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C.A.R.E (Cohort Assessment & Retrieval Environment)

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(Cohort Assessment & Retrieval Environment)

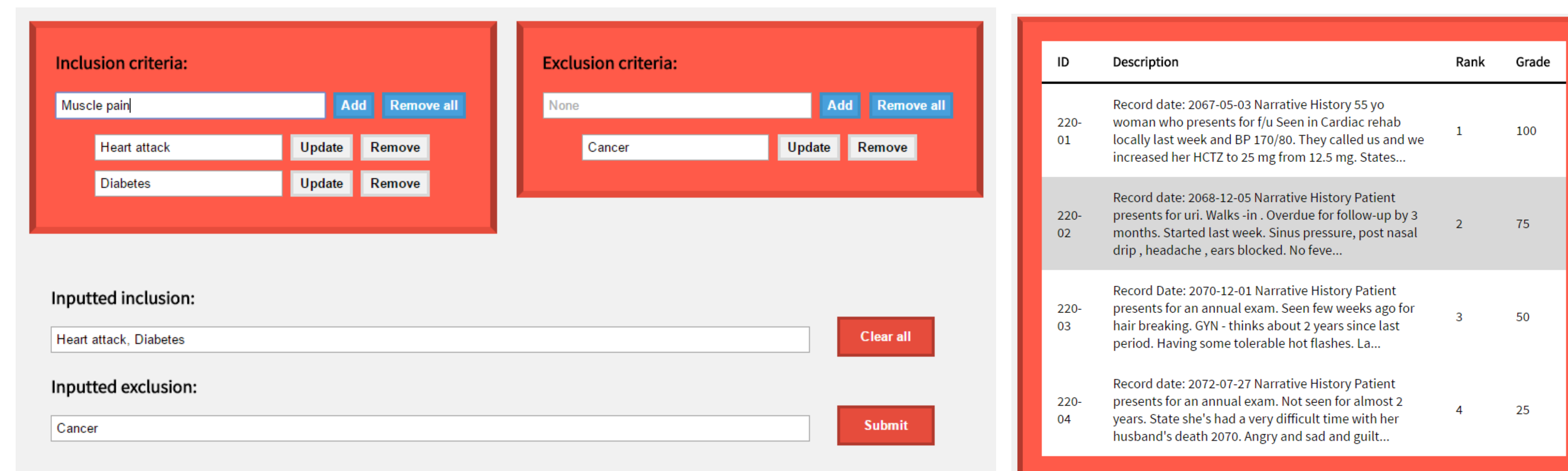
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What is CARE?

- A system that can easily identify and display which patients are best suited for a specific clinical trial based on their patient records.

Project Background:

- During clinical trials, the identification of patients who satisfy a set of predefined criteria for the trial is instrumental.
- Distinguishing these patients on the basis of their clinical records is challenging.
- Data may be structured or unstructured, which can be very time consuming.
- One difficulty with this is data normalization; there are many ways to describe a single concept.
 - EX: Heart Attack and Myocardial Infarction both refer to the death of the heart muscle.



The screenshot shows the CARE web interface. On the left, there are two panels for 'Inclusion criteria' and 'Exclusion criteria'. The 'Inclusion criteria' panel has a search box with 'Muscle pain' and buttons for 'Add' and 'Remove all'. Below it are 'Heart attack' and 'Diabetes' with 'Update' and 'Remove' buttons. The 'Exclusion criteria' panel has a search box with 'None' and buttons for 'Add' and 'Remove all'. Below it is 'Cancer' with 'Update' and 'Remove' buttons. Below these panels are 'Inputted inclusion:' and 'Inputted exclusion:' fields with 'Clear all' and 'Submit' buttons. On the right, a table displays the results:

ID	Description	Rank	Grade
220-01	Record date: 2067-05-03 Narrative History 55 yo woman who presents for f/u Seen in Cardiac rehab locally last week and BP 170/80. They called us and we increased her HCTZ to 25 mg from 12.5 mg. States...	1	100
220-02	Record date: 2068-12-05 Narrative History Patient presents for uri. Walks -in . Overdue for follow-up by 3 months. Started last week. Sinus pressure, post nasal drip , headache , ears blocked. No feve...	2	75
220-03	Record Date: 2070-12-01 Narrative History Patient presents for an annual exam. Seen few weeks ago for hair breaking. GYN - thinks about 2 years since last period. Having some tolerable hot flashes. La...	3	50
220-04	Record date: 2072-07-27 Narrative History Patient presents for an annual exam. Not seen for almost 2 years. State she's had a very difficult time with her husband's death 2070. Angry and sad and guilt...	4	25

Advantages of CARE:

- Decrease the amount of time it would normally take for users to manually identify the best candidates for their clinical trials.
- The new system will operate more accurately and efficiently due to the automation of these previously manual processes.
- The system executes most of its processes in the background, making the user experience much smoother.
- The web interface presents information cleanly and in a manner that makes browsing records simple.

Technology Stack:

