Frequently Used C++ Code for Medical Decision Models

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This does not represent the work of my institution.
Source code can be found at:
`https://github.com/namyaila/microsim_base` .

Contents

List of Figures

List of Tables

1 Configuration File Parsers

The file format is meant to be simple, although admittedly fragile. Comments (lines beginning with a #) and newlines are ignored; lines containing input settings are tokenized by comma. The parser for this is located in the header file `"parse.h"`. Assume that your configuration file reads:

```
# Simple example of a configuration file.
# Note: booleans are evaluated as true if they're equivalent to 1, true,
# or True - all other values evaluate to false
# Input the gender to run (0 = male, 1 = female, 2 = all), a double for step
# size, and a boolean for calibration.

1, 0.01231, true
```

The code to parse this would be as simple as:

```
auto items = parse::get_tokens(input_file, comment_, delim_);
// Need to staticly cast integers to enumerator values.
gender_ = static_cast<Gender>(std::stoi(items[0]));
population_ = std::stod(items[1]);
calibration_ = parse::string_to_bool(items[2]);
```

2 Random Distributions