Economic Impact Analysis
Virginia Department of Planning and Budget

12 VAC 5-218 – Virginia Department of Health (State Board of)
Rules and Regulations Governing Outpatient Health Data Reporting
October 23, 2002

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.G of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

The proposed regulations will establish an outpatient data reporting system for outpatient hospitals, ambulatory surgical centers, and physicians performing selected outpatient surgical procedures.

Estimated Economic Impact

These regulations establish reporting requirements for outpatient surgical data as mandated by section 32.1-276.2 et seq. of the Code of Virginia (amended by 2001 Acts of Assembly, HB 2763). The entities, which include outpatient hospitals, ambulatory surgical centers, and a number of physicians performing selected outpatient surgical procedures,[1] are currently required to report data under emergency regulations that have been effective since November 2001. The proposed action will make the emergency regulations permanent without any change in the original language.

[1] These outpatient surgical procedures are not specified in law or in the regulations, but determined by a task force.

The outpatient data reporting system established under the emergency regulations requires data submission on at least five specific outpatient surgical procedures. Currently, seven procedures are approved for reporting by the Board of Health.[2] The number and the type of these procedures are subject to change over time. These specific procedures are selected among others based on their frequency, actual or perceived risk to the patient, the potential for moving from an inpatient procedure to an outpatient procedure, and the level of costs. Frequently performed procedures are of interest because they may affect a significant number of Virginians. Procedures whose performance presents an actual or perceived risk are of interest for studying and developing information to help providers and patients and reduce the morbidity and mortality risks. Information on procedures that are likely to move to an outpatient basis may provide information on differences in costs and the effectiveness of care between the different settings (inpatient, ambulatory surgical center, and hospital). Finally, information on costs may allow consumers and providers make cost comparisons.

The system works in the following manner. Reporting entities submit patient level data for each patient for whom an outpatient surgical procedure is performed. The data elements include (1) identities; the identity of patients, hospitals, operating physicians, payors, employers of the patients, (2) demographic information; sex, date of birth, postal zip code, relationship between the patient and the insured, (3) billing information; procedure codes, procedure dates, revenue codes, revenue units, procedure specific charges, total charges, (4) health information; status at discharge, admission date and hour, admission diagnosis, principal diagnosis, secondary diagnosis, external cause of injury, co-morbid conditions existing but not treated. Most of this information is already collected on standard UB-92 and HCFA 1500 forms[3] and reported to insurance companies by the reporting entities regardless of these regulations. For example, reporting entities collect all of the demographic information at registration and enter procedure codes, duration of the operation, and the outcome once the surgery is completed. However, a few elements are reported in addition to the information on standard reporting forms because of these regulations. These elements are the hospital identity and co-morbid conditions reported by

[2] The approved procedures are (1) colonoscopy, (2) laparoscopy and laparoscopic surgery, (3) surgery of the breast including repair and reconstruction surgery, (4) hernia repair, (5) liposuction, (6) facial surgery including facelift, blepharoplasty, and laser resurfacing, and 7) knee arthroscopy.

[3] UB 92 is the standard reporting form for hospitals and HCFA 1500 is for physicians.

hospitals and admission diagnosis, external cause of injury, as well as the hospital identity and co-morbid conditions reported by physicians.

Upon collection of the required patient level data, reporting entities are required to either submit quarterly data to the Board of Health that in turn passes the same data to Virginia Health Information, a nonprofit organization that has a contract with the board, or directly to the nonprofit organization for processing and verification of reported data. Reporting entities performing less than 100 of the surgical procedures per year may submit the data in either electronic or hard copy format. Entities with at least 100 procedures are required to submit data in electronic format such as on a CD or a floppy disk. However, all entities must eventually utilize electronic reporting by January 2004.

Once the data is received, the nonprofit organization processes and verifies data. If the error rate is greater than 5%, a fee may be levied on the reporting entity. However, the regulations do not establish any specific amount of fees. Under section 32.1-276.8 of the Code of Virginia, the non-profit organization may charge a fee up to one dollar for each erroneous record. The purpose of the fee for erroneous records is to improve the accuracy of the reported data. The erroneous data is edited by the nonprofit organization.

Then, the nonprofit organization extracts information in a raw form, or calculates new variables from reported data elements. For example, patient age is calculated from the date of birth information. This information is made available free of charge to Virginia Department of Health (VDH) support programs, health system agencies, reporting providers, and consumers through direct dissemination of the data, through printed consumer guides, or through internet access. The organization tries to accommodate individual consumer requests without a charge as well. Non-reporting providers or commercial users can obtain the data from the organization for a fee.

Information is not free as it requires human capital and machines to collect, process, verify, analyze, organize, store, and disseminate data. The costs associated with the outpatient data reporting system fall on the reporting entities and the nonprofit organization. Reporting entities must designate a contact person for the data reporting responsibilities. Their costs include additional utilization of their electronic systems or purchase of additional capacity if necessary, the use of additional office supplies if hard copy reporting is chosen, and additional

staff time to execute the reporting requirements. These costs are unlikely to be uniform across reporting entities and are very much likely to increase with the number of outpatient surgical procedures performed. Although no estimate is available for these costs, it should be remembered that reporting entities already collect much this information on standard forms and therefore additional costs may be relatively small. In addition to these, reporting entities may be assessed a fee for erroneous data, which would increase their overall costs.

Similarly, the nonprofit organization already has the technical infrastructure and human resources for inpatient data collection and dissemination in place since 1994. The outpatient surgical data reporting system closely resembles existing inpatient reporting system. Thus, the costs to the nonprofit organization are in terms of additional utilization of existing electronic equipment or new equipment if needed, expanded utilization of existing programs and modifications to them, additional web design costs, and additional staff time to handle hard copy reporting, resolving erroneous data entries, designing search algorithms, developing user-friendly interfaces, and organizing and managing electronic data in general. The nonprofit organization spent $36,000 on this project during the first year from its own resources and will continue to spend another $36,000 to $50,000 for the second year. The sources of these expenditures are the funding the organization receives from general fund appropriation for inpatient data reporting system, federal grants, and revenues from commercial customers.

Although currently the non-profit organization incurs the costs of the outpatient data reporting system, the costs associated with human capital and machines supporting human productivity will have to be funded somehow. In fact, there is expectation that the outpatient system will be funded sometime in the future as the inpatient system and basic processing costs will ultimately come from the contributions from general fund appropriation and/or from the federal grants. Alternately, the nonprofit organization may be able to supplement its resources by compensation from consuming entities in the market. If that route is a part of the organization's financing strategy, there is likely to be some additional costs for marketing of the outpatient data. These may include for example press release, direct mail, and telephone costs that are expected to be in hundreds of dollars. If the organization cannot generate enough revenues or cannot find a funding source, it may have to abandon its role as a facilitator at some point in the future.

The proposed regulations may create another potential cost is in terms of privacy. The data collected contains personal health information at the patient level. The release of any patient identifiers and the release of any data or information or combination of data elements that could reasonably be expected to identify an individual are prohibited under the statue and are punishable by civil penalties. While additional reporting and processing required under these regulations may increase the chance of unlawful privacy breaches the nonprofit organization indicates that its internal controls, policies and procedures have prevented any breach of privacy for the more than 6.5 million inpatient records processed since 1993. Similar controls are employed for processing of outpatient data the volume of which is a small fraction of the inpatient discharges.

Availability of outpatient surgical data is expected to generate a number of benefits. At the aggregate level, these regulations will reveal among other things a more complete and accurate picture of the healthcare outcomes either bad or good and reduce potential bias that would have prevailed under a voluntary self-reporting approach. Under a voluntary approach, reporting entities might only provide information, which reflects positively on their interests and might try to curtail access to information that reflects negatively on them. Also, the providers would not voluntarily release information that may benefit competitors while the same information may improve consumer well being. Thus, these regulations will likely help reveal a reasonably accurate picture of health outcomes at the aggregate level as well as at the provider level.

Also, readily available inpatient data and outpatient data complement each other and may produce additional benefits. Both databases may be combined at the patient level and are expected to produce overall synergies in terms of tracking the patient over time. In other words, it is likely that the new outpatient data will enrich readily available inpatient data while the readily available inpatient data will increase the likely benefits from the outpatient data reported pursuant to these regulations. For example, at the extreme, if a mortality occurs following a discharge from an inpatient procedure, it may lead to wrong conclusions when in fact the patient had an outpatient procedure performed elsewhere after being discharged from the hospital that performed the inpatient procedure.

The availability of data to VDH support programs or health system agencies may further help identify trends, inform policy makers early on about the potential problems and desired outcomes, and help shape the health policy. For example, VDH has undertaken a major program to reduce the number of Virginians suffering from cardiovascular diseases using patient level data to identify cities and counties with higher rates of this condition and initiated screening programs and other related treatment programs. Similar programs have been developed for diabetes. Injury prevention programs such as seatbelt usage, bicycle helmet programs have employed the patient level data system to determine the scope of the problem by geographic area and then focus educational and other interventions where they can be most effective. Additionally, the proposed regulations will help build a local level database which may enable decision makers identify differences between national and local trends regarding various variables such as length of stay, infection rates, outpatient surgical costs, etc. As an example, policy makers may be better informed about the safety of the procedures performed at the local level relative to the national level.

Outpatient health care providers may also benefit from the proposed data reporting system. Reporting hospitals or physicians may be able to compare their performance with other providers and identify the areas that may need improvement. Examples may include how often patients receiving procedures develop complications or infections following care. Similar information on how frequently patients require related treatment to address problems with earlier outpatient care can also be used to improve performance. In addition, the providers may use some of the information to identify new markets for outpatient procedures and enhance their market share. They may be able to identify where patients are coming from by zip code, where they go for outpatient services, and what areas they need to target to gain market share. Taken together, the effects on providers may improve healthcare outcomes and may contribute to competition in the outpatient surgical industry.

The outpatient data may further benefit consumers who seek to find out critical information about providers for benchmarking purposes. They may benefit from consumer guides published in print or on the world wide web by the nonprofit organization based on reported outpatient data. They may be able to easily locate providers and learn more about the indications and expected results from the procedures. Consumers may access data about average charges for procedures, and they may obtain information about the experience and the

performance of the providers. In other words, they may be afforded a chance to make better-informed health care decisions.

Finally, with this data, the nonprofit organization may be able to increase its revenues by selling it to non-reporting providers or commercial users as a compensation for the value it adds to the raw data. Such business transactions are expected to take place if they benefit both the seller and the buyer.

Businesses and Entities Affected

The proposed regulations will establish reporting requirements for approximately 90 outpatient hospitals, about 20 to 25 ambulatory surgical centers, and several hundred physicians who perform the selected surgical procedures in their offices.

Localities Particularly Affected

The proposed regulations apply throughout Virginia and are not expected to affect any locality more than others.

Projected Impact on Employment

The proposed reporting requirements may increase the demand for labor slightly as reporting entities will likely devote more human resources to report outpatient data and the non profit organization will likely devote additional labor for processing and verification of reported data. However, existing staff at these entities will likely meet much of the need for additional labor.

Effects on the Use and Value of Private Property

The proposed regulations are not expected to have any direct effect on the use and value of private property. However, reporting entities may enhance their profitability with the comparative provider information collected. These may include for instance identifying their performance on reported outpatient surgical procedures and using this information to reduce costs and to identify new markets to increase revenues. To the extent this happens, there is likely to be a positive effect on the value of their businesses.

Record keeping represents a significant cost to outpatient service providers. This rule increases these costs by some small amount and will likely result in a small reduction in the stream of expected profits from outpatient service providers. Given the small incremental nature

of this change, the effect of the value of outpatient surgery practices will certainly be too small to measure.