Service Advisory

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Module: **eRA System**
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Beginning Monday, general system performance has been abysmal. This has escalated from "lower level" performance issues over the past couple of weeks (and which mostly seemed to impact GM) to the current situation.

The problem is not a simple one, but appears at this point to be coming from multiple causes. The most obvious target is a program that is being executed more than 20 million times a day. This assembler program is being called to scan documents that are already in the IMPAC II system. Prior to e-Submissions there was not a major problem with this program's execution; it was executed MANY times a day, but far fewer than 20+ million. With e-Submissions, there are now many more documents in the system (a 20% growth in the past three months and it required about 10 years to get to the level it was at three months ago). Also, the number of sessions that require scanning these documents has increased dramatically. All in all, an approach that was designed for paper submission was ill-behaved in the e-Submission environment.

This problem is NOT one of capacity, nor is it a fault of e-Submissions. If anything it relates to the quick transition from paper-based submissions to electronic ones. Also (more bad news), there is reason to believe that there are other performance problems that will appear once the assembler program situation is resolved. Many of these relate to database queries that are run against the system. Queries that were not efficient when the system wasn't heavily loaded can become truly problematic when load increases.

Now, the good news. Two approaches have been taken to address these issues. First, we identified the most knowledgeable person for the module executing the assembler program. He was pulled from all other tasks to change the logic of the program calling the assembler program. This person has been working miracles and expects to have a new module ready for architectural review and testing by tomorrow afternoon. The second problem is more obscure since it is still a bit undetermined at this point. (It won't be totally apparent until the assembler problem is resolved.) In any event, a swat of five experts was created to dive into the problem. This team is working to eliminate the immediate problems within the next couple of days and to provide a process for total resolution of the types of problems they're seeing.

Everyone has been very helpful during this difficult time. NIMH has, for example, temporarily stopped running their daytime data synchronization job to reduce the system load. We are extremely grateful for this type of cooperation.

We are hoping that these performance issues will be under control within the next two days. Stay tuned for more details.