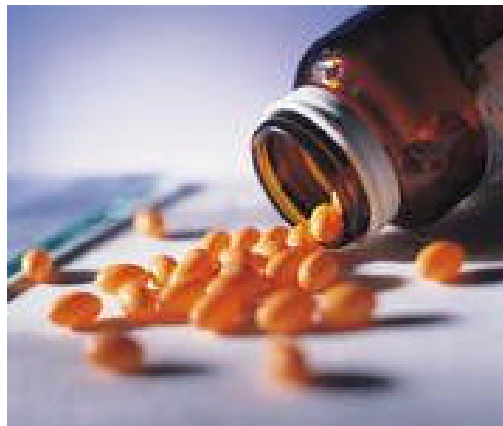

**Sonoma County
Economic Development Board**

presents

**Medical Services and
Life Sciences Report**



2004

Prepared in Partnership with the
Sonoma County Workforce Investment Board

January 2004

The Sonoma County Economic Development Board (EDB) is pleased to bring you our report on medical services and life sciences written for the EDB by Economy.com. The report also was made possible through a partnership with the Sonoma County Workforce Investment Board. In this report, please find important information regarding current trends in the health services and life sciences sectors within Sonoma County. The report includes information on health professionals, hospitals, managed care and medical technology.

Highlights from the Medical Services and Life Sciences 2004 Report include:

- The medical services industry is on the mend, recovering from a weak two-year stretch.
- Hospitals have experienced an increase in revenue despite lower utilization due in part to increased pricing.
- Sonoma County has one of the highest HMO penetrations (80%) in the state.
- Sonoma County has a small but promising high-wage medical technology and life sciences industry, particularly in the field of research and development.
- More than 50% of hospital revenue comes from public sources such as Medicare and despite budget deficits, payments are expected to rise.
- The risk to the industry include state budget deficit, a change in elderly population growth, and joblessness resulting in a spike in the uninsured.

Due to research timing, the impact of the new federal Medicare legislation is not reflected in the report. Thank you for your continued interest in the Economic Development Board's research. As always, if you have any questions please feel free to contact us at 707-565-7170.

Sincerely,



Ben Stone
Director

Sonoma County Medical Services

Recent Performance. The health services industry in Sonoma County (SON) is on the mend, recovering from a weak two-year stretch. Hospital operating margins in SON expanded by 2% in the year leading up to the second quarter of 2003 from -6% over the same period last year, according to California's Office of Statewide Health Planning and Development (OSHPD). The local healthcare industry also continues to add jobs at a pace faster than the state average, although health services payroll growth has weakened from early 2002.

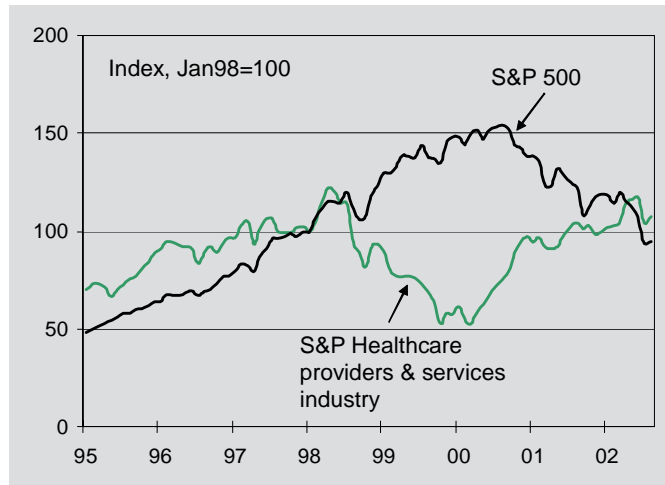
The improvement in hospital fortunes in the county comes from a pick-up in patient revenues, fed by rising prices. Patient volumes actually declined in the county; outpatient visits in SON hospitals fell over 20%, while adjusted patient days fell over 7% in the second quarter of 2003 from the same time last year. However, hospital patient revenues are up over 8% in the second quarter of this year. This suggests that hospital fortunes are improving thanks to better pricing rather than higher utilization. Specifically, SON hospitals saw a 50% year-over-year growth in Medi-Cal revenues in the second quarter of 2003, while revenues from managed care and traditional Medicare rose 40% and 32% respectively over the same period.

On the medical technology end, Medtronic recently received approval from the FDA for its Driver stent, made out of thinner material more visible to radiological machines than regular stents, which should boost revenues for the company in the near term. Medtronic will also be using this in its trials for its upcoming drug-eluting stent, which will be crucial to ensuring Medtronic's leadership in the national vascular medical devices industry.

Macro Drivers. The macroeconomic recovery is currently well under way. Fundamental macroeconomic and industry drivers will ensure that the health services industry maintains sturdy job and revenue growth.

Traditionally, the macro economy has a lagged effect on discretionary health spending, and it typically takes a few years of weaker income growth for consumers to restrict health spending. This is now showing up in some industry segments, as new admissions growth and patient revenue growth has been slowing in both for-profit and not-for-profit hospital chains.

Labor pressures in healthcare are still cause for concern, although the easing in



national labor markets over the past two years has benefited the industry. As of November 2003, the jobless rate for healthcare practitioners and other technical occupations was a mere 1.3%, versus a 5.9% national average.

The strengthening of SON's health services industry comes at a time when national health spending trends are showing signs of moderation after three years of healthy growth acceleration. Healthcare is fundamentally a regional industry, making national aggregations somewhat spurious; still, although utilization and prices are still growing at a steady clip nationally, risks are beginning to shift toward the downside for the industry.

Industry Drivers. The relationship between local providers and insurers helps define the performance of the local health services industry. California in general is considered a bellwether state in the national healthcare industry, being among the first states to embrace both managed care and capitation. In fact, the Napa-Sonoma region is estimated to have the highest HMO penetration rate in the state, nearly 80%, in a state with the highest managed-care penetration in the nation.

The SON health services landscape is dominated by not-for-profit (NFP) providers, which have traditionally suffered more dire financial conditions than their for-profit counterparts. This is mostly due to NFP providers' commitment to providing uncompensated care and reluctance to exit unprofitable markets or business lines. There is still a strong possibility of a merger or a closure in the SON hospital industry, as the region might not be able to continue to support its 7 hospitals separately.

Health insurance premiums in SON are now growing at a rapid and above average clip, making up for past years of controlled premium growth. The dynamic of healthcare providers

and insurers has changed in SON over the past year, with the health insurer Health Plan of Redwoods sinking into bankruptcy, and Kaiser Permanente, with its hospital and health insurer business lines, emerging as the largest employer in the county. Local hospitals have secured better reimbursements from the remaining private plans in the county, but local employers are bearing some of this burden, and are seeing increased health insurance premiums, according to local media sources. Notably, this is the second year of double-digit premium growth

for SON area employers, versus almost four years of double-digit growth nationally. The lag implies SON employers might be in for more dramatic premium growth in the near term.

SON's medical technology industry continues to grow, and offers upside potential for the medical industry in the county. Home to medical equipment maker Medtronic's vascular unit, SON is also host to several smaller but promising medical technology firms such as TriVascular and Endomatrix, and close to prominent medical research institutes like the Buck Institute for Aging Research. Currently, the industry is still fairly small in SON, but the high wage jobs it creates and the expected deepening of demand for outpatient medical equipment and drugs over invasive and expensive hospital inpatient treatment bodes well for growth in this industry in SON.

Pricing. Over 50% of hospital revenues in SON come from public sources, mostly Medicare. Federal budget deficits and spending constraints pose minimal downside risks to the outlook, and Medicare payments are expected to rise. Despite growing fiscal deficits that pose a risk to long-term Medicare commitments, Medicare reimbursements are not threatened in the near term. Recent updates from the center for Medicare and Medicaid Services (CMS) reveal generous Medicare reimbursement hikes for the industry. Inpatient payments will be up 3.4% for FY 2004, while outpatient payments will rise 5.7%.

A designation as a "rural agricultural" county by the Medicare programs has ensured lower reimbursement to SON hospitals, but there are some signs that this might be corrected soon. Local health providers have led a concerted effort to reclassify SON as an "urban" center with the CMS to ensure higher Medicare reimbursements that take into

account the higher costs of providing care in the region. This generates some upside potential for local health service providers, who could expect higher Medicare payments if the plan goes through.

An expected cut of 5% in Medi-Cal reimbursements starting in 2004 is certainly a concern to hospitals' revenue streams; Medi-Cal accounts for about 12% of SON hospital revenues. That said, a change in Medicare designation should outweigh the impact of the expected cut in Medicaid reimbursement, resulting in a net positive in aggregate for SON hospitals. Medicare accounts for over the twice the share of SON hospital revenues as Medicaid. Individual hospitals in the county will certainly face different circumstances according to their revenue structure.

Operating Expenses. Labor and technology continue to be the biggest drivers of operating expenses for health service providers nationally, and SON is no different. Despite labor and technology pressure, SON hospitals enjoy lower admission-adjusted expenses than the state and the nation, according to American Hospital Association data.

SON hospitals have done a tremendous job in cutting costs. Operating expenses for SON hospitals in aggregate fell 3% between the second quarters of 2002 and 2003, according to OSHPD data. This is especially stark considering the considerable pressure that the national and regional nursing shortage is placing on labor costs. The nursing shortage, combined with California's minimum nurse staffing ratio law, has led to a bidding war for nurses in the county, and contributed to a spike in wages and benefits for nurses. For instance, nurses at Kaiser hospitals in SON enjoyed a 26% wage hike in their four-year contract signed last year, prompting similar wage hikes for nursing staff at other area hospitals.

The acquisition of new medical technology has become imperative for hospitals to remain competitive and maintain pricing power in several markets, and the rising cost of technology has spurred a medical arms race of sorts. SON area hospitals are estimated to have spent \$25 million in 2003 on medical technology, from imaging equipment to modern defibrillators and stents.

An earlier downside risk to hospital profitability was mitigated this year, as Sonoma Valley Hospital became the fourth hospital in the region to receive a five-year extension to fulfill its seismic retrofitting requirements.

Hospitals in California are required to meet new seismic standards by 2008, expected to cost SON hospitals around \$200 million. The five-year extension grants most area hospitals a reprieve.

Profitability. Profit margins have improved markedly on a year-over-year basis in the SON healthcare industry. Nationally, hospitals are reporting moderating profit growth as national health spending and utilization begin to fall in line with weaker aggregate income growth. Improved reimbursements from public and private sources, combined with effective cost containment, have put SON hospitals, in aggregate, in the black. Operating margins rose from -11% in the second quarter of 2002 to 5.3% in the second quarter of 2003.

Managed care companies are enjoying improved profit margins due to hikes in insurance premiums and reduced operating expenses. Managed care companies have also been extremely diligent about leaving unprofitable areas. Any successful attempt to bolster private industry participation in Medicare would boost profitability and bolster flagging private enrollment growth in managed care plans.

Long-Term Outlook. Despite some downside risks on the horizon, the long-term outlook for the health service industry in SON is positive. The county's demographics provide room for optimism for local healthcare demand. SON residents are generally wealthier and older than the average Californian, and even the average American. Further, the public health caseload in SON is below average, with a lower share of the population eligible for the state's low-income Medi-Cal program than the state average. The aging of the baby boomers, concurrent with a boom in healthcare technology and growing life expectancy, will support consumer demand. SON hospitals should also continue to benefit from serving residents in neighboring counties, where the public caseload is significantly higher and healthcare facilities are less well equipped.

The outlook for managed care is less optimistic due to its decreasing efficacy in stemming rising healthcare costs. Continued growth in prescription drug spending will complement the ever-increasing costs of implementing new medical technologies. That said, new forms of managed care that take advantage of the Internet to improve consumer ownership of healthcare could lead to renewed growth in the industry. Over the long term, hospitals and unionized physician groups with

more negotiating clout on one side, and the public and political forces demanding lower health costs on the other, will squeeze managed care profits.

Upside Risks. Technology creates the biggest upside potential for the health services industry. Greater use of the Internet and budding wireless technologies could provide significant operational and cost efficiencies. More accurate, accessible and standardized information would cut waste and increase consumer choices. Similarly, the continued rapid development of medical technologies offers significant potential for providing more efficient care to a larger population. Any unforeseen leap from the drawing board to the marketplace of even one of many promising new technologies is a significant upside risk. Research done at the Buck Institute, as well as ongoing research and development at the many budding local biotech companies, bodes well for the nascent biotech cluster in SON.

The industry would also benefit from state and federal legislation that increases healthcare coverage for the uninsured, which would boost utilization in hospitals and improve chances of government reimbursement for managed care companies.

Downside Risks. The greatest downside risk to providers nationwide is extremely high state deficits, and California's well-documented budget gap is especially troubling. Medi-Cal reimbursements are already being cut for next year, and further cuts cannot be ruled out, especially once the full extent of fiscal damage in the state is revealed.

Demographic trends also bear watching. Healthcare providers are building capacity anticipating a spurt in demand as baby-boomers retire. However, with baby boomers living healthier lives, the demand for healthcare might not increase as much as expected, and might be focused on medical devices and drugs than on health services. Persistent physician woes are also a downside risk; anecdotal evidence suggests an ongoing physician shortage in the county which could intensify and affect local health outcomes if it is not addressed.

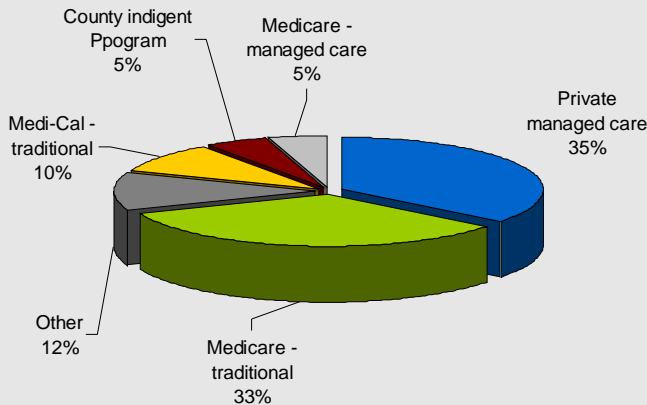
Technology also provides a challenge, in that hospitals will have to learn to co-opt new technology, and diversify into new health delivery settings, such as specialty hospitals and outpatient centers, in order to stay competitive.

*Rakesh Shankar
December 2003*

Sonoma County Services

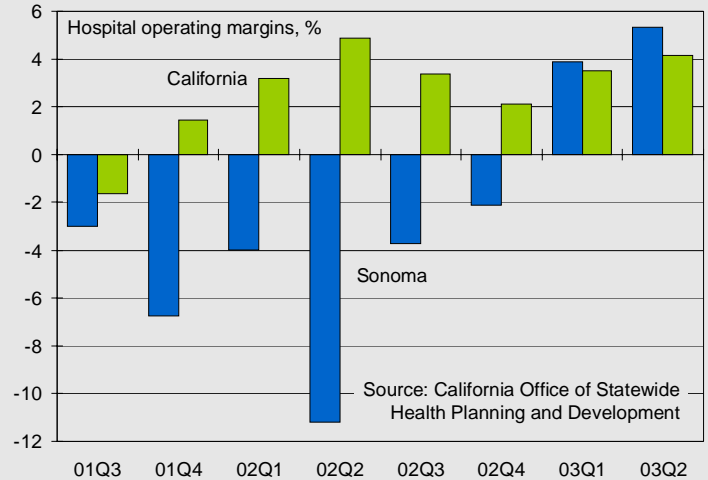
Medicare and Private Insurers Are the Most Important

Sources of SON hospital revenues, 2003Q2, four quarters ending



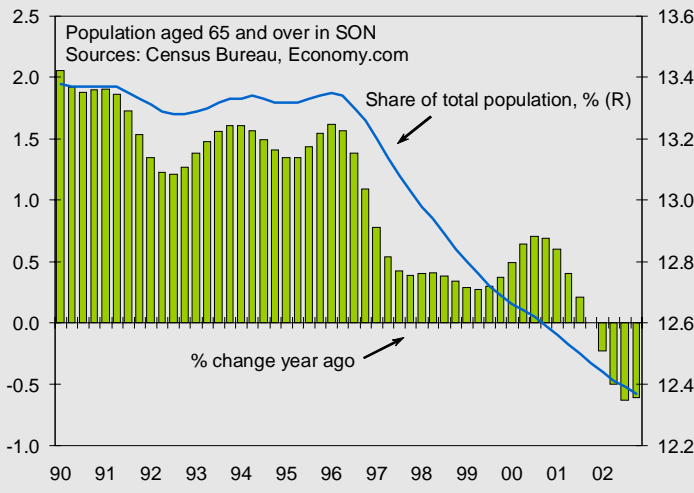
Medicare, both in its traditional fee-for-service version as well as its managed care off-shoot, is the largest revenue source for SON hospitals. By contrast, Med-Cal brings in less than a third of the revenue that Medicare brings in. Over the past year, SON hospitals' reliance on Medicare has shrunk, however. A year ago, over 40% of its revenue came from Medicare, with over 15% from Medicare managed care plans, compared to the 5% now. Meanwhile the share of private insurers in SON's revenue pie has risen from 27% in the four quarters ending 2002Q2 to 35% in the four quarters ending 2003Q2.

A Turnaround Story



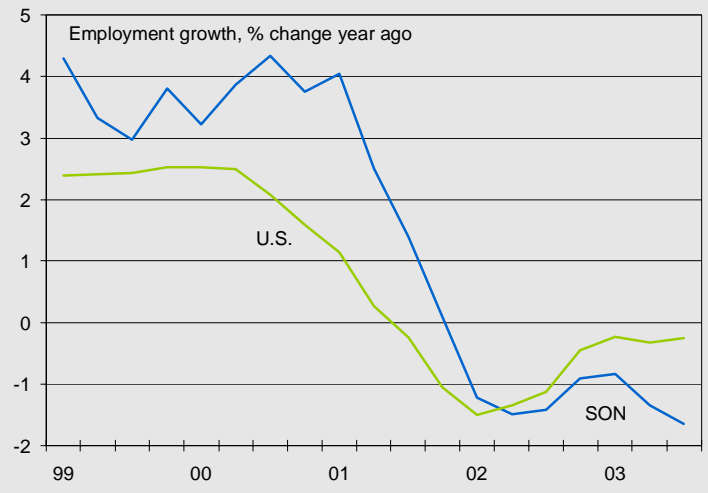
After two years of persistent weakness, SON hospitals are emerging from financial distress. Operating margins were positive in the first half of the year, and accelerating. This is thanks to improvement in the hospital revenue stream. In particular, SON hospitals have done a better job exacting higher reimbursement from private insurers. Still, labor and technology costs remain a serious challenge to SON hospitals' bottomlines, and unless the Medicare reclassification goes through for area hospitals, they will likely see a return to negative margins in 2004.

Demographic Trends Take a Turn for the Worse



Adding to near term cost concerns for SON health service providers is a long-term threat afforded by weakening demographic trends. Currently, SON has a higher share of elderly residents than the state or the nation, and has a higher per capita income, both of which are positive underlying supports for healthcare demand. However, SON's share of elderly residents has been falling over the past decade, and population growth among the elderly population has ground to a halt. Population growth in SON slowed to its lowest pace in recorded history in 2002. This bodes ill for local healthcare demand.

Weak Economy Bodes Ill for Health Spending



Regional economic conditions affect the local healthcare economy in a few ways. First, job losses and weak job growth have a deleterious impact on income growth in the region, which filters through to healthcare spending on a lagged basis. Second, a rising tide of jobless workers results in a spike in the uninsured count in the region, as a majority of consumers receives health insurance through job-based health insurance. This in turn puts additional pressure on health provider emergency rooms, the only resort for the uninsured. To this end, persistent weakness in SON labor markets is not encouraging.