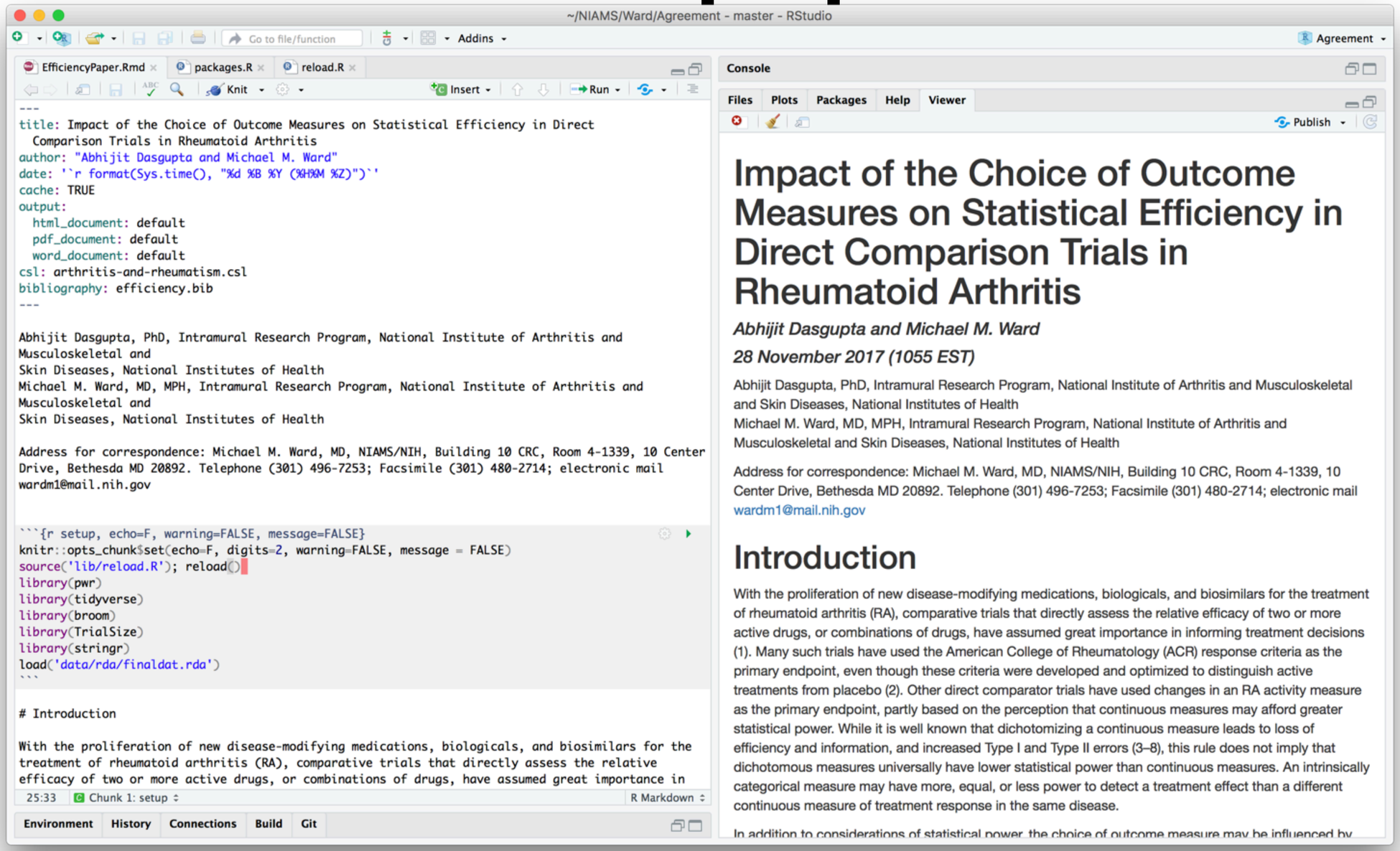
Conclusion

- Keeping text and code together allows for easy reproduction of documents
- This also ensures that there are no mistakes in the results, since the code to create them is already in the raw document
  - No copy/paste errors
- This also allows for a relatively easy revision cycle

A full paper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Addins
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title: Impact of the Choice of Outcome Measures on Statistical Efficiency in Direct Comparison Trials in Rheumatoid Arthritis
author: "Abhijit Dasgupta and Michael M. Ward"
date: ``r format(Sys.time(), "%d %B %Y (%H%M %Z)")`'
cache: TRUE
output:
html_document: default
pdf_document: default
word_document: default
csl: arthritis-and-rheumatism.csl
bibliography: efficiency.bib

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```{r setup, echo=F, warning=FALSE, message=FALSE}
knitr::opts_chunk$set(echo=F, digits=2, warning=FALSE, message = FALSE)
source('lib/reload.R'); reload()
library(pwr)
library(tidyverse)
library(broom)
library(TrialSize)
library(stringr)
load('data/rda/finaldat.rda')
```
Introduction
With the proliferation of new disease-modifying medications, biologicals, and biosimilars for the treatment of rheumatoid arthritis (RA), comparative trials that directly assess the relative efficacy of two or more active drugs, or combinations of drugs, have assumed great importance in
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Impact of the Choice of Outcome Measures on Statistical Efficiency in Direct Comparison Trials in Rheumatoid Arthritis
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28 November 2017 (1055 EST)
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Introduction
With the proliferation of new disease-modifying medications, biologicals, and biosimilars for the treatment of rheumatoid arthritis (RA), comparative trials that directly assess the relative efficacy of two or more active drugs, or combinations of drugs, have assumed great importance in informing treatment decisions (1). Many such trials have used the American College of Rheumatology (ACR) response criteria as the primary endpoint, even though these criteria were developed and optimized to distinguish active treatments from placebo (2). Other direct comparator trials have used changes in an RA activity measure as the primary endpoint, partly based on the perception that continuous measures may afford greater statistical power. While it is well known that dichotomizing a continuous measure leads to loss of efficiency and information, and increased Type I and Type II errors (3–8), this rule does not imply that dichotomous measures universally have lower statistical power than continuous measures. An intrinsically categorical measure may have more, equal, or less power to detect a treatment effect than a different continuous measure of treatment response in the same disease.
In addition to considerations of statistical power, the choice of outcome measure may be influenced by