



NYU School of Medicine  
Emergency Care Electrocardiogram (ECG) Database

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Here are some suggestions and background to help you get the most out of the NYU Adaptive Learning Of Electrocardiograph (ALOE) ECG database.

**Q. Where did the ECGs come from?**

Most of these ECGs were harvested from a large database of ECGs performed on patients in the NYULMC Emergency Department during clinical care.

**Q. How did you prioritize the diagnoses seen in the database?**

There was no specific prioritization. We pulled an ECG done in the ED that would have had a cardiologist over-read some time after the ECG was collected. Standard practice was for the cardiologist to over-read one ECG of any of the ones done during the ED visit. Usually they chose the "key" ECG but this will vary.

**Q. ECG Interpretation Issues: Are the interpretations "Machine Reads" or Cardiologist Over-reads?** In most cases, a cardiologist will have signed off on the interpretation. 82% of the time, the machine interpretation stood without change. The other 18% of the time, the cardiologist over-rode the read to a final interpretation. Those changes are indicated with blue digital ink.

**Q. ECG Interpretation Issues: In fact, I think this answer is incorrect!** The "answers" are a machine-decoded version of the diagnoses associated with the Cardiologist's interpretation of that ECG. This is an IMPERFECT GOLD standard but each answer will stimulate the kind of processing necessary to really learn how to read ECGs well. Eventually, we will make it possible to provide comments on interpretations that are thought to be imperfect. The idea is to have a "self-improving" set of ECGs in which the crowd eventually settles on the correct(est) answer.

**Q. What data is collected on use of the database? Where is my data going?** We are not specifically tracking use of the database. We are not collecting any userID information. Eventually we may do this in order to improve the database, at which time we would institute a User Permissions Agreement.

**Q. If I'm having problems, who can I contact?**

Email: Martin Pusic (NYU Bellevue/Langone Peds ED MD) with any questions or concerns ([martin.pusic@nyumc.org](mailto:martin.pusic@nyumc.org)).

**Q. How can I help improve the program?**

Three ways:

1. Use the database! And send us a note as to how you've used it.
2. Leave comments. On the bottom right of the last screen of each ECG case is a link for leaving comments. Write us love (or hate) mail -- all of it will be read and used to improve the cases.

Remember to put the ECG ID in the email.

3. Email us: [ekg.learning@gmail.com](mailto:ekg.learning@gmail.com)