U.S. Faces Severe Shortage Of Critical Care Physicians

BY NANCY NICKELL
Associate Editor, Practice Trends

The rapid growth of the elderly population in the United States may create a shortage of critical care physicians in the United States—a shortage that could lead to tens of thousands of potentially preventable deaths in the country's intensive care units, a new federal report warns.

The report has prompted critical care societies to outline solutions and press lawmakers and federal health agencies for greater help in boosting the nation's supply of critical care intensivists.

Policy makers can attack the problem in three ways: by "increasing supply, increasing efficiency, or decreasing the need for intensive care," said Dr. W. Michael Alberts, president of the American College of Chest Physicians.

With the nation's elderly population rising rapidly, "demand for intensivists will continue to exceed available supply through the year 2020 if current supply and demand trends continue," according to the report, entitled "The Critical Care Workforce: A Study of the Supply and Demand for Critical Care Physicians."

The federal Health Resources and Services Administration (HRSA) produced the report for Congress, which asked the agency in 2003 to examine the adequacy of the critical care workforce.

Almost 500,000 people die in ICUs each year, according to the report, and 360,000 of them are not managed by intensivists. If they were, an estimated 54,000 lives could be saved annually, according to a study cited by HRSA researchers (Eff. Clin. Pract. 2000;3:284-9).

Although intensivists currently direct the care of only one-third of critically ill patients, the proportion of patients receiving care under the direction of an intensivist has increased dramatically in recent years.

Increasing the proportion of ICU patients whose care is directed by an intensivist from one-third to a more optimal level of two-thirds would save lives—but it would also push the need for intensivists from 3,100 in 2000 to 4,300 by 2020.

The result: A shortage of about 1,200 intensivists in 2000 could grow to an estimated shortfall of 1,500 in 2020—or 129% above the projected supply.

As demand for critical care specialists grows, so does the burden on existing intensivists—prompting many of them to consider early retirement. More than half of intensivists expect to retire by age 60, and almost a third expect to retire by age 55, according to a report in 2000 by the Committee on Manpower for the Pulmonary and Critical Care Societies (COMPACCS).

Retirement isn't the only factor that may worsen the shortfall. Difficulty attracting physicians to the field, gender issues, and the proportion of international medical graduates (IMGs) could also leave the nation unable to meet its critical care needs. Currently, intensivist fellowship positions are not fully filled, said Dr. Alberts, who is a professor of oncology and medicine at the University of South Florida, Tampa. The number of newly trained critical care medicine fellows per year has actually dropped from 110 in 1998 to 86 in 2004, according to the HRSA report. In fact, less than 1% of U.S. medical school graduates are expected to choose to practice as intensivists.

Although 86% of pulmonologists and critical care physicians are men, a greater proportion of the younger generation of intensivists are women. Because female physicians tend to work fewer hours and retire sooner, the number of hours provided could fall, the report's authors cautioned.

The large proportion of critical care fellows who are international medical graduates may add to the uncertainty. Those IMGs may face visa restrictions that force them out of the United States.

Creation of more critical care specialists won't be easy, the HRSA report acknowledged. "Simple solutions to the critical care workforce problem are not likely to be found in the near future," the report's authors said.

The rise of intensivist-managed ICUs could help meet some of the unmet demand. Encouraging intensivists and pulmonologists trained in critical care to spend more of their work hours in the ICU might increase supply as well. But the report's authors cautioned that such strategies may require significant financial incentives.

Better management of demand could come as more hospitals use in-house, full-time intensivists to ensure appropriate utilization of critical care services and reduce unnecessary ICU admissions. Improved education regarding end-of-life issues might help physicians and patients make better treatment decisions and potentially reduce the number of days of ICU care.

Organizational changes could improve patient access in a different way, especially in rural areas. "One example is the increased use of electronic ICUs, where specialist physicians and nurses monitor and help treat critically ill patients in widely scattered hospitals," the authors stated.

To help close the projected shortfall, four critical care societies have outlined their own proposals to increase the efficient use of current critical care resources and boost the supply of intensivists in the future.

The Critical Care Workforce Partnership—composed of the American College of Chest Physicians, the American Association of Critical-Care Nurses, the American Thoracic Society, and the Society of Critical Care Medicine—also announced plans to work with Sen. Richard J. Durbin (D-Ill.) on legislative and regulatory steps.

"The looming critical care workforce shortage is an issue that affects every one of us and needs to be addressed now," said Dr. Mark J. Rosen, chief of the division of pulmonary and critical care medicine at Beth Israel Medical Center, New York, and president-elect of the ACCP. ■

For a copy of the HRSA report, visit www.chestnet.org/practice/gr/hrsa.php.

POLICY & PRACTICE

Fix the SGR, Delay Imaging Cuts

Rep. Michael Burgess (R-Tex.), an ob.gyn., has introduced legislation (H.R. 5866) that would put an end to physician fee cuts under Medicare by halting application of the sustainable growth rate by Jan. 1, 2007. Each year, the SGR has contributed to a decrease in payments; in 2007, that cut is slated to be 5.1%. Rep. Burgess is proposing to tie physician fees to one factor only: the Medicare Economic Index minus 1%. According to Rep. Burgess, this places "more value on actual cost inputs." The bill also would establish a system of quality measures to give patients more information about Medicare providers, delay by 1 year proposed cuts in imaging services reimbursement, and require the Institute of Medicine to study whether imaging saves money. The American Medical Association called the Medicare Physician Payment Reform Bill and Quality Improvement Act of 2006 an "important step toward replacing the flawed Medicare physician payment formula." Rep. Burgess' bill is the third in the House to delay or repeal the cuts in imaging fees; a similar bill was recently introduced by Sen. Gordon Smith (R-Ore.) and Sen. Jay Rockefeller (D-W.Va.).

Senate Bill to Boost Drug Safety

After months of public discourse, Sen. Edward Kennedy (D-Mass.) and Sen. Mike Enzi (R-Wyo.) have introduced a bill that aims to increase assurances that drugs are safe before they reach the marketplace, or at least have a plan in place to more closely monitor when they need to be withdrawn. The Enhancing Drug Safety and Innovation Act would require pharmaceutical manufacturers to be more proactive about safety problems. Companies would have to establish risk evaluation and management strategies that will be agreed upon by the manufacturer and the Food and Drug Administration before the product is approved. The companies would have to submit adverse event reports every 15 days, quarterly, and annually. If a company knowingly does not comply with the agreed-upon strategy, the FDA can impose monetary penalties. The senators also proposed that manufacturers make clinical trial results public. Fuller disclosure "will help patients and their health care providers make better informed decisions about treatment," Sen. Kennedy said in a statement. Finally, the bill would overhaul the FDA's process for vetting outside advisory panel members, with a goal of minimizing conflicts of interest and then ensuring that they are fully disclosed.

Gulf War Research

New federally funded research will test the hypothesis that veterans with Gulf War Illness have metabolic, structural, or functional changes in their basal ganglia that are not accounted for by posttraumatic stress disorder, depression, or alcoholism. This is among 24 projects that were funded by the federal government starting in fiscal year 2005 to examine the health of veterans of the Gulf War. The Department of Veterans Affairs is required to report to Congress each year on the status of research into the health consequences of military service in the Persian Gulf region from Aug. 2, 1990, to July 31, 1991. From fiscal year 1992 through 2005, the federal government has sponsored 300 research projects on Gulf War veterans' illnesses, according to the report, available at www.research.va.gov/resources/pubs/pubs_individual.cfm?Category=Gulf%20War%20Reports.

Genetic Testing

Officials at the Centers for Medicare and Medicaid Services should establish a genetic testing specialty under the Clinical Laboratory Improvement Amendments (CLIA) of 1998, according to a coalition of 14 women's health groups. In a letter to CMS Administrator Mark McClellan, the groups urged him to move forward with a Notice of Intent of proposed rulemaking issued in 2000 on the development of a genetic testing specialty. The science is outpacing the current regulations, the groups wrote. Currently there are about 1,000 tests for genetic diseases available clinically and several hundred more under development. Signatories to the letter include the Association for Reproductive Health Professionals, the Reproductive Health Technologies Project, and the Society for Women's Health Research.

HIV Vaccine Grants

The Bill and Melinda Gates Foundation has awarded $287 million to researchers in an effort to accelerate development of an HIV vaccine. The sum will fund 16 grants to more than 165 investigators from around the world. "Some of the vaccine concepts that will be pursued have been talked about for years, but have never been adequately studied," Dr. Nicholas Hellmann, acting director of the Gates Foundation's HIV, TB, and Reproductive Health program, said in a statement. "If successful, they could lead to entirely new paradigms for HIV vaccine development."

Payment for Part B Drugs

The federal government spent about $10 billion last year on drugs covered under Medicare Part B, with one rheumatoid arthritis treatment accounting for about 5% of the spending, according the Centers for Medicare and Medicaid Services. Dr. Herb B. Kuhn, director of the Center for Medicare Management at CMS, presented information from a preliminary estimate of allowed charges under Part B to the House Ways and Means subcommittee on health. Infliximab (Remicade) made up about 5% of the total allowed charges under Medicare Part B in 2005, while intravenous immune globulin accounted for about 1.6%. About half the money paid last year for Part B drugs went to oncologists, 5% to urologists, and 4% to rheumatologists, according to Mr. Kuhn's written testimony.

—From staff reports