## Full Body Scan ELE282 Biomedical Engineering Seminar, March 25, 2002 Anna Wagner Biomedical Engineering, University of Rhode Island Kingston, Rhode Island 02881

If you've been paying attention to tv or reading the newspaper, you've probably heard about the new preventive diagnosis tool... a full body scan. The idea is that you get a scan of your heart, lungs, and other organs to see if there is anything wrong with you, rather than waiting for the symptoms. This way you can possibly prevent or cure a problem before it's too late. The scans are available in a number of places and anyone can request a scan. That is, anyone with about \$800 to spend. Most insurance companies don't pay for scans unless you already know something is wrong.

If a patient doesn't have that type of money, they can opt for just one type of scanheart, lungs, or even a virtual colonoscopy or bone density test. All the procedures are noninvasive. The power of this tool is impressive, a full body scan can show such fatal diseases as strokes, aneurysms, cancer, and lymphoma, and other non-fatal problems such as gallstones, arthritis, kidney stones, and osteoporosis.

While the tests are not 100% accurate, the method of detection also matters. While most companies realize that MRI is not up to the task, they debate about the use of CT vs. EBT. EBT is faster and therefore, more accurate because of it's ability to take pictures in between heartbeats. However, CT is less expensive and therefore more tempting for a company. For EBT you also can wear your own clothes (another plus for the consumer.)

So whom needs this scan? A young, fit individual doesn't. If you are a women over 50 or a man over 40, a smoker, obese, have diabetes, or have a family history of strokes or heart disease, you should get a scan. Even people who are healthy should consider a scan. People in top shape have known to discover problems which might have killed them. However, sometimes the scan uncovers something that is not detrimental to one's health, and might just cause a person to worry.

No matter what, the scan is just the first part. If something is discovered, you need to look into it with your doctor. In every case, after a scan you get a consultation to explain the results. And usually you get a CD-ROM and a print out of the information. The recommend-ation is to repeat the scan anywhere from once every year, to once every 6 months. It depends on the findings.

So is a scan right for you? If you are at risk and have the money, it could save your life.

