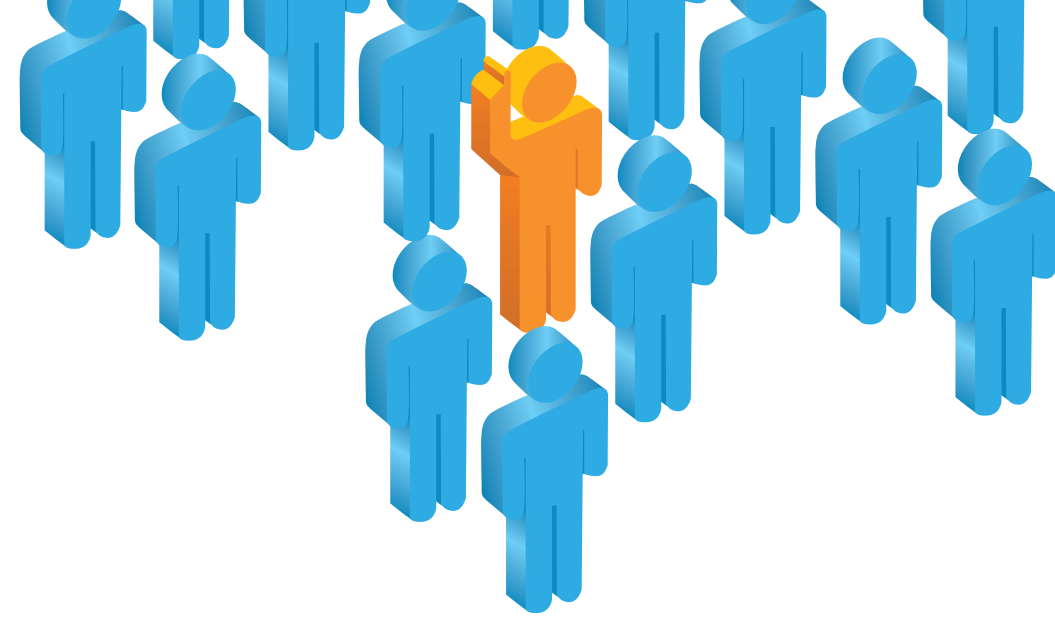


Value-Based Purchasing



UNDERSTANDING THE IMPACT
OF PHARMACEUTICAL
BENEFIT DESIGN DECISIONS





Contents



Introduction.....pg 1



Approaches to Benefit Design.....pg 3

Cost Management.....pg 3

Consumer Demand Management.....pg 4

Value Management.....pg 5



Successful Benefit Design Innovations.....pg 5

Pitney Bowes.....pg 5

Marriott.....pg 6

Asheville Project.....pg 6

Worksite Health.....pg 7



Changing Healthcare Strategy.....pg 8

Talk ROI.....pg 8

Think Process Improvement.....pg 8

Know the Population.....pg 9

Realize Co-Pays Do Not Work Alone.....pg 9



Checklists For Effecting Change.....pg 10



Introduction

Healthcare costs continue to burden the U.S. economy, rising much faster than the Consumer Price Index. According to a recent Towers Perrin survey, healthcare costs have increased by more than 60% in the last five years.¹ And those increased costs have led to higher insurance premiums that employers pay on behalf of their workers. The trend cannot continue much longer without having a serious negative impact on U.S. industry.

Some companies, however, are starting to successfully control the cost of their employees' healthcare—by taking a different approach and implementing forward-thinking benefit designs. These companies have demonstrated that it is possible for employers to spend less on premiums at the same time their employees spend less out of their own pockets.

By examining what these pioneering companies have done, other employers can apply their winning strategies—to control costs today and, perhaps more importantly, to create a “culture of health” that results in a longer-term success for everyone—the employer, the employee, and the American society as a whole.

In conjunction with the National Business Coalition on Health's 11th Annual Conference, the Benefit Design Institute (BDI) conducted a workshop with nationally recognized thought leaders to discuss pharmacy benefit design innovations and the impact of value-based purchasing and evidence-based benefit design decisions on workforce health, employee productivity, and employer healthcare costs. Workshop participants represented employer groups, business purchasing coalitions, benefits managers, managed care organizations, benefit design consultants, and professional associations focused on improving the current state of the employer-based healthcare system.

This report contains an overview of the benefit design strategies, specific examples of successful innovations, and practical recommendations discussed during the workshop that employers can use to improve the health of both their employees and their bottom line.



The Benefit Design Institute's Workshop



The BDI workshop was moderated by [Thomas M. Chamberlain](#), PharmD. As the executive director of BDI and president of Managed Market Resources, Dr. Chamberlain uses his years of experience in clinical pharmacy, research, and educational programming to help organizations optimize pharmaceutical outcomes—and ultimately consumer health. Nationally recognized as a thought leader in the pharmacy profession, Dr. Chamberlain frequently lectures and conducts educational programs, forums, and advisory boards with healthcare professionals and business executives.

Two experienced faculty presented workshop participants with current information about health management tactics and their outcomes:



[George Carpenter](#), MBA, is the president and CEO of WorkWell Systems, Inc., a California-based firm that focuses on bringing new technology and business processes to underserved healthcare markets. After starting his career as a manufacturing process control consultant in the steel industry, Mr. Carpenter moved into the healthcare arena, working with Baxter Healthcare and then acting as chairman and CEO of CORE Inc., the company that pioneered the application of healthcare management tools to workforce analytics. Mr. Carpenter consults with Global 500 pharmaceutical and biomedical firms and speaks frequently on healthcare technology and financing issues.



[Schumarry Chao](#), MD, MBA, is the president of the consulting firm SHC & Associates. As such, Dr. Chao calls on her experience from “all sides of the healthcare industry,” including insurer, delivery system management, employer, pharmaceutical, and information technology. For several years, she served as the CMO and senior vice president of strategic development for the pharmacy benefits manager, MedImpact. In her leadership role at Aetna, she acted as the company’s official national spokesperson on healthcare reform and policies. In addition to her consulting work, Dr. Chao, who is board-certified in emergency medicine, is a clinical professor for the Schools of Medicine and Pharmacy at the University of Southern California.

Approaches to Benefit Design

Dr. Chao provided participants with an analysis of the approaches that have been taken with pharmacy benefit design—as well as some new ideas to consider.

COST MANAGEMENT

Overall, the industry has been quite successful in cost management, an approach that focuses on unit pricing. In a nutshell, we try to control how many units are used and ensure that less expensive units are used whenever possible. In fact, this idea provides the foundation for much of our system today.

To get unit prices for products and services down, payers must consolidate their purchasing power and buy in volume. Volume purchasing in healthcare has been accomplished by creating restricted networks of providers and suppliers. To provide cost-effective care for their members, health plans have contracted with networks of physicians and hospitals.

In addition, many plans have implemented other cost-control measures based on this idea of taking advantage of the lowest unit price. For instance, HMOs and POS plans control costs by encouraging the services of primary care physicians rather than specialists. Most managed care plans also require prior authorization for certain procedures, to ensure appropriate utilization and the use of less expensive treatment options.

The pharmacy benefit has been structured in a similar manner, with volume pricing enabled by networks of retail pharmacies and contracts with pharmaceutical



manufacturers. Utilization is controlled in many instances via tiered drug formularies, which encourage the use of less expensive products (whether brand or generic) that are deemed therapeutically equivalent. Prior authorizations are sometimes used as well to ensure that more expensive products are used only when they are truly needed.

With these coverage- and reimbursement-limiting tactics, the cost management approach creates a barrier to access, with the payer playing a role in deciding what is “right” for each patient. While this approach can be successful at reducing costs in specific areas or “silos,” such as medical care costs or pharmacy costs, it has revealed a significant problem: reducing costs in one area often leads to increased costs in another. By taking a “silo approach” to healthcare and trying to decrease costs in individual areas (e.g., medical, pharmacy, mental health, disease-specific management programs), payers may succeed only in shifting their costs around—without regard for the overall healthcare costs and potential health outcomes.

Too often, regardless of the efforts made in these various silos, the total cost of healthcare continues to increase. We’ve learned that the silo approach has limited success; we need to look more at the big picture.



CONSUMER DEMAND MANAGEMENT

Recognizing the increasing burden of healthcare costs, most employers have decided to shift more of the cost to their employees. Many simply require their employees to pay more of the insurance premiums or higher co-pays; others have opted to have their employees play a larger role in their care—by using high-deductible health plans. With consumer-directed healthcare (CDHC), the employee becomes the primary decision-maker and purchaser, determining his or her own access to care. Thus, access to care is limited only by the employee's willingness and ability to pay.

CDHC certainly has its advantages. It adds more money to the healthcare pool, by supplementing funds from the government and employers. It allows for true market-based pricing. It also makes sense because the consumers are the ultimate beneficiaries of the healthcare services they are paying for, so they have control over the decisions that affect both their health and their finances. Unfortunately, consumers are not always sufficiently educated or accountable for their decisions.

And so consumer education is proliferating in the media. But is it enough? When consumers are suddenly faced

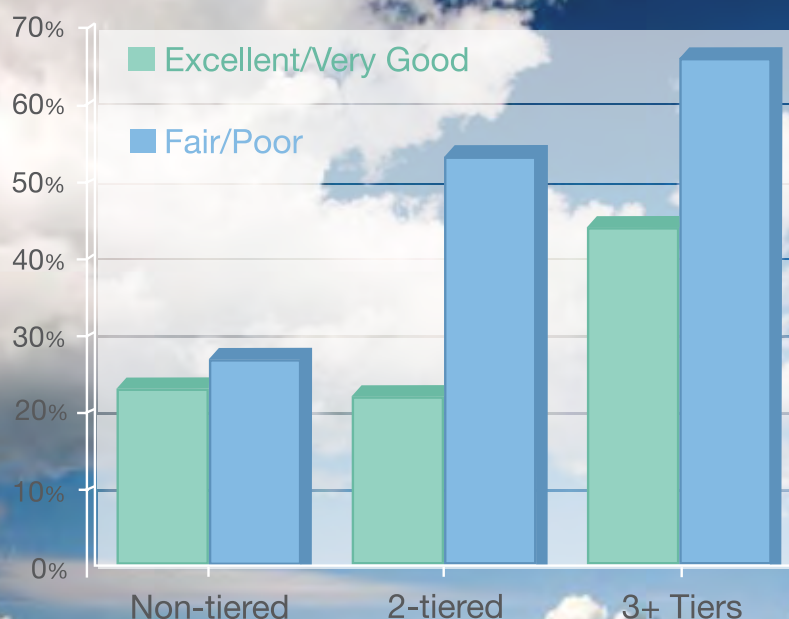
with paying for their healthcare services instead of just a small co-pay, will they make the smart choice for the long term or the choice that has the least impact on their pocket book today?

Studies of the effect tiered formularies have on consumer behavior demonstrate how unwilling consumers can be to pay for their healthcare. A study by Harris Interactive showed that more restrictive drug formularies resulted in increased non-compliance. And while the compliance of all members was affected, those members in poor health were more quickly affected by the price difference than those in good health.² (See Figure 1).

Another study of chronic medications showed how patients' behavior was affected when faced with an aggressive three-tier formulary. More patients chose to discontinue treatment when they were required to use a preferred product or pay a higher co-pay to obtain the product they were prescribed. For example, while 85% of patients on ACE-inhibitors did switch to the preferred product, 15% did not.³ And remember, 20% of members account for 85% of costs.

If a co-pay differential is enough to discourage patients from filling their prescriptions, what impact does going from a co-pay to full price have? How compliant will they be? By making poor decisions, consumers could end up costing themselves, other payers, and society in general even more money.

FIGURE 1: NON-COMPLIANCE BY HEALTH STATUS



Harris Interactive Inc. Research report: the impact of tiered co-pays -- a survey of patients and pharmacists, September 2003.²

VALUE MANAGEMENT

In addition to the weaknesses already discussed, the cost management and consumer demand management approaches fail to consider the health status of employees and their productivity in the workplace—which is, at the end of the day, the real value proposition for employers. After all, the more productive the employees are, the better the company's performance can be.

It's a "believe what I say or believe what I do" kind of situation. Patient education and compliance initiatives must not be undermined by high co-pays or other barriers to access.

And so we have a third benefit design approach to consider, one based on value. With this approach, payers base their access decisions on evidence of the ROI of products and services. They analyze the data and promote those services that have proven the most beneficial for specific patients. This approach allows payers to optimize their resources by lowering their medical costs and improving the health and productivity of their employees. It also allows patients to have affordable and appropriate access to services, improving their quality of life while keeping their out-of-pocket costs down.

It is critical with this approach for the benefit design to support the services that are promoted. It's a "believe what I say or believe what I do" kind of situation. Patient education and compliance initiatives must not be undermined by high co-pays or other barriers to access. Benefit design decisions must be made thoughtfully, along with pay-for-performance incentives for providers, so that everyone is working toward the same goals. And benefit designs should be kept simple so that patients and providers can easily work within them. In addition, to support the benefit design decisions, payers should provide education and decision support tools for both consumers and providers.



Successful Benefit Design Innovations

Some companies are starting to succeed in controlling their healthcare costs by taking a value-based approach. Mr. Carpenter described the following examples for participants to consider.

PITNEY BOWES

Pitney Bowes found that half of its workforce had chronic conditions (e.g., asthma, diabetes, cardiovascular disease, depression). And so the company took an analytical approach to the problem. It created an algorithm to determine what those chronic conditions might mean to its healthcare costs, assuming the following:

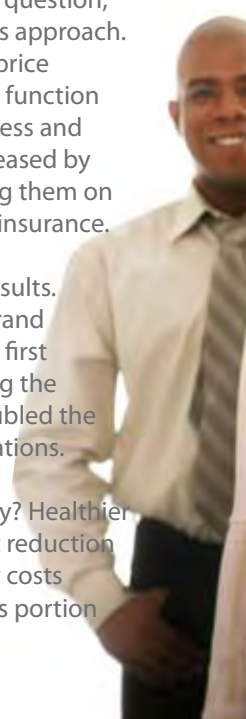
- The prevalence of chronic disease will increase.
- Medications are an integral part of managing chronic conditions.
- Non-compliance with medications is a key predictor of future disease burden and cost.

Pitney Bowes' conclusion: By keeping employees with chronic disease on their medications, the company can reduce its future health claims.

Of course, the next step was figuring out how to keep employees on their medications. To answer this question, Pitney Bowes continued with its logical business approach. It assumed that medications are subject to the price elasticity of demand, that demand elasticity is a function of cost, and that compliance is a function of access and affordability. Therefore, compliance can be increased by making medications more affordable, by putting them on the formulary tier with the lowest co-pay or co-insurance.

Pitney Bowes did just that—and saw positive results. By putting generic medications and targeted brand medications for the top chronic diseases on the first tier, with a 0%–10% co-insurance, and increasing the co-insurance for tiers 2 and 3, Pitney Bowes doubled the compliance with those targeted chronic medications.

What did that compliance mean to the company? Healthier employees with fewer ER visits and a significant reduction in total healthcare costs. In fact, even pharmacy costs decreased by 12% (PMPM). While the company's portion



for the targeted drugs increased, the utilization of additional drugs was avoided because employees were healthier (e.g., fewer complex events occurred leading to ER admissions and becoming therapeutic failures that required additional drugs). In addition, more patients used combination products, instead of multiple products for co-morbidities. By looking at their employees' healthcare with an investment strategy rather than a cost containment strategy, Pitney Bowes was able to make positive steps in controlling its current and future healthcare costs. Factors important to their success included the following:

- Establishing an integrated healthcare database (medical and pharmacy)
- Taking an integrated approach to their benefit design and the delivery of care
- Viewing healthcare management as a holistic and continuous process (e.g., looking at the migration of members to healthy behaviors and lower long-term costs, not just the pharmacy costs for one year)
- Ensuring that the appropriate patients are prescribed pharmaceuticals proven effective in preventing more serious (and costlier) health problems—and then keeping those patients compliant with their medications, to help them stay healthy as long as possible.

By identifying these chronic conditions that were driving 50% or more of the company's healthcare costs, and their relationship with medication utilization, Pitney Bowes was able to improve its employees' health outcomes and reduce its costs.

MARRIOTT

Marriott also wanted to improve compliance with chronic drug therapies in that non-compliance leads to increased adverse clinical events and costs. The company concluded that by using an innovative benefit design structured around evidence-based medicine, it could improve patient compliance with select drug therapies—thus improving employees' quality of care and satisfaction with the company, while reducing the company's healthcare costs.

Marriott's program offered employees lower co-pays for therapies in five chronic disease categories. The program's preliminary results look extremely favorable. More employees have begun recommended therapy, and those employees are seeing improved outcomes. More detailed findings from Marriott's program are expected to be published in 2007.

ASHEVILLE PROJECT

The community-based Asheville Project further illustrates the power of knowledge and early intervention. Experience from the Asheville Project in the management of diabetes prompted the study team to implement a pharmacist-driven care model for asthma patients. Pharmacists and care providers were trained and empowered to provide disease management services to 207 adult asthmatics. The project provided for employer-paid one-on-one asthma education, financial incentives in the form of waived disease-related medication co-payments, and face-to-face patient counseling from specially trained pharmacists at 12 local pharmacies.

Over 5 years, patients' outcomes improved, and total asthma-related costs decreased. While spending on asthma medications did increase, the asthma-related medical claims decreased. For example, patients with emergency department visits decreased from 9.9% to 1.3%.⁴ The end result was an average direct cost savings of \$725 per patient per year.

In addition, missed or nonproductive workdays decreased (from 10.8 to 2.6 per year), resulting in an indirect cost savings of \$1,230 per patient per year.



WORKSITE HEALTH

Other companies—often large employers, like Wal-Mart and Goodyear—have found that actually providing the healthcare services for their employees is an effective way to control costs. Some have their own occupational medical departments, while others contract with outside organizations to staff worksite-based or community-based health clinics. At these clinics, employees can access care conveniently and affordably (services are usually free or at a very low cost)—resulting in high compliance and healthy workers.

These worksite health programs have typically offered routine and primary care (e.g., vaccinations, strep throat cultures) and occupational medicine services. The current trend is that more companies are including prescription medications in their programs, especially since the clinics qualify for the same pricing as HMOs. For obvious reasons, the clinics tend to confine their services to the less difficult (less litigious) areas, focusing instead on the well-established, evidence-based routine services that most people require.

The worksite clinic approach, regardless of its specific scope and setup, provides several advantages to employers:

- Costs are transparent—because the care is not claims-based; the employer pays for everything directly. The company knows exactly what it costs to pay for physicians and nurses, medical equipment, and office space—and sets a fixed budget based on that knowledge. So there's no incentive for overutilizing services.
- By taking the claims processing out of the equation, employers save those back-office administrative costs, which tend to consume about 10%–15% of costs.
- It's easier to integrate employees' data (e.g., pharmacy, occupational medicine, productivity) and thus easier to manage their health.
- Employees spend less time away from work for physician visits (especially in those companies with on-site clinics).

By investing in employee health, companies can improve objective outcomes and save money. In addition, employee attitudes improve, resulting in a better working environment and increased productivity. (See Figure 2).

FIGURE 2: HEALTH MANAGEMENT IN THE WORKPLACE





Changing Healthcare Strategy

When discussing possible changes in an employer's healthcare strategy, remember the following tactics:

TALK ROI

To achieve strategic changes, healthcare and benefit design need to be discussed in terms of investment and the returns on that investment. This is the language of the C-suite, where executives are under pressure from quarterly earnings reports for Wall Street. The argument to change healthcare strategy will not be won by providing specific clinical outcomes and *p* values.

We need to get away from the silo mentality and move toward a culture for advancing and investing in human capital. The workforce should be considered one of the company's assets, with values assigned for healthy, productive employees. Managing that asset should be viewed as a strategic function of the company, with personnel dedicated to enhancing employees' health and productivity. This approach requires us to understand the significance of innovative benefit design and the true cost of healthcare—both the direct medical costs and the indirect costs of not providing appropriate care, including presenteeism, absenteeism, and disability.

And what about that ROI? The long-term clinical impact of treating chronic illnesses is already well established (e.g., there are gold standards for treating asthma, diabetes, and hypertension, showing significant clinical improvements); thus, that hurdle is fairly low. However, the short-term return can be a bit tougher to convey. One challenge that many employers run into when trying to increase access to prevention or early intervention programs is the timing of the ROI. How quickly will the program realize results?

In fact, by moving a drug to a lower co-pay, the employer will immediately see increased share of drug costs and increased drug utilization. The employer may see that initial cost increase as a bad result. However, while the direct healthcare cost savings may not be immediate, employee absenteeism, satisfaction, and productivity effects should be visible very quickly. Therefore, if employers can focus on those types of workplace measures, the argument should be more easily won. The direct healthcare savings will then show up in the longer term.

THINK PROCESS IMPROVEMENT

According to process improvement principles like Six Sigma, if a company wants to save 5%–10%, it can usually do that through adjusting its purchasing activities. If, however, a company wants to save a significant amount, say 50%–90%, of money or time, it must start at the beginning and rebuild the entire process. That kind of significant change cannot be achieved through purchasing habits alone.

Most companies have been successful at this rebuilding in fundamental business processes such as manufacturing and shipping. However, employer-sponsored healthcare has not been approached with this mentality, and past attempts to improve it have had limited success. In fact, implementing barriers to purchasing, such as higher co-pays, can actually make capturing and analyzing healthcare data even more difficult.



To improve the management of healthcare, CEOs need to think about healthcare in the same way they think about the rest of their business, using the same basic principles, like these:

- Test raw materials for quality.
- Perform preventive maintenance rather than letting equipment break.
- Screen vendors, evaluate their performance, and hold them accountable.

It costs \$1 to prevent a problem, \$10 to fix it upon inspection in the factory, and \$100 to fix it out in the field.

It costs \$1 to prevent a problem, \$10 to fix it upon inspection in the factory, and \$100 to fix it out in the field.

KNOW THE POPULATION

Every industry is different. Different employers will have different concerns and objectives. Therefore, each employer needs to analyze its workforce before designing a new strategy.

After analyzing its employees' health, the employer needs to decide what it considers "appropriate" access. Employers cannot afford to give their employees unlimited access to every healthcare product and service available. And not every product is appropriate for every patient. By using evidence-based medicine, an employer can identify the therapeutic categories most beneficial for its overall employee population. It can then segment the population, for example, as to who may or may not really need a new therapy. With better understanding of both clinical evidence and their employees' health, employers can save money and improve the productivity of their workforce.

Some executives may raise the question of how much they are spending on their employees' families' healthcare, compared to the healthcare of their employees. Most families in the United States have both spouses working. When one spouse is sick, the other's productivity is affected. Most CEOs do recognize this impact on productivity, as well as the give and take of the coordination of benefits between spouses, as important to their bottom line.

REALIZE CO-PAYS DO NOT WORK ALONE

Years ago, before tiered formularies with higher co-pays were implemented, patients did not take their medications as they were prescribed. Compliance was a challenge even when there was no economic hurdle. Therefore, giving targeted products a lower co-pay does not guarantee that patients will suddenly be more compliant. It does, however, eliminate what may be an inappropriate barrier to necessary care—and thereby encourage compliance. A low co-pay engages the employee, as compared with a zero co-pay, which rings of entitlement, thereby eliminating the sense of value. To be really effective in terms of compliance, benefit design must be clearly supported by other initiatives, such as patient education and incentive programs.



A low co-pay engages the employee, as compared with a zero co-pay, which rings of entitlement, thereby eliminating the sense of value.



Checklists For Effecting Change

As we gather more input from thought leaders and more data from innovative projects like those discussed here, making decisions regarding benefit design should get easier. In fact, the University of Southern California and the Integrated Benefits Institute are currently collaborating on a simulation model for payer health benefit decision-making. For now though, we can use the following lists to help us in our quest:

- Remember that every industry, every employer, every population is different.
- Determine where the employer's healthcare dollars are going. Is the employer spending money on creating barriers to access to appropriate care, barriers to compliance? Or is the employer spending money on getting its employees into gold standard therapies that will result in a healthier workforce and improved productivity?
- Emphasize an investment strategy rather than a cost containment strategy. A company's healthcare benefit is not just another expense line on the balance sheet; it is an investment in the core business, contributing to the bottom line. Remember that time to get to ROI is important.
- Based on the employer's data, identify a specific measure of success before approaching the C-suite. Having concrete expectations and a specific endpoint to measure against will be a big step toward convincing an employer to invest more money, at least initially, in its employees' healthcare.
- Share best practices of employers who are investing in their employees' health.
- Start with small pilots, partnering with various stakeholders in a local community, to create more best practices.
- Work with NBCH to identify resources and industry partners.

To accomplish a significant improvement in how they provide healthcare to their employees, companies should consider tactics for the following:

- Engaging employees in their own healthcare
- Providing incentives for preventive care
- Reducing barriers to appropriate access
- Promoting shared accountability
- Supporting transparency
- Steering employees to high-performance plans and providers



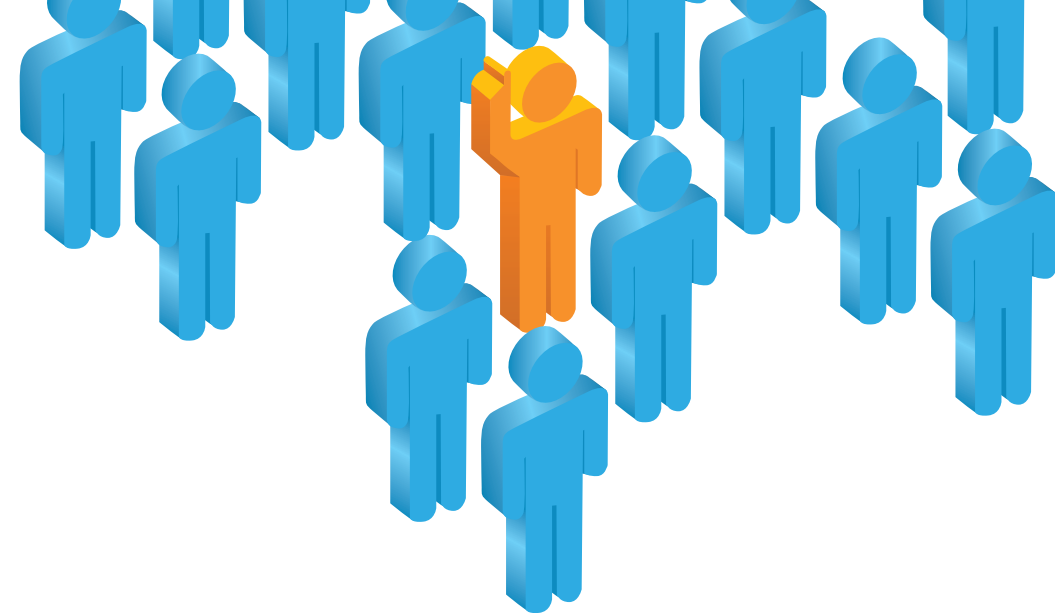
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