Creating, connecting and supporting active consumers

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Abstract Programmes to turn patients into active consumers have not yet lived up to their sponsors' expectations. While the business case for such programmes has been strong, their success has been hampered mainly by two factors. The first is a lack of robust and actionable messages that would create awareness of system-wide problems in healthcare and cause consumer-patients to act on those messages through decision-support tools. The second is an appropriate segmentation of the messages and decision-support tools that would appeal to different types of consumer-patient.

This paper proposes a framework that would enable employers to identify the key components needed to launch an active consumer programme, and to draw lessons for vendors of decision-support tools that cater to these programmes.

THE BUSINESS CASE

Current environment

The majority of consumers have shown little interest in actively participating in healthcare decisions, in particular when it comes to choice of treatments or providers. As a result, the diffusion of tools to help patients make informed healthcare decisions has been very slow. The diffusion is hampered by several factors:

- an unwavering faith that physicians are practising good medicine, reinforced by the media (i.e. very few die from mistakes on *ER*), and the information given by health plan sponsors (i.e. lack of transparency on quality of providers)[1,2,3,4]
- the incomplete understanding of (a) the treatment decision-making process of physicians and (b) the existence of expert guidelines for those treatments[5,6]
- the design of decision-support tools that, for the most part, cater to the well-heeled and educated consumer not the average patient.[7,8]

As a result, there has been only a limited consumer-based movement to improve the quality of care, in contrast to the consumer-based movements to improve auto safety or clean up the environment. This lack of public pressure has resulted in a continuous cycle of unaccountability

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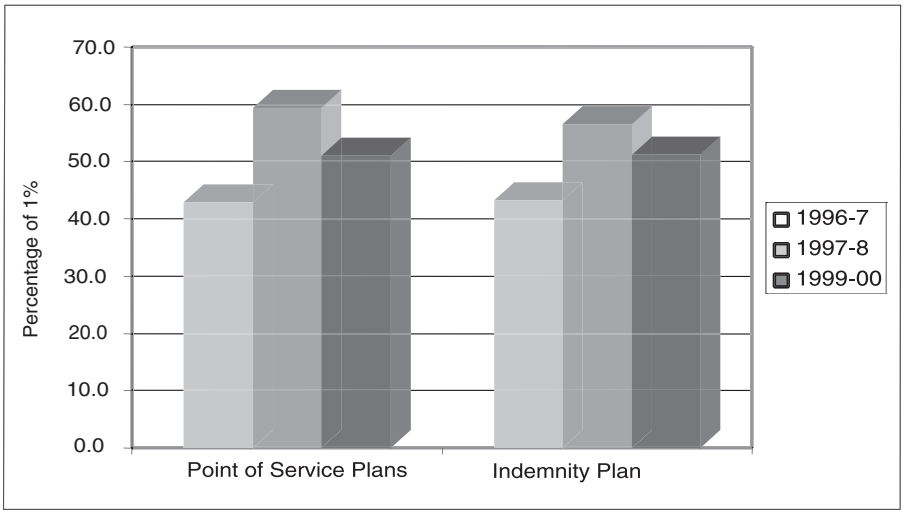

Figure 1 Percentage of lower back pain costs outside guidelines

(consumers do not care, employers do not care, health plans do not care, providers do not care), the result of which is an expensive healthcare system with marked variations in quality.[9–11] This variation is characterised by well-documented patterns of overuse, misuse and underuse.[12,13]

As an example of overuse, GE's internal analysis has shown that about half of all the costs associated with treating uncomplicated lower-back pain are outside well-accepted expert guidelines (Figure 1).

As an example of misuse, the 1999 report of the Institute of Medicine (IOM)[14] showed that close to 100,000 patients die every year in hospitals as a result of preventable errors. As an example of underuse, recent data from Medicare showed that, on average, only 55 per cent of hospitalised patients with atrial fibrillation received anticoagulants.[15]

Six Sigma and healthcare

Six Sigma is an approach to quality improvement that aims for defect-free processes, in which 'Six Sigma' represents 3.4 defects per million opportunities (DPMO). While Six Sigma was born in a manufacturing environment (Motorola), a 1998 report[16] suggested that the methodology could be applied in much of healthcare. In Six Sigma terms, the US healthcare system is operating at a 23 sigma level more than 100,000 defects per million opportunities. The IOM report[17] used this framework to define the defects that cause preventable errors in hospitals, a form of misuse. We can extrapolate this framework to other studies. For underuse, defects are defined as interventions that should have been done but were not (no medication prescribed for those whose condition warrants it); for overuse, interventions done that were outside expert guidelines (antibiotics prescribed for viral respiratory infections).

Applying this methodology shows that, for most common conditions, the care delivered in the US by physicians and other practitioners, either in their offices or in hospitals, has a level of quality about equal to that of airline baggage handling, and far below that of airline passenger safety,[18] as shown in Figure 2.

Reducing these defects from care processes will require a combination of

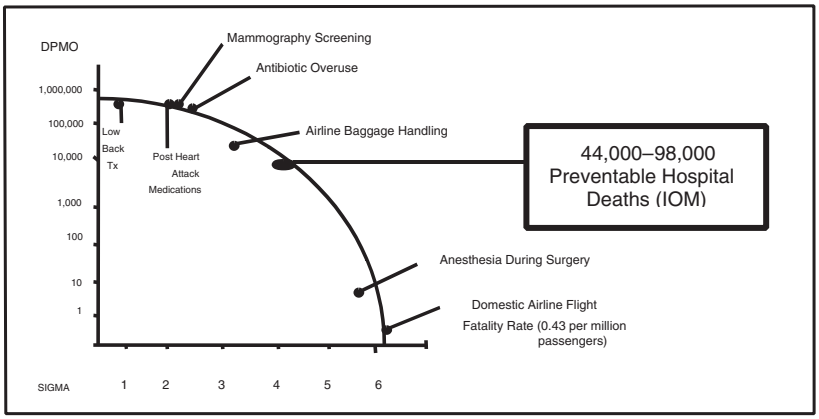

Figure 2 The quality imperative

forces that are described in a series of recent articles.[19] One of those forces is the patient as consumer. But for this force to be effective, patients must be activated: their information construct must change. They need to understand the magnitude of the rate of mistakes in care, and their personal level of risk associated with these mistakes. They need to appreciate what they can do to exert some control over their risk. They must then be led to information and decision-support sources that will help them make informed decisions, reducing their risk of suffering from a healthcare defect overuse, misuse, or underuse.

CREATING AND CONNECTING ACTIVE CONSUMERS

The activation framework

One model and at least two studies in healthcare consumerism and segmentation provide some insights on how to change the information construct. At the centre is Prochaska's model of health behaviour change where he identified that, across 12 health behaviours, consistent patterns were found between the pros and cons of changing and the stages of change (pre-contemplation, contemplation, preparation, action, maintenance, termination).[20] Putting this model together with population segmentation research[21,22] helps us paint a picture of the current stage of activation of different populations: the degree to which they understand the existence of problems in healthcare, and the degree to which they feel empowered to make decisions with respect to their care (Figure 3).

There is general agreement that those who understand there is a problem have a greater tendency to act on that understanding and to seek out information in order to make their care decisions. Analysing the psycho-socio profile of these segments, and their attitudes towards healthcare decision-making, provides us with some insights on which segments we need to target with our messages.

At the first stage of activation, we find the 'fix-me's: individuals who do not believe that taking charge of one's health or participating in treatment decisions is important or necessary.

At the other end we find the 'Murphy Brown's: individuals who understand the complexity of care decisions, the problems inherent in the system, and the necessity to play a very active role in treatment decisions. In between is the remainder of the population, all at different stages of activation. We cannot prospectively identify the members of each group, and

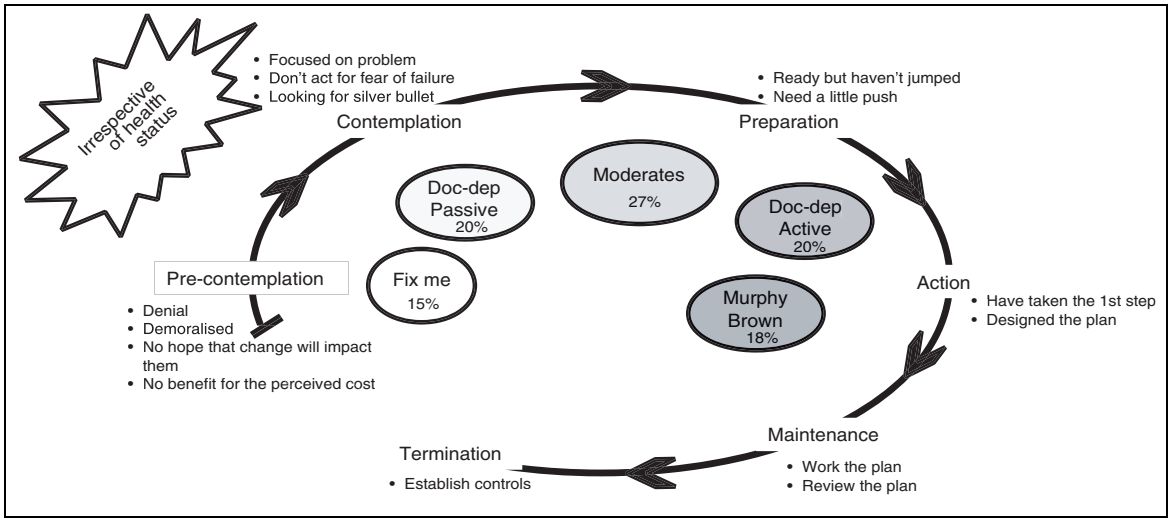

Figure 3 Prochaska model with Porter Novelli profiles and Kaiser health segments

there are only a few homogenous socio-demographic characteristics within the groups. However, we do know that within each group, there are similarities as to how healthcare decisions are approached, and the general propensity to be active decision-makers.

Using the framework to activate

Understanding the similarities within each segment helps us understand how to connect each group to the tools and information services they will need to take an active part in their healthcare. It can also help us to understand how to frame messages to these groups and move them from one Prochaska stage to another. For example, the 'Murphy Browns' need only be pointed to the right source by a trusted party in order to act. Moderates, on the other hand, need to better understand the personal risks of not taking an active part in healthcare decisions. They will need a coach, or another 'connector', both to lead them to sources of information, and to help them interpret and act on the information

This integrated model argues strongly for a market segmentation approach. It also demonstrates the difficulty of identifying the members of each of these segments. In fact, it may not be possible to identify the segmentation at the individual patient level. While that could be viewed as a shortcoming, the model is nevertheless useful in teaching us that there is a significant percentage (40–75 per cent) of all healthcare consumers who may be willing to take action and play a role in their healthcare decisions. As a result, focusing our initial efforts on these segments may be enough to tip the healthcare market.[23]

Using this framework effectively means tailoring messages that each segment will respond to in their current information construct. Recent surveys on consumer attitudes about healthcare suggest that there is an increased awareness of medical errors and variations in quality among physicians and hospitals.[24] In addition, there is growing evidence that consumers will pay attention to messages that are framed negatively, as long as the topic is relevant to their health condition.[25,26,27] For example, 'Less than 55 per cent of all heart attack patients receive the right medication. Are you? Know your risk, take action now.' But only the actual deployment of these messages in multiple media to reach the various segments will

help us determine whether this model works.

Once activated, we must next understand what is important to consumer-patients in making healthcare decisions, what kinds of information and decision-support tools they need, and from whom that information should come.

WHAT ACTIVATED CONSUMERS WANT

Consumer-driven product attributes

Works from Hibbard, Jewett and Sofaer,[28] as well as unpublished focus groups done by the Foundation for Accountability (FACCT) in conjunction with GE,[29] provide us with a list of critical elements that consumer-patients are looking for in health information and decision-support tools. These are that information is:

- *credible* – comes from a recognised name (Mayo, Harvard, Hopkins)
- *reliable* – is the information needed
- *understandable* – is written in layman's terms at the 5th or 6th grade level
- *actionable* – can be acted on, step by step
- *expert-based* – is backed by, for example, National Institutes of Health, Federal Drugs Administration (FDA), World Health Organisation (WHO)
- *timely* – is available at time of diagnosis or treatment decision
- *easy to access* – is delivered in a self-service way by respected third parties.

If it has these characteristics, consumer-patients say that they will use this information to:

- have a dialogue with their physicians about treatments and treatment options
- select an evidence-based treatment
- choose a safe hospital
- select a good care team.

Trusted sources of information

The data on what sources consumers trust most to provide them with information on health and on healthcare quality are contradictory.[30] While consumers indicate that they trust friends, family and co-workers for information on quality of providers, they also indicate that they receive the majority of their information on this issue (in ratings of providers) either at work or via the mail. In addition, they acknowledge receiving the majority of their general information about health via the television or other mass medium. Finally, many continue to trust their physicians for expert medical advice.

There has not been, to date, a national study that would indicate whether or not consumer-patients would trust their employer to provide them with vetted information sources. Internal GE focus groups and surveys indicate that employees want and trust the company to actively look for and identify best-in-class information and decision-support tools, and then act as an intermediary, disseminating the vetted information and giving them the knowledge to vote with their feet.[31] Nevertheless, they do not want either their health plan or employer to come between them and their physician, or to restrict their choice of providers by restricting network access, even to unsafe hospitals.

Overall product attributes

As a result, effective programmes designed to activate, connect and support healthcare consumers must contain as many of the attributes important to consumer-patients as possible. They also must be disseminated by a trusted source, whether the employer or a third party. Overall, these attributes can be summarised as a series of basic principles that effective decision-support tools must possess.

- *They must help pull back the covers on healthcare* – close the information gap between patient and provider; not by

turning patients into or against their physicians, but by de-mystifying some of the care processes to increase the ability of patients to understand their options and make informed decisions.

- *They must encourage transparency in the system* – help create and disseminate objective measures that patients can use to (a) compare the care they are getting to best-in-class care, and (b) rate and select their care providers based on the excellence of their skills and the processes they use.
- *They must cater to different segments of healthcare consumers* – provide support to patients in a timely way, help find connectors or coaches and decision-support tools that are segment-appropriate.
- *They must be accompanied by a consistent and frequent public awareness campaign* – reminding consumers about the dangers of mistakes whether in hospitals or physicians' offices and variations in practice patterns due to opinion-based medicine, not evidence-based medicine.

PUTTING IT ALL TOGETHER

Developing a programme that will help to create active consumers by moving them along the Prochaska stages[32] from pre-contemplation to contemplation to preparation to action, while providing adequate support to those who are at the various stages, is a novel and largely untried concept on a large population with varying healthcare needs. However, as we have shown, there is a body of literature and research that suggest such an approach might be successful.

In developing such a programme, it is important to ensure that the decision-support tools meet the principles outlined above. While we have not yet identified a tool that perfectly meets all attributes and principles, there are a number of tools that come close.

DoctorQuality.com A web-based decision-support and health information tool that enables consumer-patients to understand guideline care for certain chronic conditions, as well as rate and select hospitals and physicians on their performance relative to certain objective criteria.

PDHI.com A web-based decision-support tool that helps patients with chronic conditions track their care, comparing it with guideline care.

EBMSolutions.com A web-based treatment decision tool with over 65 evidence-based guidelines for patients and physicians to work through cooperatively.

NexCura.com A web-based treatment decision-support tool for cancer patients.

iHealer.com A web-based treatment decision-support tool for cancer and other acute and chronic conditions.

Subimo.com A web-based hospital-selection tool that helps consumers to understand the importance of certain variables when selecting a hospital for care.

Leapfroggroup.org A consortium with specific data on hospital safety standards.

FACCT'S Compare Your Care A web-based tool that helps a patient rate their physician as they compare the care they are getting with evidence-based care.

Consumers Medical Resources A web-based and phone-accessible programme that links patients with serious health conditions to top physicians in the country's leading medical teaching institutions, to tailor a package of information that summarises the evidence around treatment options for the specific condition they suffer from.

American Healthways A national disease management programme that uses web, phone and print tools to help physicians and patients adhere to evidence-based care

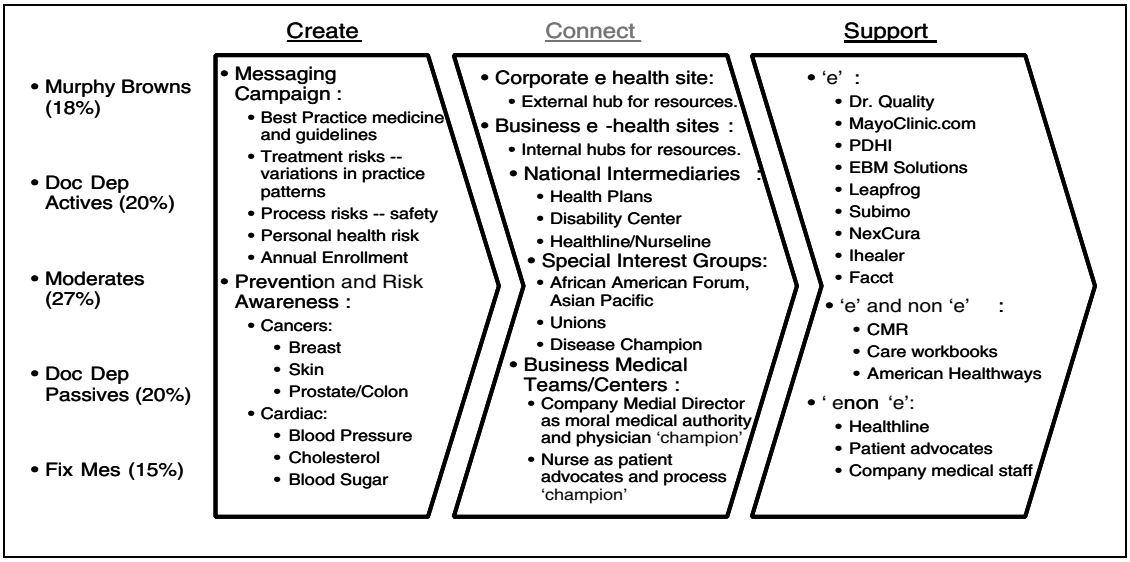

Figure 4 Creating, connecting and supporting consumers in different population segments

guidelines for chronic and acute conditions.

In addition to these off-the-shelf tools, employers and other purchasers can also use some internal resources as part of their programme. For example, GE will use the medical centres at its larger worksites to help patients understand their treatment options. These sites will be distributing care workbooks that illustrate key decisions and treatment pathways for select conditions. However, for the creating or supporting of active consumers to be successful – as measured by acceptance and use – it is critical to ensure that once activated, consumer-patients are then connected to the segment-appropriate support tools.

As depicted in Gladwell's book,[33] 'connectors' and 'salesmen' are critical in the diffusion of a product; and what we've learned from the behavioural and population segmentation models is that different segments will require different types of connectors and salesmen.[34,35] For example, the 'Murphy Browns' will only need a little education about where the tools are located and be given an easy way to access them (e.g. on internal or external website). On the other hand, the 'fix-me's will require a lot of messaging from respected salesmen to help them understand how much at risk they are for errors or mistakes, and then a personal connector a coach or nurse to guide them to, and maybe even interpret, the information in the support tools. Various methods to create, connect and support consumers that are in different population segments are shown in Figure 4.

CONCLUSION

The implications for active consumer vendors are clear. First, their products must possess certain attributes (encourage transparency, pull back the covers, meet consumers where they are) to appeal to purchasers. Secondly, for their products to be adopted and used by consumers, they must meet patient-consumer attributes (credible, reliable, understandable, and actionable). Thirdly, for employers and other purchasers to have a successful campaign, they must spend as much time

developing, planning and deploying valid connectors as they do developing and deploying robust support tools and information sources.

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