health plan?

**Myth: 'by outsourcing, we lose control of our members'**

*Fact:* the *sine qua non* for effective control is information. We have all heard cliches such as 'uncontrolled is unmanaged', and they are all true. Prior to outsourcing, most health plans could not even identify their patients with various diseases, let alone measure the quality and/or cost of their care. However, once a contract has been initiated, health plans have a clear window into the care that these patients are receiving. They can then exercise 'control' by enforcing protocols, reconfiguring

networks, adjusting the benefits plan, etc. The ultimate control of bringing the programme in-house is also a possibility. Most disease management vendor contracts are written with an 'out' clause for the health plan should it choose to do exactly that, although no case has been reported in which the health plan actually did that.

**Myth: 'we are better off building the programmes. If savings from these programmes are that high, we should just do them ourselves and keep the money that would otherwise be spent on the vendor's sales, marketing, overheads, profits etc.'**

*Fact:* Disease management, it is thought, is a key competency of a health maintenance organisation (HMO). However, it turns out that HMOs are not set up for disease management and are, in essence, 'assembly line' shops focusing on fast and timely resolution of common problems and requirements.

This analysis also overlooks the incontrovertible fact that a vendor's efficiencies learned from having implemented essentially the same programme many times far outweigh the extra elements in the cost structure such as sales and marketing.

There is also the 'cost' of time. At a recent roundtable,<sup>[2]</sup> 2 experts in building and buying disease management programmes, MidAtlantic Medical Services Inc. (MAMSI) and Humana, respectively, exchanged opinions. Humana said that it could implement a purchased programme in 6 months, while MAMSI, as mentioned earlier, indicated that 18 months is quite usual when building a programme.

There is also the 'cost' of financial risk. 'Buying' allows savings to flow straight to the bottom line, provided it is done on a guaranteed basis.

Finally, there is the 'cost' of physician relations when physicians are globally capped or at least share some of the inpatient risk. An outsourced programme, particularly if physicians are allowed to participate in the selection and evaluation of such a programme, is a much easier 'sell' to those physicians than one in which they are asked to participate with no guarantee of success.

Readers not persuaded by this logic should be persuaded by the data. One would think that with 600 health plans and 10 manageable disease cate-

gories (6000 'cells') there would be quite a number of home-built programmes which have announced that they demonstrably save money across an entire population of people with a disease. Only 2 programmes have done so: Kaiser's end-stage renal disease (ESRD) programme in southern California, and Harvard Vanguard's CHF programme, developed when Harvard Vanguard was still part of Harvard-Pilgrim.

***Myth: while outsourced disease management programmes do save money, they are hard to implement***

**Fact:** Implementing all of the 3 most 'potent' programmes in the outsourcing arsenal guarantees to save a total of at least 4% of total medical spending. To achieve 4%, at least 5% of a health plan's membership must be aged over 65 years, since this is where the greatest opportunity lies. Clearly, nothing which promises results like these programmes will be easy to implement and, yes, outsourced programmes are hard to implement. Their implementation difficulties recall some words from Winston Churchill: 'democracy is the worst form of government except for all the others that have been tried from time to time.' Likewise, disease management programmes are the hardest way to save 4% of medical losses except for all the others which health plans try from time to time.

***Myth: 'our health plan is too small to bother'***

**Fact:** in 1999, a 15 000-member west coast health plan (including, to be fair, nearly 4000 Medicare lives) saved \$US1 million through a guaranteed savings contract with Lifemasters Interactive Heart Management Corporation. The trick with small health plans is to combine all 4 major chronic diseases and conditions (coronary artery disease, CHF, diabetes, chronic obstructive pulmonary disease) of the over 50 year age group on one contract. Then a high quality vendor's attention will be gained far more effectively than by doing one alone. The only trade-off is that you will have to spend more; but

the more you spend, the more you will save in the same year.

It may be inferred from this example that chronic disease management is most worthwhile in an older-than-average population. This is absolutely the case. For example, CHF is prevalent in 5% of those aged over 65 years, but prevalence is well under 1% in those aged under 65. In a non-Medicaid population aged under 65 years, a cancer disease management programme is the best choice for near term savings.

## Conclusions

Disease management is less understood and appreciated than any other aspect of health plan management. The Disease Management Purchasing Consortium & Advisory Council is often asked, 'if disease management is so great, why aren't more people doing it?' Readers who candidly peruse this article and ask themselves how many of these fallacies they themselves believed (or still believe) have the answer. Disease management is so different from every other initiative that a health plan undertakes; it offers the promise and guarantee of both clinical and financial improvement.

Disease management proposals are met with mistrust and scepticism. Overcoming these reactions requires a lengthy educational process.

## References

1. Disease management: an industry emerges. *Healthcare Business Review*. 1999; Sep-Oct: 22
2. Diamond F. This disease management study is flawed. *Managed Care* 1999; Jun

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