IBM Integrated Health Services:
Promoting Health and Creating Value

The foundation of Integrated Health Services is the relentless pursuit of value. Our fundamental purpose is to help IBM win in the marketplace through the health and productivity of our workforce.

-- Martín Sepúlveda

It was December 2011 and Martín Sepúlveda, Vice President of Integrated Health Services, was wrapping up after another long day. When he returned to the office after the first of the year, he would no longer be in the role he had held for the past thirteen years. Having been appointed as an IBM Fellow\(^1\) in mid-2009, Martín had agreed to take on a new role as Vice President of Health Systems and Policy Research within the corporation. While he was looking forward to new challenges, he would also miss the group that he had helped form.

IBM’s Integrated Health Services (IHS)\(^2\) organization, as it had come to be known in 2008, was a global team of approximately 250 occupational medicine, industrial hygiene, safety, health benefits and wellness professionals responsible for ensuring the health and well-being of IBM’s over 400,000 employees worldwide. IBM’s history of leadership and commitment to employee health, well-being and workplace safety dated back to its founding in 1911. It had established a leadership position on workplace safety even before it issued its first formal policy in 1967, had embedded environmental and well-being indicators into its public disclosures and had received hundreds of awards around the world for its commitment to employee health and productivity.\(^3\)

Sepúlveda played a central role in establishing IHS as a vital and ongoing contributor to IBM’s success. He and his team faced many challenges in developing strategies and approaches to creating a culture of health within IBM and maintaining its commitment to the well-being of every employee,

\(^1\) The distinction of IBM Fellow has been reserved for only a few employees since IBM’s founding and is appointed in recognition of industry-leading innovations and collaboration with clients and business partners worldwide by the Chairman and CEO of IBM Corporation. http://www-03.ibm.com/press/us/en/pressrelease/27640.wss

\(^2\) Although the name Integrated Health Services (IHS) did not come into being until 2008, IHS will be used throughout this document to refer to the collective functions that it currently encompasses within IBM.

\(^3\) http://www.ibm.com/ibm/responsibility/employee_well_being.shtml

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and he found it difficult to isolate a single program or initiative about which he was most proud. He took great satisfaction in how the organization had come together and what it was able to accomplish:

I feel really good about a couple of things in particular. First, we successfully established and maintained a culture of health and productivity while simultaneously saving our company almost two billion dollars – allowing us to reinvest in healthy living programs. Second, IBM has provided leadership on systems transformation in healthcare delivery that has become the foundation of an important pillar of the Affordable Care Act. Having watched health benefits professionals, safety engineers, industrial hygienists, doctors and nurses work together to create those kinds of financial savings and improvements in employee health brings a smile to my face – that’s very gratifying.

We implemented several tough financial decisions over the years and we did so by remaining steadfast to two inter-related principles: creating value and preserving IBM’s core culture. We managed to continuously add value to employees and their families and to the company. Our contributions, built on collaborations with managers and employees, have given us a lot of credibility with senior managers and enabled us to be an ongoing, vital part of this enterprise. Continuously adapting and adding value has allowed IHS to remain integral to IBM rather than being marginalized as in so many other companies. All the while, we maintained a reinforcing set of behaviors and beliefs based on one of IBM’s core values – trust and personal responsibility in all relationships – that enabled required changes to be made. This has been my greatest source of satisfaction. This is what I would like others to understand.

Sepúlveda’s Formative Years at IBM (1985 – 1992)

Sepúlveda joined IBM in 1985 as a physician specialist after studying at Yale, earning his MD and MPH at Harvard and completing residencies in internal medicine and occupational health. [See Exhibit 1 for Sepúlveda’s Bio]. When he first arrived, IBM was in its heyday. It was a paragon of corporate America, and its name was synonymous with information technology. Returns on sales, assets and equity had reached an all-time high in 1984, and in 1986, IBM enjoyed its fourth year running at the top of FORTUNE Magazine’s Most Admired List. The reverie would not continue.

Declining demand within IBM’s core mainframe business and increasing competition from personal and minicomputer manufacturers led to two years of disappointing profits, and in 1988, IBM’s position on FORTUNE’s Most Admired List fell to 32nd. In response, CEO John Akers launched the most significant restructuring of IBM’s business in more than 30 years. The restructuring included creating five autonomous business groups, decentralizing corporate staff, instituting voluntary retirement programs and seeking to make managers more accountable for results.

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4 http://money.cnn.com/magazines/fortune/fortune_archive/1988/01/18/70102/
The restructuring showed early promise. In 1990, IBM’s revenues and net earnings were $69 billion and $6 billion, respectively, making it the second most profitable company in the world. In a matter of months everything changed. With mainframe sales dropping precipitously, net earnings plunged from $6 billion in 1990 to losses of $2.9 billion and almost $5 billion in 1991 and 1992, respectively. [See Exhibit 2 for historical net earnings.] The $5 billion loss was the largest loss posted by a firm to date. As losses mounted, IBM’s board became disenchanted, rumors flew that the company would be being broken up, and one of America’s most revered companies was teetering on the brink of collapse.

By the end of 1992, IBM looked nothing like the firm that Sepúlveda had joined in 1985, and the corporate context in which he was working could not help but shape his thinking and approach to his work. During this time, Sepúlveda had advanced quickly to Senior Managing Physician, and in 1989, he took on the role of Director of U.S. Occupational Health Services. He spent much of his time creating the hybrid occupational health professional - instilling a business perspective, conducting lots of cross-training, creating higher value wellness and case management services and inculcating a culture of continuous transformation within the team. It was during this time that Sepúlveda’s focus on value creation crystallized, and it would be a driving theme throughout his next two-plus decades at IBM:

In the late 1980’s and early 1990’s, the precursors to what would come to be known as Integrated Health Services existed in component parts like medical, industrial hygiene, and safety. We were completely decentralized with 25 different medical departments all reporting into personnel managers at different sites and divisions, providing regulatory, return to work and limited ambulatory care services. We were doing traditional industrial health and safety kind of work – keeping workplaces and environments safe, providing medical and industrial hygiene surveillance and reporting. We weren’t pursuing value-added work opportunities, and at the same time, the company was on the verge of going out of business.

Very early on, I became quite expert at taking advantage of crises. Across the country, corporate physicians were being excised from large corporations as fast as lightning and then being picked up by small firms providing those same services back to corporations. All of this was the result of not delivering value aligned with the business.

Particularly for doctors and nurses, it was critical to create roles, skills and a set of services that were valuable to the company in order to save their jobs. One of my greatest and ongoing challenges was to orient them in the language of business. The fundamental notion throughout was that we are not here to do “doctor stuff.” In this increasingly competitive business environment, our first job is to understand the business. I spent a lot of time on knowledge and skills development and on helping our people understand why we are here, what we do, understanding the business strategy from quarter to quarter and communicating in terms the enterprise could understand.
I tried to inspire team members to think in terms of adding the kind of value that our software developers and engineers add to our customers and the business. We constantly have to ask ourselves how we can enable the business to solve its problems. How can we help IBM become better, faster, and more competitive? The challenge was really hard, but the path and the goal were clear – we had to develop our portfolio of skills and the services we offered to be aligned with the businesses.

My fundamental belief is that corporations – IBM included – will continue to make major changes forever and you have to be excited about that. My promise to the team was that if we were learners, were versatile, agile and committed to continuously reinventing ourselves, we would continue to be employed. I got their attention. I assured them that this would continue to be fertile ground. If we executed properly, we would be rewarded – we would be valuable players either within IBM or elsewhere in the marketplace.


On April 1, 1993, Louis V. Gerstner Jr. became the first chief executive in IBM’s history to be recruited from outside its own ranks. Not only had Gerstner spent his career outside of IBM, he wasn’t even from within the computer industry. Instead, he had spent time at McKinsey, eleven years at American Express and most recently, four years as Chairman and CEO of RJR Nabisco. Those experiences cultivated in him an acute appreciation for listening to customers. Just a few short weeks after arriving, Gerstner launched “Operation Bear Hug” requiring each of his 50 most senior leaders to visit a minimum of five of IBM’s biggest customers within the next three months. Gerstner noted this as a first step in IBM’s cultural change and an essential way for him to emphasize that the customer would drive all of IBM’s actions.

A focus on the customer also underpinned Gerstner’s most important decision as CEO. When he arrived at IBM, there was increasing momentum behind the idea of carving up the corporation into separate companies. Gerstner did exactly the opposite. As a large customer of information technology while at American Express, integration had been one of his biggest headaches. Many of IBM’s customers shared this same frustration during “Operation Bear Hug.” Gerstner was convinced that IBM’s unique competitive advantage was in its ability to integrate and deliver global solutions to its customers. This customer and market-driven approach was encapsulated in the mantra “Going to market as one IBM” and became the mantel on which his turnaround program was based.

“Going to market as one IBM” rejuvenated IBM and had dramatic implications for the development of what would become Integrated Health Services. Changes Gerstner sought to instill in the culture at IBM were also reflected in the evolution of the occupational health functions within the firm.

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Sepúlveda and his colleagues heightened focus on the customer, improved quality and integrated delivery of its services globally. Sepúlveda recalled his reaction to Gerstner’s efforts:

*When Lou Gerstner came on board, he very simply and categorically communicated how critical it was to focus on the customer and what the customer perceived as value. In our case, our primary customers were the corporation’s business leaders and our employees. The principle dominating this era was to understand our customer, to listen to them and to help them solve their problems whether we had any skill in that domain or not. We were there to help them solve problems – that made them more receptive to changing things. I continued to focus on identifying issues in our culture, raising skills, and working with counterparts. We built a reservoir of good will and trust and an open door with the business leaders.*

Having established strong relationships with its primary customers (i.e. IBM business leaders), the emphasis within IHS soon shifted to globalizing its operations. Sepúlveda explained:

*Much of 1995 through 2000, I was consumed with the creation and implementation of GOHS (Global Occupational Health Services). Throughout the successful centralization and consolidation of 25 different medical departments in the US into a shared service organization (OHS – Occupational Health Services), I began creating a framework and pitching the creation of OHS on a worldwide basis.*

In 1997, corporate headquarters safety and industrial hygiene staff were combined with U.S. Occupational Health Services (e.g. physicians and nurses) to form GOHS (Global Occupational Health Services). In 1999, all worldwide medical, safety, industrial hygiene and ergonomics resources were folded into GOHS to create a global, vertical, shared service organization under Sepúlveda’s direction. The globalization of occupational health services through the late 1990’s mirrored the shift in manufacturing business operations from high-cost (e.g. United States and Western Europe) to lower-cost countries (e.g. Mexico, Hungary, Singapore, Thailand, China, India). Sepúlveda commented:

*Creating GOHS required integrating everything that had to do with health in a broader sense into one locus in the enterprise. This allowed us to dramatically reduce headcount and save money. We saw tangible reductions in absenteeism and associated increases in management and employee satisfaction; a concerned and insecure health and safety team became creative, confident and happy.*


Another significant turning point in Sepúlveda’s personal development and the development of an integrated health service organization was Randy MacDonald’s joining IBM as Senior VP of Human Resources in August 2000. MacDonald’s arrival prompted unprecedented innovation and change related to IBM’s approach to employee well-being. Sepúlveda explained:
When Randy arrived, there was increasing pressure on all facets of labor costs – pensions, compensation, healthcare, benefits. He needed to “fix” all of those and demonstrate a return on overall labor costs. This marked the beginnings of a more integrated and comprehensive approach to health, well-being and benefits.

In 2001, Global Well-Being Services (GWBS) was created, and tighter collaborations with the health benefits team began. The notion of ‘well-being’ was increasingly prevalent in Europe and reflected a holistic view of the human being at work – capturing employees in their full diversity and complexity and the ecosystem in which IBMers lived, worked and played. This was coincident with Sepúlveda’s introduction to and increasing involvement in the benefits side of human resources:

*Randy invited me to participate in health benefits reviews that he was undertaking. This was in an era where it was quite rare for physicians to be directly involved with health benefits experts. Randy was unique in his belief that involving competent clinical people could bring value to that space. He asked me to pay particular attention to issues of health outcomes and care quality.*

During those reviews, Sepúlveda learned quickly from the many bright benefits people on the team – particularly from its leader, Marianne McManus. Together, Sepúlveda and the team incorporated those lessons into a strategy that would ultimately save the company significant amounts of money while building a culture of health and productivity. Sepúlveda recounted:

*In this period, I became a zealot around the idea that the single biggest locus of value creation was in healthcare costs. It became increasingly clear to me that there was an opportunity to leverage the team’s perspectives and expertise in workplace safety, injury prevention and health promotion and direct them toward reducing healthcare costs while improving health status and productivity. In short, we would be most capable of optimizing the outcome for the individual and for the enterprise if we integrated the design of health insurance with everything else we were doing as a company related to health, safety and well-being. Randy embraced and endorsed the concept, and in 2002, he asked me to integrate health benefits into GWBS. This was quite daunting – I didn’t know anything about health insurance pricing and design. However, our health benefits professionals, led by Marianne McManus, were exceptionally visionary, skilled and adaptable.*

Sepúlveda was taking on a big job at another critical inflection point in IBM’s financial history. Its 2002 net earnings fell 53% to $3.6 billion from $7.7 billion in 2001. At the same time, national healthcare costs were continuing to increase at double digit rates, and IBM was being impacted similarly. [See Exhibit 3 for IBM net earnings and national healthcare trend rates]. Sepúlveda explained:

*Although the company’s employee base had been shifting toward developing countries, almost 80% of IBM’s healthcare costs were still generated in the United States. Relentlessly high year-on-year cost increases were contributing to unaffordable labor cost trends and adversely affecting the company’s competitiveness. There was no time to waste – we had to drive down costs in the US while*
simultaneously promoting employee population health and laying the foundation for broader global application.

**Reduced benefits spending**

MacDonald recognized that immediate and significant expense reductions in health benefits costs were critical. Although equally important, savings from improving employees’ health would take much longer. Sepúlveda and his team worked intensely with MacDonald to devise a comprehensive strategy to support both objectives. Sepúlveda described how the strategy wove together several key elements:

First and foremost, it was necessary to figure out how much IBM could afford to spend on health benefits and how best to allocate those dollars in a way that would enhance value and maintain integrity, transparency and fairness. This required completely revamping our approach to vendor partner relationships and plan design so as to reap benefits from our purchasing power. We also created an integrated palette of health insurance options with strong care support and prevention components (e.g. disease management programs and healthy living rebates) and established a technology platform to support our commitment to enhanced employee population health management globally. I was fortunate to be able to rely on Randy and key members of the health benefits team who brought deep expertise and would be critical to our successfully implementing the strategy in the coming years.

**Vendor partner relations.** When Sepúlveda first stepped into the role, MacDonald recommended consultants who had served him well in the past, and Sepúlveda scanned the landscape to identify others with whom he would establish constructive working relationships. Right from the start, Sepúlveda and his health benefits team established a unique and clear set of ground rules for working with insurers and other vendor partners:

Our approach to working with our healthcare consultants and vendor partners was especially unique. We sought the most relevant skills and expertise within each firm and created a team to help us accomplish our goals. We stressed a couple of points. First, I didn’t want to hear how much money they would save us – I wanted to know how they were going to help us improve the overall health status and the experience of our beneficiaries. Second, they had to accept that they were no longer competitors. We were creating a team and we expected them to work as partners – leaving at the door all the intellectual property issues and other baggage that firms typically carried around. Getting people who were keen competitors to work together was no small feat, and it made a lot of them very uncomfortable. Some firms walked away as a result. However, there was plenty of glory to spread around, and those who stayed were able to learn a lot and go to market with some very innovative ideas to share with their other clients.

**Plan design.** Sepúlveda’s and the benefits team’s initial challenge was to design a set of plans that was fair for all employees and that they would accept. IBM employees had become accustomed to
comprehensive health benefits plans that covered not only them but also their dependents. Sepúlveda and his team recognized that that level of support would no longer be possible. Sepúlveda explained:

We had to communicate to employees with integrity that we simply couldn’t afford to subsidize spouses and children to the extent we had in the past. We were very transparent about the healthcare market and economic reasons driving that decision, and we coupled that message with the answer to the question: ‘So what is going to happen to health insurance going forward?’

Sepúlveda highlighted the key elements of the answer to that question:

We made a lot of tough decisions and took a lot of risks over the course of 2003 and 2004 to ensure that we implemented an approach that was true to IBM’s employees, heritage and culture. We were going to make major changes in how much insurance they would get and the kind of insurance they would get – and we had to do that in a way that preserved their trust and confidence.

We started by increasing our level of support and ensuring comprehensive coverage for all employees. First, we raised the subsidy and made it equal for each and every employee. We had to provide strong support for the individual employee because s/he was the unit of production – s/he was the one who created value for the enterprise. A second very appealing feature was that we provided a richer plan that was free to the employee. The company paid the entire premium for employee coverage. That was totally new – prior to that, the employee had paid some portion of the premium.

In addition to anchoring the new plan designs on a benchmark plan that provided a strong level of care, we provided choice by creating two additional insurance plan types with higher coverage levels for employees and families who wanted them. Each employee received a subsidy equal to that of the benchmark plan and absorbed additional costs associated with these higher-end plans. We also moved to ‘unitized pricing’ for dependents. That is, we charged a single rate per person enrolled – say x for a spouse and y for each dependent child. Randy really wanted to make sure that we stopped having some people subsidize others. This was a shift to true costs, and it was very novel at the time.

McManus recalled the interaction amongst the team as they worked to design the plans:

These were not easy decisions to make. We had a lot of discussion and debate amongst ourselves about changing the subsidy and the impact that would have on employees and their families. IBM had quite a paternalistic culture – would employees think we were being ‘anti-family?’ We knew we had to take bold steps, but we also were incredibly thoughtful about it. Under Randy’s leadership, we were able to able to provide access for dependents and to do that in a way that was fair for everyone with dependents.
In addition to ensuring that every employee received equitable benefits allocation, Sepúlveda and the team needed to design a new set of plans that simultaneously provided appropriate coverage, combatted over-insurance, drove down overall costs, and helped their colleagues become smarter overall consumers of healthcare. Sepúlveda explained:

First, we introduced the concept of designing plans based on the actual health risk of major subgroups of the employee population. We assured employees that there would be a safety net for expensive medical treatments and catastrophic events no matter what, but then we tailored or ‘personalized’ plans appropriate for employees with (i) multiple chronic medical conditions and predictable high-cost care needs, (ii) fewer needy chronic medical conditions, and (iii) better health status. This was intended to reduce costs from over-insuring which was rampant under the traditional model in which IBM absorbed most annual cost increases. Instead, we helped employees to understand the level of coverage that they really needed.

We wanted to encourage our employees to be engaged in and take accountability for their health by providing them tools to better understand the healthcare system. We supported personalized decision making by partnering with insurers and others to provide resources and tools for employees to model and assess needs, utilization, costs and coverage under the new plans as well as tax advantaged savings vehicles to pay for out of pocket costs.

Finally, to retain a level of support for families, IBM would apply to dependent coverage whatever was left of a pre-determined, total health insurance spend after paying for the free employee plan. This level of dependent subsidy would change each year depending on the overall cost of the free plan for the employee. This meant that if healthcare cost increases in our population continued on an upward spiral due to suboptimal health status or prices, financial support for families would continue to decline, to zero if necessary. Now employees would be motivated to pay attention and manage their health accordingly. To the extent that we – within the IBM family – could make ourselves healthier, we would keep our healthcare expenditures down and keep our coverage costs lower. Not only were the actions we took totally new in our industry, but the transparency with which we communicated the changes was also unmatched.

Enhanced purchasing power. MacDonald, Sepúlveda, McManus and the team designed a cost-efficient coverage model that was free to employees and reasonably priced for dependents at a time when cost-shifting strategies (i.e. high deductibles, co-pays and co-insurance) were increasingly becoming the norm among large employers. They did this by leveraging IBM’s brand and purchasing power with its health plan and vendor partners. Sepúlveda described their approach to consolidating plans and vendors and to carving up the United States into markets to optimize purchasing:

First, we had to determine what plans to provide. You have to understand that in 2003/2004, it was normal business for insurers to come to employers and say ‘we have these 8 plans – let’s figure out
which are best for you.’ Our approach was ‘these are the plans we want, and we want you to deliver them.’ That was the only way to deliver on our promise of plans tailored to IBM employee needs.

Second, we needed to determine how many insurers to work with and how best to carve up the US into markets to optimize purchasing. The prevailing thinking at the time was that if you had a single vendor nationally, that would be administratively easiest and result in the best pricing – i.e. lower fees in return for providing the vendor a larger population. We were committed to getting out of an enormously inefficient multi-vendor system and to paring down to the smallest effective set possible, but we decided against the single national insurer route.

Randy and our team bucked convention because we saw that markets were becoming more efficient on a geographic basis. Instead, we engaged external market and actuarial experts to model markets and determine if new market alignments would afford improved purchasing and service efficiency. We carved up the markets in a way to optimize strengths of major players and competition. In terms of health maintenance organizations (e.g. Kaiser), we went from over 200 to under 15 based on quality and cost, and on the commercial insurer side we got down to 4. To be able to do that, and provide a compelling logic to employees was an enormous challenge.

Employee population health management

While attacking out-of-control benefits spending was the first order of business, Sepúlveda and his team never lost sight of their vision to keep people healthy and productive. Sepúlveda explained:

All of our actions – e.g. increasing the employee subsidy while reducing the dependent subsidy, moving to unitized pricing, consolidating vendors – were consistent with our ongoing aim to improve the experience and outcomes for our employees and their families from clinical care services. We capitalized on the team’s competencies as clinical people and benefits administrators to build an infrastructure that would continue to purge inefficiencies from the system and support healthy behavior within our IBM employee population.

Three key elements of the infrastructure were (i) creating requirements to embed new forms of clinical care management into IBM’s health benefits plans, (ii) instituting health risk assessment and cash incentives for healthy behavior, and (iii) developing a technology platform to undergird the ongoing efforts.

Clinical care management. As clinicians and benefits professionals, Sepúlveda and the team believed in the importance and potential benefits of providing more coordinated, seamless care across settings and providers. They believed the greatest returns could come from better serving employees with the most costly chronic illnesses such as diabetes, respiratory distress, and congestive heart failure. IBM committed to disease management at a time when there was quite a bit of debate and its outcomes unproven. Sepúlveda explained:
We were not afraid to take risks to improve care management. For example, we were an early adopter of disease management among larger employers. Outside of managed care organizations, this was a very new concept in the marketplace, disease management firms were risky, fledgling entities, and neither the health nor economic returns were well-established. Nonetheless, it was my view that this made all the sense in the world for the subset of our population with the highest needs for healthcare and with the highest per capita consumption of care.

Sepúlveda shared their approach to identifying and working with vendor partners to fulfill the vision:

We sought a partner to provide the kind of condition management that we envisioned. We found a small vendor with experience in this area and worked closely with it to design protocols – putting a lot of our own expertise into research, development, and execution. Then we started building requirements into our contracting with health plans whereby the successful bidder would have to work with that vendor if they wanted our business. It’s not easy for an insurer to work with another company that is providing critical services involving utilization and claims, but effective implementation depends on it. These practices were not widespread among insurers at the time, and it has been gratifying to see these kinds of partnerships become more commonplace in the industry and to know that our team was on the forefront of that.

Healthy Living Rebates. An integral feature of the team’s overall strategy was linking health risk assessments to financial incentives for healthier behaviors. [See Exhibit 4 for an overview of IBM’s Healthy Living Rebate Programs.] Sepúlveda summarized the thinking:

The notion of collecting health risk information was not new. What was new was building it into health plans and linking wellness programs to the major risk factors emerging from the assessments. We used our health risk assessments to ensure that our employees were well matched with plans that were most appropriate for them and to offer incentives for them to maintain healthy lifestyles. Just as we had developed vendor requirements for clinical care management, we also started requiring that our health plans provide certain kinds of wellness and health promotion offerings. We were thinking we could move this market so that at some point down the road, this would automatically be built into health insurance and we wouldn’t be doing it anymore.

Sepúlveda and his team adapted its healthy living rebate program to ensure that it was addressing the most pressing needs and delivering value:

I am pretty keen on the science of public health and prevention, so we drew on those wellness and population health findings to design our foundational programs in smoking and physical activity. Smoking was our anchor program – it was low-hanging fruit. In 2003, we introduced annual premium reductions for non-smokers and a $150 rebate to smokers completing a smoking cessation program. We also recognized early on that overweight and sedentary employees result in healthcare costs on par with smokers. Thus, we created our Virtual Fitness Center – a program for employees
to earn rebates for reaching minimum physical activity goals. Given the distributed nature of our workforce, this was way more practical and cost-effective than building fitness facilities. $150 doesn’t sound like a lot, but multiply it by 50,000 or 100,000 employees, and it is a significant investment – and well worth it.

We continuously evaluated our spending and outcomes and adjusted our offering based on our findings. For example, as our smoking rates dropped for existing employees, we modified the program in order to free up dollars to attack other problems. We shifted to providing a one-time non-smoking incentive to new employees – an investment well below the projected annual claims costs that pays for itself in one year.

Technology platform. Finally, Sepúlveda and his team established technology as a key priority for the way it would conduct business going forward. They introduced technology to improve access to programs, resources and tools, and to manage costs. Initially, the technology interface was fairly rudimentary, but it was essential and set the foundation for future development:

We committed early to creating an online entry point for our colleagues to access information on their own terms and in their own time (i.e. 24-7). At the beginning it was pretty ‘dumb’ stuff – information about the programs that people could read. Over time, the site became more and more sophisticated and expanded to include resources and tools that supported action. These could be tools that we created or tools developed by our partners. Either way, they were critical to supporting our healthy living programs. Everything was digitally enabled – employees could go there to set goals, create teams, report results and seek expert support. The technology tapped into the competitive spirit of IBMers to generate engagement and meet collective fitness goals. Having everything online also enabled us to aggregate the statistical data necessary to understand the ongoing health status of our population and to modify our programs accordingly.

Health system transformation leadership

As Sepúlveda and the team gained traction in its initiatives to consolidate vendors, leverage purchasing power and implement its palette of healthy living programs, Sepúlveda began to look for the next major challenge that would build on their early success. He firmly believed that IBM could be a credible, recognized voice for primary care as one of the pillars of reformation in the healthcare system. He catalyzed his focus on primary care – on legitimizing it and validating models for policy makers. He described his thinking:

Though we had made tremendous progress in reaping gains from all of our initiatives, Randy, Marianne and I recognized that those returns would soon plateau. We were addressing what we could within the confines of our four walls, but the incremental benefits would become smaller and smaller. We may buy a billion dollars in healthcare, but it’s a fragmented system and we can’t affect as much as we would like. It was clear to us that all our best efforts would not solve the underlying problems – our healthcare delivery system was broken and too many people lived in unhealthy
communities. This was a nice opportunity to introduce a new pillar to our strategy. We said ‘let’s take the power of our brand and go out and accelerate change in the delivery system.’

In studying healthcare systems for opportunities it became obvious that populations are healthier in environments where the scales are tipped toward primary care rather than specialty care. Health services research has borne this out over time and across several countries.\(^8\)\(^9\) Quite simply, a strong foundation in primary care is associated with reduced costs, improved quality and more satisfied patients. I needed to begin planting the seeds for solving this bigger problem and for contributing to major societal change.

**Primary care within IBM.** One of the first steps Sepúlveda and the team took was to incorporate an emphasis on primary care within IBM’s health plan design. With many of the key elements of overall benefits design rationalized and vendor partners consolidated and operating smoothly, the time was right to shift focus toward efforts that would have a longer-term impact on costs and employee health. Sepúlveda shared the team’s thinking:

> We knew we wanted to put a third of our chips on preventative care and a lot of emphasis on primary care. In 2006, we started providing totally free preventative care and deductible-free primary care. That meant that preventative services like vaccinations, cholesterol screening, and blood tests were totally free to the employee, and that she or he didn’t have to pay against the deductible when s/he went to see her/his family doctor or internist. In 2010, we made primary care 100% free as well – not only was there no deductible, the employee did not incur any charge (i.e. co-pay) at all for seeing a primary care practitioner.

This was a real innovation and required a big leap of faith. We couldn’t point to any other company that had done this and say ‘here are the financial returns on that.’ We relied on knowledge from the healthcare services research field that showed that people with strong continuous relationships with primary care providers do better and cost less. We had evidence, but it was not employer-based evidence; it was United States HSA [health service administration] evidence and international evidence that had been replicated many times. It was population-level data demonstrating the benefits of good primary care. It was cutting edge stuff, and Randy was willing to take a chance on it. We immediately began working with our vendor partners to measure the cost and potential outcomes impacts of this change, but it takes a good 18-24 months for the claims to mature.

**Essential collaboration.** In addition to ensuring that primary care was an integral part of IBM’s approach to employee population health management, Sepúlveda also capitalized on the fact that by 2005/2006, there was increasing recognition that the primary care system was under tremendous pressure. There were too few primary care practitioners serving populations in need, and working conditions were becoming ever more challenging. Primary care provider


associations (e.g. family physicians, internists, pediatricians) were advocating for new models of offering care, and yet they often approached things competitively and were perceived by policy makers as only being interested in higher reimbursement rates. Sepúlveda saw an opportunity to tackle this issue by creating collaborations with key stakeholders and bringing private sector legitimacy to their advocacy efforts:

When we first approached the different professional organizations, we demanded two things from them. First, they had to put their historical tensions aside and stop competing with one another. Second, they needed to agree to a unified vision for primary care. Each group was advocating for a slightly different primary care model. This was confusing to employers and to individuals and families. Instead they had to focus on the shared principles in those models. Only then would they be able to recruit buyers in the private sector (i.e. IBM and other corporations) to their vision. My proposition to them was that in exchange for their crafting a single vision and set of principles, I would help them learn how to interact more effectively with the private sector.

While MacDonald’s and Sepúlveda’s ideas sparked the initiative and framed the strategy, Dr. Paul Grundy, IBM’s Director of Global Well-Being, built enormous momentum behind the ideas. In 2006, he became the first president of the newly created Patient-Centered Primary Care Collaborative (PCPCC), dedicated to advancing a more effective healthcare system built on a strong foundation of primary care and the patient-centered medical home. Consolidating a unified position among the disparate primary care groups was only half of the equation. Equally important was getting other employers on board. Sepúlveda described those efforts:

In our meetings with leadership teams and boards of the professional associations, it became clear that there was a lot of synergy between the kind of care providers wanted to deliver and what we – at IBM - were interested in buying. However, we would be much more effective with the power of other corporations alongside us. In mid-2006, I invited my counterparts from a dozen or so companies to a meeting to share our progress. With the support of the head of the National Business Group on Health (NBGH), we laid out a big vision for primary care transformation that would enable employers to 1) get more support for the health of their employees and 2) set the stage for being able to exit from building, delivering, administering and paying for programs that addressed the existing deficiencies in the healthcare system.

Some of the key milestones included selling the concept, recruiting employers, creating the organization (2006), unifying the vision (agreeing the shared principles of the medical home), creating the repository of information, resources and tools for employers and the primary care community to understand what this model is. PCPCC developed a website that explained the concept and offered tools to help employers talk to health insurers. That became a repository for country examples and to capture pilots. Over time, we brought in other key stakeholders – patient advocate groups, insurance plans, and disease management companies. Under Helen Darling’s
leadership at the National Business Group on Health, primary care transformation became a focus for action including educating member companies and providing resources for action.

Support for medical home pilots. Much as he and his team had done in working with vendor partners to reshape benefits plan designs, Sepúlveda sought to serve as a model for how employers could change the market through primary care purchasing. He invested a lot of time describing the strategy and how it could be folded into purchasing. He built support for the medical home concept with every vendor partner with which IBM had relationships and informed them that pilots would be incorporated into purchasing requirements. That meant that to get IBM’s business, health insurers and other vendor partners would have to commit to and make provisions for supporting medical home pilots. Sepúlveda described IBM’s interest in medical homes and the importance of involving partners:

The medical home concept was first introduced over forty years ago in the US, but was never really implemented here – though it has been picked up and implemented elsewhere, in Brazil for example. It relies on a shift in physician compensation from fee-for-service to payment for overall patient management focus – from an episodic focus to comprehensive, relationship-based care.

We focused our efforts within the pilots on three characteristics of medical homes: broadening access so that patients don’t go to the ER for urgent care, ensuring comprehensiveness of care so that patients are viewed holistically in terms of their physical, psychological and emotional health, and improving coordination across all elements of the healthcare system. Health insurers were essential collaborators for additional capabilities such as chronic care management, prevention, payment incentives and informatics. They already had the information technology systems in place to conduct the required claims analyses and to implement the payment mechanisms that made it attractive for physicians to participate in the model. Though we initially had to be aggressive to get some involved and to meet our requirements, it was especially gratifying when plans took the implementation to completely new levels with widespread adoption of the model and major changes to the way they incented physicians.

Over time, the collaboration among a growing set of stakeholders enabled a more cohesive and effective approach to policy makers. Sepúlveda described:

When we started this initiative, policy makers did not give much credence to the primary care physician organizations because they were perceived as being focused solely on higher reimbursement levels. Their desire to transform primary care wasn’t coming through. Establishing a strong partnership and shared message among all the relevant players (e.g. professional associations, corporate employers and health insurers) created receptivity among policy makers and really helped spread the ideas and get them adopted. We see them strongly reflected in the Affordable Care Act which places significant value on primary care and new models like the medical home.
Results and Closing Reflections

The IBM health benefits team realized concrete gains from its strategy. Innovative plan design, aggressive purchasing and effective employee population health management slowed the upward trend in IBM’s healthcare costs and yielded savings of over $1.5 billion over the next several years. [See Exhibits 5 and 6 for trend rates and estimated savings.] In addition, IBM employees earned over one million rebates between 2003 and 2010 and health ultimately improved. [See Exhibits 7 and 8 for health risk reductions and Exhibit 9 for resultant savings.] McManus summarized the accomplishments:

IBM went through dramatic changes in its business model and corporate culture. What we did on the health side not only aligned with those changes but, in many cases, was instrumental in helping to shift the culture and ensure IBM’s competitiveness. The results were just staggering. We saved the corporation a lot of money at a time when IBM needed that. At the same time, we vastly improved the overall health status of the IBM employee population. To achieve tremendous financial savings and health improvements simultaneously was the direct result of implementing an integrated strategy focused on prevention and primary care and instilling a mindset and providing tools to enable employees to be proactive about and accountable for their health.

Hugely important was how IBM got ahead of the market around emphasizing prevention and managed care. We really went beyond the role of the employer and assumed a leadership role in shifting the industry of the delivery system. That was a critical milestone for IBM.

Sepúlveda offered final reflections and insights into the era to come:

We have always been interested in the broad circle of changing the world outside of IBM for people to have a better experience and be in better health. This principle was embedded in the strategy we laid out in 2001/2002 and was reflected in our early commitment to disease management, preventative and primary care within IBM and our desire to reshape the broader healthcare delivery system.

The phase that is coming is a natural reflection of everything we have built – it will move away from the notion of simply health at work and entail opening the aperture to focus on the wider community. We at IBM and within the private sector at large have a changing responsibility for the outcomes of health. We are moving from worker health to citizen health – consistent with the belief that it is better to create a strong child than to fix a broken adult.
Martín-J. Sepúlveda, M.D. FACP is an IBM Fellow and Vice President of Health Systems and Policy Research for the IBM Corporation. He collaborates with multi-disciplinary scientists on applied research for multi-sectoral data analytics related to health in cities, industrial engineering and work optimization in health care settings and human performance in the workplace. Dr. Sepúlveda previously served as IBM VP Integrated Health Services and led health policy, strategy, health benefits design and purchasing, occupational health, wellness and health productivity for IBM globally.

Dr. Sepúlveda was recently appointed to the highest level of technical achievement in the IBM Corporation, an IBM Fellow, by the Chairman and CEO of the IBM Corporation. He is the first IBM Fellow chosen for a distinguished history of contributions in the area of population and occupational health. His work in understanding and controlling workplace exposures and in advancing employee health and productivity has been instrumental in leading enterprises to view the health of people and work environments as assets that are directly linked to improved performance, workplace climate and global citizenship. Dr. Sepúlveda helped to pioneer integrated approaches to health promotion and preventive services at work, developed widely-adopted models for integrating workplace disability and rehabilitation management and led early efforts in health insurance design to enhance quality and coordination of care for persons with chronic diseases. He is widely recognized for his work in promoting comprehensive primary care in health systems delivery, and as an innovator in these areas has advanced national priorities for healthcare delivery reform, healthier people and healthier workplaces.

Dr. Sepúlveda is a Fellow of the American College of Physicians, the American College of Preventive Medicine, and the American College of Occupational and Environmental Medicine. He was elected an honorary member of the American Academy of Family Medicine, serves on the American Board of Internal Medicine Foundation, the New York Academy of Medicine board and the American Academy of Family Physician’s TransforMed company. He previously served on the Commonwealth Fund Commission for a High Performance Health System, the Institute of Medicine’s Population Health and Public Health Practice Board, and co-founded and chaired both the Global Business Group on Health and the Institute for Health Benefits Innovation Research at the Employee Benefits Research Institute.

He received his M.D. and M.P.H. degrees from Harvard University, completed internal medicine residency at the University of California San Francisco Hospitals & Clinics, internal medicine fellowship at the University of Iowa Hospitals & Clinics, occupational medicine residency at NIOSH, CDC, and Epidemic Intelligence Service at the Centers for Disease Control & Prevention.
Exhibit 2  IBM Historical Net Earnings and Employee Counts

IBM Net Earnings and Total Employees
(1986-2011)

Exhibit 3  IBM Net Earnings versus National Healthcare Trend Rate

IBM Net Earnings and National Healthcare Trend Rate
## Exhibit 4  Evolution of IBM Healthy Living Rebate Programs

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<td>$11/month premium discount</td>
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<td>Preventative Care Rebate</td>
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<td>2007</td>
<td>Not smoking or smoking cessation program</td>
<td>Set action dates for preventative screenings &amp; risk reduction activities</td>
<td>Physical Activity Rebate</td>
<td>Physical Activity Rebate</td>
<td>Physical Activity Rebate</td>
<td>20 min, 3 days/week for 10 of 12 weeks</td>
<td>Log activity on Virtual Fitness Center</td>
<td>Review hospital quality using Web-based resources</td>
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<td>12 week online nutrition or weight management on Virtual Food Pro</td>
<td>Or, logging free physical activity program with self-tests and online interaction with fitness professional</td>
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<td>Confirm completion of overdue screenings</td>
<td>Use online Health Optimizers for individualized support</td>
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- Red Text indicates yearly changes made to programs
Exhibit 5  IBM Net Healthcare Cost Trend

Exhibit 6  IBM Estimated Healthcare Cost Savings
Exhibit 7 Health Risk Improvement

2004 – 2007 Health Risk Improvement

Exhibit 8 Health Risk Reductions

Reductions in Health Risks (2004-2010)
Exhibit 9 Cumulative Savings from Health Risk Improvements

Cumulative Estimated Savings in Healthcare Costs from Improvements in Employee Health Risk

IBM Paid Medical and Rx Claims ($ Millions)

- 2005: $12M
- 2006: $41M
- 2007: $79M
- 2008: $97M
- 2009: $115M
- 2010: $134M