

tiré de “A new era of diagnostics”, Institute for the Future (Menlo Park, US), Health Horizons Program, December 2003

WHY CARE ABOUT DIAGNOSTICS?

Diagnostic testing plays a vital role at the point of care. A number of trends are drawing attention to advances in diagnostic technology and what they indicate for future utilization and the cost of health care. In assessing health status, physicians rely heavily on simple diagnostic procedures such as measuring blood pressure, which occurs in nearly half of physician visits. According to the National Ambulatory Medical Care Services Survey, diagnostic testing and screening services were ordered at 83 percent of doctor visits in 2001. Though clinical chemistry has traditionally been the dominant form of diagnostic technology, clinicians have enthusiastically adopted advances in diagnostic imaging, naming MRI and CT scans as the most important innovations of the last 50 years.

Another area of diagnostic innovation that is expected to transform health care in the future is the burgeoning field of molecular diagnostics, the market for which has been growing quickly at 30–50 percent per year, as knowledge about the human genome is applied to the tests used in the development of new therapies.

In response to technological advances, health care payers will face the tricky task of paying for expensive diagnostic innovations and high-quality care while trying to keep health care affordable. In addition to greater demand for technology, technology itself increases health care costs. As a primary driver of cost increases, drugs, medical devices, and other medical advances are responsible for 22 percent of the increase in health insurance premiums.

Blue Cross Blue Shield Association (BCBSA), for example, recently reported that the cost of diagnostic imaging will increase by roughly \$20 billion from 2000–2005 and in vitro diagnostics by roughly \$15 billion over the same time period. BCBSA also reports its per member per month expenditures for CT scans and MRIs have increased by 45 and 47 percent, respectively, over two years. Payers assess the cost–benefit tradeoff with many new innovations, especially those that are expected to generate high utilization or high costs and raise questions of how much incremental improvement is worth paying for and whether improved health outcomes result.

Finally, consumerism is increasing demand for testing. From 1992 through 2001, visits with any mention of a diagnostic and/or screening service increased by 28 percent. Consumer-driven, self-pay CT scanning at free-standing centers has made headlines as both an important way for individuals to take control of their health and as an unethical practice that preys on individuals’ fears and generates unnecessary follow up to false positive tests. The more we learn about genetics, the more likely it is that CT scanning for asymptomatic people today will be joined by predisposition genetic testing and genomic profiling. Though there are many medically necessary reasons for genetic testing, there are also hints at the beginning of a commercial genetic testing industry for non-clinical conditions, such as nutrition optimization and healthy lifestyle promotion. Though genomic profiling services may not be ready for

prime time yet, current advertising of genetic testing services and the potential of commercially available genetic profiling raise a number of ethical and policy challenges for the future.

THE IMPACTS OF THREE CLASSES OF DIAGNOSTICS ON FOUR CARE SETTINGS

This report, *A New Era of Diagnostics*, examines emerging trends in three diagnostic technology classes.

- Imaging
- Clinical chemistry
- Molecular diagnostics

Beyond technological innovations happening across the care spectrum, this report also explores the ways in which these innovations are altering the delivery of care. Specifically, we examine the likely impacts that diagnostic technologies will have in four key markets or care settings.

- Hospitals
- Reference labs
- Physicians' offices
- Patients' homes

Along the way, we look at how payment pressures will affect adoption of new diagnostic technologies and how high the regulatory hurdles may be. We also discuss the importance of consumer-driven demand for the future of diagnostics and take a special look at the coming shift toward and ubiquitous testing.