Home Healthcare Electronics: Consumers Are Ready, Willing and Able

CHARLES ROUSSEL and PAUL F. NUNES

How many older Americans are afraid to use electronic medical devices at home, fearing they will use them incorrectly or, worse, break them, or that the devices will not work properly? The answer is, not many.

A recent Accenture survey reveals that among respondents over age 65, 83 percent disagree, and 46 percent strongly disagree, that they are afraid to test their own health at home. Only 13 percent fear that a device will not function properly, while only 12 percent think they might break the device. Even fewer – 8 percent – believe they might forget how to use one.

In fact, older Americans do not differ markedly from survey respondents overall in their attitudes toward home healthcare, specifically in their receptivity toward electronic home healthcare devices (see Defining home healthcare electronics). These devices and related services, which enable consumers to test for, monitor and even treat certain health conditions, are becoming an increasingly important aspect of healthcare.

Defining home healthcare electronics

Defining the future, not to mention the nature, of home healthcare electronics is complex because they stand at the intersection of two major trends in medicine: home healthcare and telemedicine.

The American Telemedicine Association defines telemedicine as "the use of medical information exchanged from one site to another via electronic communications for the health and education of the patient or healthcare provider and for the purpose of improving patient care."

This suggests defining home healthcare electronics as devices that support telemedicine. But home healthcare – as defined for more than a hundred years – encompasses the broader mandate of sharing information person-to-person and using medical devices in the home.

Combining these concepts, we define home healthcare electronics as devices with electronic components that monitor health and diagnose and sometimes even treat illness in the home. Two early examples help to illustrate this definition. Pulse Metric's DynaPulse monitor lets chronically ill patients measure their blood pressure and heart rate in the home – but with clinical accuracy. A connection to the personal computer ensures that physicians can analyze and track this data over time.[1] Another offering, Health Hero's HealthBuddy device, enables patients to regularly view and respond to queries from caregivers without visiting the doctor's office. [2]

Why do we need a clear definition of home healthcare electronics? As Jonathan Linkous of

the American Telemedicine Association points out, a definition is essential in determining whether services are reimbursable under Medicare and other insurance. By the same token, are services eligible for existing grant and loan programs or affected by state medical licensure laws?

Vendors of services and products need a definition to identify the current and future market. And medical centres need a basis for deciding which department (information services vs. medicine) owns home healthcare electronics.

About the research

This report is based on a study conducted by the Accenture Institute for Strategic Change and Accenture's Communications & High Tech Operating Group. The results reflect 4,313 surveys completed online, from a sample of 40,000 U.S. consumers selected at random from a database of more than one million people and solicited via e-mail. The demographics of both recipients and respondents nearly match the demographics of the overall U.S. population. We conducted the survey and collected the supplemental data in the spring of 2002.

Because they can reduce long-term costs, improve convenience and keep people in their homes rather than in care facilities, these devices will almost certainly have significant impact on healthcare and will create opportunities for the electronics industry. To gauge the potential impact of these devices, we surveyed consumers on this emerging trend and explored the history of home healthcare and telemedicine in the United States *(See About the research)*.

A positive sign of untapped opportunity in home healthcare devices is that the survey respondents are already involved consumers of healthcare. They report being very proactive in managing their health, comfortable with emerging medical technologies and even willing, under the right circumstances, to contribute financially to using medical devices at home.

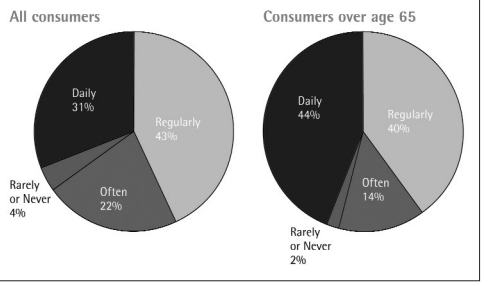
But consumers do have concerns about receiving medical treatment away from the doctors and medical centers they know, and they have very strong opinions that, however home healthcare evolves, certain criteria must be met.

The challenges are formidable – developing equipment, determining payers and meeting security and trust demands (See *Obstacles to rapid adoption of home healthcare electronics*). But consumers are ready, willing and able.

PRIMARY CAREGIVERS

Most of the survey respondents are active managers of their personal health (see Exhibit 1). The majority of them manage their health daily or regularly, and four out of five want to monitor their health even when they are well. When sick, 83 percent say they never, or almost never, forget to take their medications.

Exhibit 1: Consumers manage their health



And consumers are no strangers to home health monitoring. More than 50 percent do at least some monitoring of their general health and 23 percent monitor a chronic condition. Thirty percent report monitoring the health of a family member or friend.

Not surprisingly, such consumers crave medical information. Nearly 90 percent search the Internet for information on symptoms and treatment – dropping slightly to 78 percent of those over 65 – and more than half of them do so always or very often. In addition, respondents are very likely to talk to their doctor about symptoms and test results (54 percent say always and 31 percent almost always; 73 and 22 percent, respectively, of those over 65) and about their medical history (50 percent always and 30 percent almost always; 68 and 22 percent of those over 65).

The result is a population of well-informed consumers. Only 12 percent report ever not knowing how to take medications, and nearly 60 percent always or almost always know what other medications not to take.

OBSTACLES TO RAPID ADOPTION OF HOME HEALTHCARE ELECTRONICS

The Accenture survey and key demographic trends indicate very strong consumer demand for home healthcare electronics. But significant obstacles could delay the widespread availability of these devices:

- **Payment uncertainty.** New devices face a long and arduous government evaluation process to qualify for essential insurance reimbursement.
- **Massive marketing requirements.** Medical professionals and consumers alike require significant education in new healthcare products – at high cost to manufacturers.
- **Technology limitations.** Manufacturers face insufficient information technology infrastructure and preparedness among some healthcare providers as well as the requirement of protecting personal data.

Mass-market medical products have little future without insurance coverage. Patients and healthcare professionals are unlikely to purchase devices without guaranteed reimbursement, [3] so medical device manufacturers must navigate a lengthy, complicated approval process to ensure that insurance groups will help cover the price of their technologies – in the greatest amount possible.

In the United States, the government agency responsible for reimbursement decisions is the Centers for Medicare & Medicaid Services (CMS). Unfortunately, the CMS' own leader, Health and Human Services Secretary Tommy Thompson, characterizes its regulatory processes as "burdensome and inefficient." [4] How inefficient? According to the Advanced Medical Technology Association, CMS review averaged 175 days for the 26 coverage decisions made between 1999 and 2001. [5]

For device manufacturers, winning coverage is only half of the battle. Receiving a unique product code and final agreement on Medicare payment can take years. [6] Kinetic Concept's vacuum-assisted closure device – a wound-closing technology suitable for home – waited six years for its reimbursement code. [7]

Once they've cleared the reimbursement hurdle, medical device manufacturers will have to embark on expensive marketing and education campaigns, first to drive adoption. Manufacturers must persuade healthcare professionals to prescribe the new devices and encourage consumers to request them or, if appropriate, to buy them directly. After launch, manufacturers must sustain product visibility and promote upgrades.

How much can all this cost? Consider the marketing expenditures of drug companies. US drug firms spend more than $13 billion a year on promotions targeted at medical caregivers alone. [8] No wonder they've enlisted a full-time army of 82,000 salespeople dedicated to direct outreach. [9]

Direct-to-consumer marketing also requires deep pockets. The Kaiser Family Foundation estimates that drug manufacturers more than tripled their consumer advertising expenditures between 1996 and 2000, from $791 million to almost $2.5 billion.

Awareness is not the only obstacle before home healthcare electronics. Information technology constraints will discourage some medical professionals, whose legacy office systems may not accommodate the complex demands of electronic home healthcare, such as linking clinical tools and medical information within a coherent business framework. Professionals must also prepare to embrace new technology and accept unprecedented information demands, including order communication, scheduling, care paths, protocols, audit and governance. In the past, they have been slow to follow through. A recent Harris Interactive survey showed that, while 90 percent of consumers wanted to exchange e-mail with their doctors, only 10 percent of doctors were ready and willing to do so. [10]

Secure transmission of sensitive personal information presents a second information technology challenge. A Gallup poll commissioned by the Institute for Health Freedom found that 78 percent of Americans consider their medical records remaining confidential at all times "very important." More than 90 percent object to government reviews of their files without permission, and 82 percent would forbid insurance company access. Successful home healthcare electronics manufacturers must ensure that their technology includes tight data security and authentication, making misuse extremely difficult.

Although today's obstacles are daunting, some of the pressures will ease over time. The Secretary of Health and Human Services has embarked on reforming CMS, intent on making its regulatory processes faster and more transparent. Information technology systems will become more manageable, as health professionals increasingly streamline their business and information processes. As these barriers lower, manufacturers will profit from tapping the powerful demand for home healthcare electronics.

A NEW HEALTHCARE PARTNERSHIP

The vast majority of these consumers appreciate the benefits that home healthcare devices do or might deliver to them (see Exhibit 2). Respondents also say they would value reminders to take prescribed medications and to make doctor's appointments – both services they could receive through an electronic device in the home.

To receive these benefits, consumers report a strong willingness to participate actively in home healthcare – monitoring their condition when they have a chronic or acute illness or even when they are just concerned about getting sick (see Exhibit 3). They will also take responsibility for their care. The vast majority – roughly 69 percent – report wanting to see their test results and being comfortable as the only ones who do. Most want to know if and when their results are outside the expected range and would be comfortable having their doctor call to discuss the findings.

In taking responsibility, consumers are also eager to be proactive, expressing enthusiasm for using an electronic diary if they had a chronic condition, for example. Most would participate in trials of new devices and medications if they had a chronic illness. They would also be comfortable video conferencing with their doctor.

This attitude extends to other people. Consumers express strong interest in using home healthcare devices to help them better care for loved ones, specifically to monitor the health

Exhibit 2: Consumers see the benefits of home healthcare

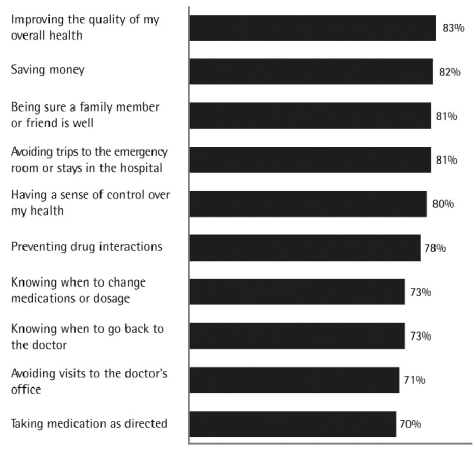
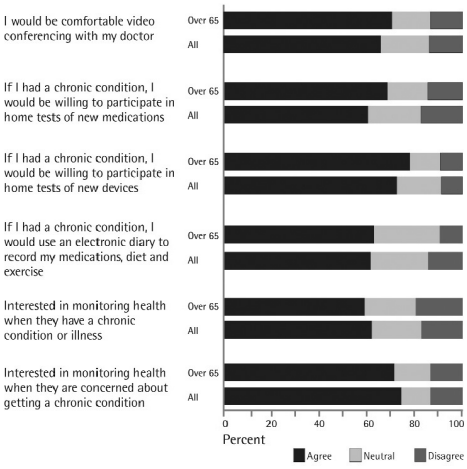
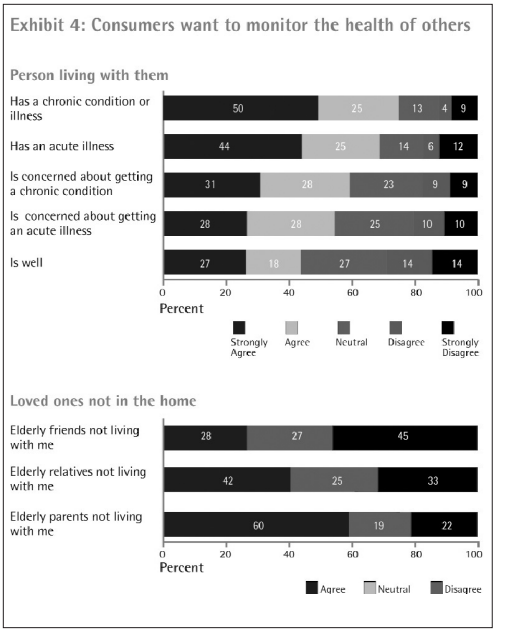
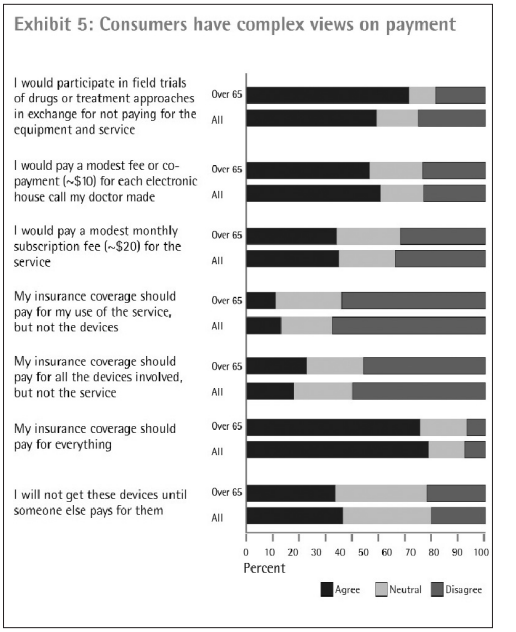


Exhibit 3: Consumers are interested in actively managing their health







of someone they live with and of relatives and friends outside their home (see Exhibit 4). Interest is strongest when a chronic condition exists, but is notably strong when people are well.

UNDER THE WEATHER

Consumer willingness to use home healthcare electronics is not unconditional. Consumers have strong preferences that manufacturers, healthcare providers, insurers and government will ignore at their peril.

WHO PAYS?

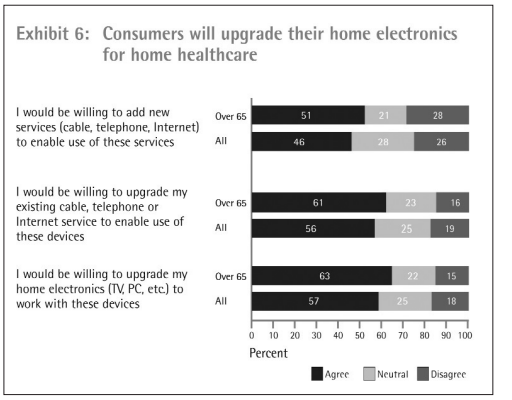
This is the most fundamental question about home healthcare devices and services. In general, consumers believe insurance companies should pay (see Exhibit 5).

But their attitudes toward payment are more complex. For example, consumers are willing to pay a modest co-payment or fee (~ $10) for each "electronic house call" their doctor makes. They are also broadly willing to pay a modest monthly subscription fee for the service (~ $20). And nearly 40 percent would "pay a small amount extra (~ $10) to have a healthcare professional come to my home to test me."

Asked if they would get these devices before someone else paid for them, 20 percent said yes, but 40 percent were unsure and 40 percent said no. Of particular interest to drug makers and insurers should be the strong enthusiasm for participating in field trials of drugs or treatment approaches in exchange for not paying for the equipment and service.

Consumers are also open to differentiated pricing for those who do and do not participate in electronic home healthcare. Sixty percent would accept higher reimbursement to those who wear wireless sensors than to patients who do not, for example.

Survey respondents, including older consumers, express great willingness to enhance their home electronics environment to handle medical devices and services (see Exhibit 6). Not only would they upgrade devices and services; many are even ready to add new services.



TRENDS FAVORING ELECTRONIC HOME HEALTHCARE

Four trends promise to propel home healthcare electronics into the mainstream:

- The aging of the population brings a corresponding rise in chronic illness and unprecedented demand for healthcare services.
- Increasing demand means escalating costs and shortages of critical skills.
- Technological advances enable cost-effective health management at home.
- Consumers eager to play an active role in managing their health embrace emerging home healthcare technologies.

The population is graying throughout the industrialized world. The proportion of Americans over 65 is expected to rise from less than 13 percent in 1995 to 20 percent by 2040, with the number over 85 expected to triple. [11] The United Nations predicts that the elderly will exceed 30 percent of the total population by 2050 in most European countries, Japan, China, South Korea and Canada. [12] The result? Surging healthcare demand and expense.

With longer life come more chronic illnesses like diabetes and arthritis. The number of Americans suffering from chronic conditions is predicted to increase over 25 percent by 2020, from 125 million in 2000 to 157 million, and the number with multiple chronic illnesses will grow 33 percent, from 60 million to 81 million.[13] Because chronic illnesses need constant monitoring and treatment, these patients account for a disproportionate share of costs – 61 percent of total U.S. health expenditures today. [14]

National healthcare systems will require massive funding increases to keep pace. In 2002, the US will spend $1.5 trillion on healthcare, 14.7 percent of the gross domestic product. By 2011, total expenditures are forecast to balloon to $2.8 trillion, [17] percent of the gross domestic product. [15]

Finding skilled professionals to serve growing numbers of patients will be no easier than finding this funding. One recent study predicts a shortage of 200,000 physicians in the US by 2020.[16]

The US Bureau of Labor estimates the need for 40 percent more nurses in the coming decade; applications to nursing schools are in sharp decline.[17] Healthcare systems are under great pressure to maximize the use of scarce resources as they manage costs.

Fortunately, advances in technology can provide new levels of efficiency and cost-effectiveness in the diagnosis, treatment and monitoring of patients – at home. Portable equipment can perform a range of tasks easily and reliably, improving preventive care while reducing the need for constant direct contact with healthcare providers. According to research firm InteLab Corporation, the market for home healthcare products is growing rapidly, with worldwide revenues likely to rise 35 percent between 2002 and 2005, from $11.3 billion to $15.2 billion.

Emerging trends, such as miniaturization and the development of intelligent sensors, promise an even brighter future for home healthcare electronics. For example, in 2001 the US Food and Drug Administration approved the first non-invasive glucose monitor for diabetic patients, Cygnus' GlucoWatch. Rather than puncturing the skin for blood samples, the wearable device takes readings every 20 minutes by using a low electric current to pull glucose through the skin.

Manufacturers are also working to shift procedures once performed exclusively at medical facilities into the home. Advances in home hemodialysis have enabled patients to treat kidney failure without constant visits to a clinic, cutting costs and letting people continue working.[18]

In North America, half of all households already use the Internet to research specific medical conditions or visit general health and fitness sites. [19] Sales of home health kits are booming, as consumers forgo laboratory procedures and test themselves for everything from high cholesterol to blood-borne infections. Industry revenues are expected to reach $2.82 billion by the end of 2002. [20] This growing consumer appetite for home health devices – if cultivated carefully – can lead to significant new efficiencies and cost reductions across national healthcare systems. By improving preventive care and minimizing the strain on scarce resources, patients themselves can ensure that healthcare systems better cope with the demographic shifts ahead.

WHO CAN YOU TRUST?

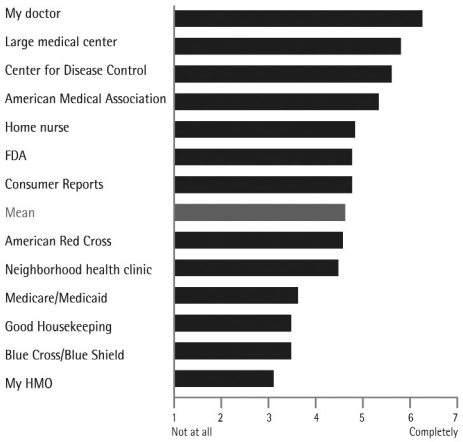
Doctors win big here (see Exhibit 7). Nearly half of consumers will not use home healthcare devices until their doctor recommends them.

Unfortunately, while HMOs will play a critical role in the broad implementation of home healthcare electronics, 26 percent of consumers trust their HMO "not at all" and, on average, would sooner get healthcare advice from Good Housekeeping. In general, health insurers and providers do not inspire trust, but most consumers would look to a major medical center or association for good advice, increasing the potential for these organizations to play a role in consumer uptake of home medical electronics.

Who will not play a role are spokespeople. Asked if they would be more willing to use these devices if someone they respected (a TV or sports celebrity) used them first, an overwhelming 48 percent strongly disagreed, and a total of 72 percent disagreed. Only 8 percent agreed, with the rest undecided. Yet consumers would value endorsement by trusted establishments, with nearly half citing the American Red Cross and 63 percent saying they would want to use the same brand used by major hospitals like the Mayo Clinic.

Most consumers trust the technologies involved in home healthcare. They are not apprehensive about their health-related data traveling over the phone line to their doctor, for example. But they are suspicious about who may be notified by electronic devices. While only 10 percent are uncomfortable with automatic notification of their doctor, 78 percent are uncomfortable with automatic notification of an insurance company or HMO; 53 percent are very uncomfortable.

Exhibit 7: Who do consumers trust for health recommendations?

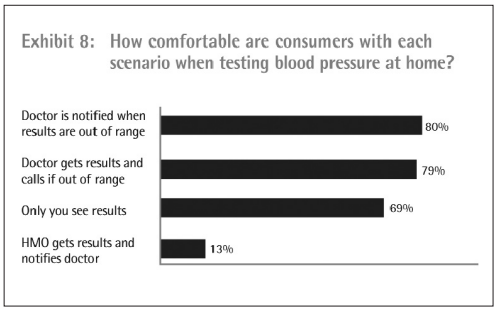


WHO SHOULD BE IN CONTROL?

Who should make the decisions about the devices used? Consumers want to make certain decisions. For example, they want to choose the brand of the device they will use 54 percent agreed and 19 percent strongly agreed.

Control of the data flowing from such devices is also an issue. While people are very comfortable with doctors receiving the data, they do not

Exhibit 8: How comfortable are consumers with each scenario when testing blood pressure at home?



want HMOs to see it (see Exhibit 8). Answering a separate question, 45 percent strongly agreed, and a total of 84 percent agreed, that they want to see the test results themselves. This highlights the fact that how a device is used can loom as large as device specifications in a consumer's decision to purchase or use the product.

THE PROGNOSIS

While consumer concerns and preferences are strong, people seem ready, willing and able to embrace home healthcare electronics (See *Trends favoring electronic home healthcare*). More good news: the field is open to many electronics companies. Consumers trust many firms almost equally to deliver value if they offered home healthcare devices (see Exhibit 9), and brand recognition for many of today's leading players in home healthcare is low (see Exhibit 10).

But designing and creating actual offerings still pose challenges. Consumers have definite design criteria (see Exhibit 11). They want both reliability and interoperability. They are flexible on brand consistency, but this may change as the market matures. They are quality-conscious, but also somewhat price-conscious – 40 percent care more about price than brand. This too may change as the market matures and particular brands gain dominance.

Strong interest in purchasing a suite of products, even at this early stage, suggests taking a variety of offerings to market or quickly adding easily integrated devices to initial offerings. Bundling across makers or developing a co-branded comprehensive solution might be the ticket.

Exhibit 9: Consumers are receptive to many manufacturers offering home healthcare devices

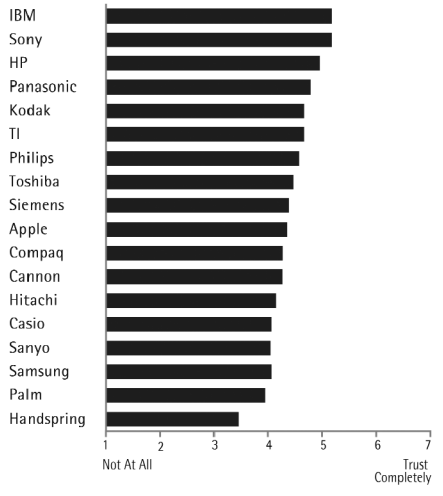


Exhibit 10: Consumers do not have strong medical equipment brand loyalty

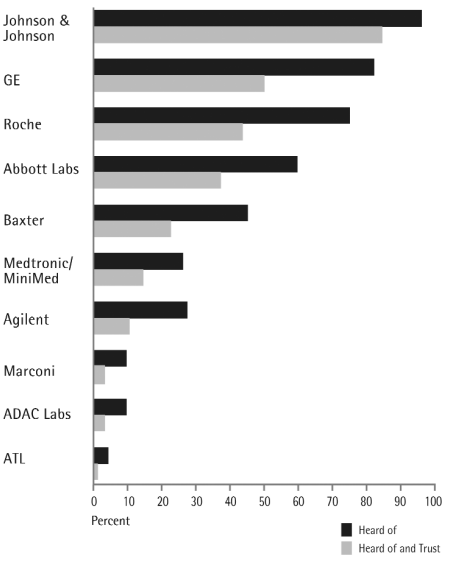
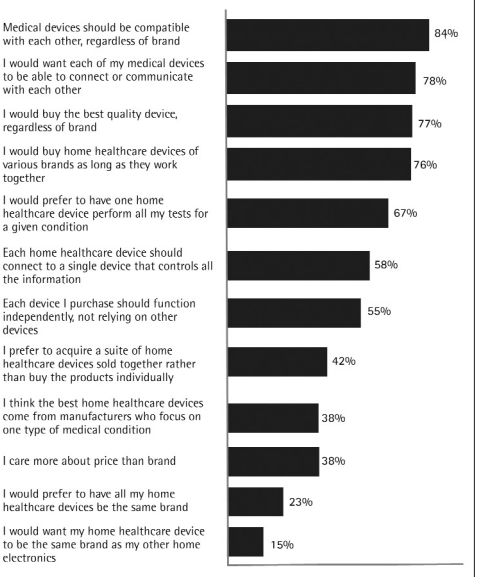


Exhibit 11: Consumers have opinions on design criteria



BRINGING HEALTHCARE ELECTRONICS HOME

Generalizing strategies for bringing healthcare electronics to the home is difficult because medical conditions, treatment protocols and related devices vary widely. Medical conditions treatable in the home range from acute burn cases to chronic conditions like Type II diabetes and congestive heart failure to wellness.

Protocols range from simple observation, of weight and blood sugar, for example, to treatment, such as in-home dialysis. And protocols are multifaceted, often involving patient education, behavior modification, medication and close medical supervision – which translates into particular devices and flows of information among patient/consumer, doctor, treatment center and insurer/HMO.

Equally complicating is the maze of government regulation that affects this market – from FDA approval of devices to Medicare and Medicaid reimbursement levels – and the purchasing power and influence of health insurers, HMOs and doctors. Nevertheless, we have identified four approaches that device makers are taking to get their products into consumers' homes.

REDUCE COSTS FOR HOME HEALTH AGENCIES/HOSPITALS

Many of the emerging device makers sell their products and services directly to home care providers and hospitals. Consider Cardiocom, a disease management products and services company based in Minneapolis, which makes scales that can record and send data to doctors and hospitals. Cardiocom has sold both devices and services to hospitals such as Akron General, Covenant and Prairie Heart Institute. Hospitals find Cardiocom's offerings attractive because the average cost per in-patient stay for congestive heart failure is $5,200, but Medicare reimburses only $4,500, on average. This creates opportunities for vendors able to narrow that gap.

Even among small groups of congestive heart failure patients, the Cardiocom system has produced dramatic savings. St. John's Hospital saw medical bills for 34 patients drop from $883,592 to $355,390 in one year. [21]

Or take HomMed TM, LLC, a Wisconsin-based supplier of home health monitoring devices and services, whose products include base stations for recording and communicating results to healthcare professionals, attachment devices like spirometers for measuring lung function and glucose monitors for testing blood sugar levels. Like Cardiocom, HomMed sells monitoring systems directly to professional organizations, but focuses on organizations that already support home healthcare. HomMed has built a network of more than 50 such providers, including the Visiting Nurse Association of Boston, Baptist Home Health Services and Personal Home Care Services, Inc.

JOIN THE SYSTEM THROUGH HMOS/INSURANCE/ GOVERNMENT

Focusing on individual providers can be a slow process, with an expensive and protracted sales cycle. So HomMed expanded its strategy to include insurance companies by forming HomMed Focused Care. This division works with insurance companies to monitor, manage and treat their most chronically ill and expensive patients. According to Herschel "Buzz" Peddicord, HomMed's founder and CEO, this program is attractive to insurers because "we have two things that no one else does. We have the HomMed home monitoring system, and we have a national network of more than 50 home health agencies and hospitals that can place the system with patients and monitor their health on a daily basis." Cardiocom also targets insurers with its devices and monitoring services. Health plans, physicians and hospitals can choose Cardioplan, having Cardiocom's specialist nurses monitor their patients and notify them only when a problem arises.

PARTNER WITH NEW SERVICE PROVIDERS/DISEASE MANAGEMENT COMPANIES

The explosion of home healthcare electronics and advances in telemedicine have meant enormous growth for disease management companies. Companies like American Healthways, the nation's largest disease and care-management company, manage patient outcomes for many common conditions like diabetes and heart disease for such leading health insurers as CIGNA Healthcare PPO. American Healthways' CEO, Thomas G. Cigarran, attributes the company's success to bringing together multiple "healthcare stakeholders to make a coordinated, integrated delivery system possible." He calls this response necessary to cope with "double digit increases in healthcare costs."

RMS Disease Management Inc., the nation's leading provider of kidney disease management, is targeting a similar opportunity in the approximately 10 million Americans with chronic kidney disease – 300,000 of whom have completely lost kidney function.

Numerous device makers are vying to supply such disease management companies, and the competition is intensifying. American Healthways is testing a Philips monitoring system with more than 100 cardiac patients, as well as a wireline solution from Alere Medical Systems. Bob Stone, American Healthways' executive vice president, comments that "there's no doubt that remote-monitoring technology can save money; we're comparing the systems, looking to see which performs best." [22] Winning these contests can be critical as the patient populations at stake are large.

GO DIRECT TO CONSUMERS

While this market is relatively small today – and may remain so for certain items like $3,000 home defibrillators – the number of products appearing on retailers' shelves is growing rapidly. This is especially true of virtual shelves, with manufacturers like Medtronic selling direct from their websites. Medtronic's MiniMed Online Store is a complete solution retailing site, selling a broad range of products, including pump infusion sets, glucose monitors and test strips and lancets and devices, as well as related books and skin care products. The store accepts "insurance, Medicare and credit cards."

Other makers sell through traditional retailers' online sites. Philips Medical Systems, for example, offers some of its home products on CVS's online retailing site, CVS.com. Meanwhile, small shops like RunningUnlimited in Palatine, Illinois, are using both their stores and online sites to sell simple healthcare-related products like the Polar S-410 Heart Rate Monitor wristwatch – demonstrating potential for retailers to easily deliver home healthcare electronics.

In some cases, firms can bring these electronics directly to consumers by working with builders to integrate them into assisted living communities and elderly housing complexes. In Japan, Matsushita has already launched a nursing home wired with its own electronics capable of remotely monitoring resident health and care. [23]

Though each of these approaches offers opportunity, the most effective companies will likely pursue all four strategies. Most current competitors are at least experimenting with selling both products and services; and many, like Medtronic have at least portions of their business units touching all the strategies. In fact, HomMed has announced the intention of marketing a product direct to the consumer within the year. And Philips Medical Systems' recent acquisition of Agilent's Healthcare Solutions Group highlights the importance of consolidating to achieve requisite scale and offering solutions to healthcare providers overwhelmed by the additional resource requirements and complexity of home healthcare.

CONCLUSION

An aging population and ever greater emphasis on medical cost containment create new imperatives for home healthcare electronics, and the environment looks ready for their uptake. Consumers are bringing home more and more electronic devices – from new game boxes, to DVD players, to cable modem Internet connections. Wireless home networks and improved communication standards across devices are ensuring that MP3 players and digital cameras are not just stand-alone devices, but integrated features of the home electronics environment. This interconnection sets the stage for more devices to provide channels for rich service delivery, including home healthcare.

In addition, a host of companies are developing compelling and innovative new technologies that can raise the bar on healthcare in the home, such as Accenture's Online Medicine Cabinet. The device leverages emerging technologies, including smart labels, face recognition and monitoring devices, to bring consumers condition monitoring, medication reminders, interactions with pharmacists and physicians and access to personalized health information.

The next step rests with industry, and the obstacles to taking it are real. The healthcare industry has historically been slow to adopt new processes, even when the benefit is clear. The healthcare channel is complex and unstable, plagued by the conflict between top-quality care for all and the cost constraints of business viability.

Overcoming these challenges will require new infrastructure and standards, new reimbursement policies and new partnerships to deliver complete solutions (see Bringing healthcare electronics home). But the global trend toward moving point-of-care closer to the patient makes the home the logical locus for tomorrow's health monitoring and treatment. e

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About Accenture

Accenture is the world's leading management and technology services organization. Through its network of businesses approach – in which the company enhances its consulting and outsourcing expertise through alliances, affiliated companies and other capabilities – Accenture delivers innovations that help clients across all industries quickly realize their visions.

With approximately 75,000 people in 47 countries, Accenture can quickly mobilize its broad and deep global resources to accelerate results for clients. The company has extensive experience in 18 industry groups in key business areas, including customer relationship management, supply chain management, business strategy, technology and outsourcing. Accenture also leverages its affiliates and alliances to help drive innovative solutions. Strong relationships within this network of businesses extend Accenture's knowledge of emerging business models and products, enabling the company to provide its clients with the best possible tools, technologies and capabilities. Accenture uses these resources to serve as a catalyst, helping clients anticipate and gain value from business and technology change.

About the Institute for Strategic Change

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