

STAT320: Codebook - Cats Consulting

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Ingest data

```
library(readxl)
ds <- read_excel("2011-05-15.xls")
names(ds)
```

```
## [1] "ID number"
## [3] "Breed"
## [5] "Weight (kg)"
## [7] "Type of food"
## [9] "Stress"
## [11] "Previous FLUTD signs?"
## [13] "Yrs ago"
## [15] "PMHx"
## [17] "Valium"
## [19] "Dexmedetomidine"
## [21] "Propofol"
## [23] "Difficulty"
## [25] "Size of u-cath"
## [27] "Flush?"
## [29] "pH "
## [31] "iCa"
## [33] "K"
## [35] "Creat"
## [37] "Temp"
## [39] "PCV"
## [41] "2nd bldwk?"
## [43] "Hrs to azotemia resolution"
## [45] "Hrs to hyperkalemia resolution"
## [47] "Became anemic?"
## [49] "X-rays: Bladder contents"
## [51] "Cryst - In"
## [53] "Crystals"
## [55] "Urine RBC"
## [57] "USG"
## [59] "Hrs of cath"
## [61] "PU at 1st visit"
## [63] "LOH"
## [65] "ID number"
## [67] "Home w/ relaxant"
## [69] "Home w/ abx"
## [71] "Prescription diet? "
## [73] "Water Change"
## [75] "Environment Change"
## [77] "Litter Change"
## [79] "Medications after ds"

"Age"
"Weight (lbs)"
"Diet"
"Access to outdoors?"
"Type of stress"
"Previous UO"
"Vx?"
"Ketamine"
"Opioid"
"Isoflurane"
"ER Drugs?"
"Time (min)"
"Other cath"
"Bolus?"
"BG"
"Lac"
"BUN"
"Severe illness?"
"HR"
"TS"
"Azotemia resolved?"
"Hyperkalemia resolved?"
"Anemia?"
"Transfusion?"
"X-rays: Effusion"
"Cryst - Out"
"Urine WBC"
"Urine protein"
"Urine pH"
"Re-UO in hosp"
"Cyst at 1st visit"
"Survival to ds"
"Time to follow up (days)"
"Home w/ pain med"
"New food?"
"Water"
"Environmental"
"Litter"
"Total changes"
"Signs at home"
```

```
## [81] "Strainguria"          "Hematuria"
## [83] "Lethargy"             "Pollakiuria"
## [85] "Inapp U."             "Other"
## [87] "Duration of signs (days)" "Prolonged signs?"
## [89] "Seen by DVM again?"    "Readmit?"
## [91] "Repeat UO?"           "Subsequent Sx?"
## [93] "Survival 30 day"
```

```
glimpse(ds)
```

```
## Observations: 106
## Variables: 93
## $ ID number      <dbl> 155932, 156753, 158035, 156645,...
## $ Age            <dbl> 3.00, 3.00, 4.00, 7.00, 2.08, 3...
## $ Breed          <chr> "DLH", "DSH", "DSH", "DSH", "DS...
## $ Weight (lbs)   <dbl> 11.4, 14.2, 15.0, 15.6, 12.0, 1...
## $ Weight (kg)    <dbl> 5.18, 6.45, 6.82, 7.09, 5.45, 6...
## $ Diet           <chr> "Dry", "Both", "Dry", "Dry", "D...
## $ Type of food   <chr> "friskies", "generic", "wellnes...
## $ Access to outdoors? <chr> "No", "No", "No", "Yes", "No", ...
## $ Stress         <chr> "No", "Yes", "Yes", "No", "No",...
## $ Type of stress <chr> "No stress", "New dog", "Moved"...
## $ Previous FLUTD signs? <chr> "Yes", "No", "Yes", "No", "No",...
## $ Previous UO    <chr> "No", "No", "No", "No", "No", "...
## $ Yrs ago        <chr> "NA", "NA", "NA", "NA", "NA", "...
## $ Vx?            <chr> "Yes", "No", "Yes", "Yes", "Yes...
## $ PMHx           <chr> "No", "No", "No", "No", "No", "...
## $ Ketamine       <chr> "Yes", "No", "Yes", "Yes", "Yes...
## $ Valium         <chr> "Yes", "Yes", "Yes", "Yes", "Ye...
## $ Opioid         <chr> "No", "No", "No", "Yes", "Yes",...
## $ Dexmedetomidine <chr> "No", "No", "No", "No", "No", "...
## $ Isoflurane     <chr> "No", "No", "No", "No", "Yes", ...
## $ Propofol       <chr> "No", "No", "No", "No", "No", "...
## $ ER Drugs?      <chr> "No", "Yes", "No", "Yes", "No",...
## $ Difficulty     <chr> "Difficult", "Difficult", "Easy...
## $ Time (min)     <chr> "Not recorded", ">5", "2-5min",...
## $ Size of u-cath <chr> "3.500000", "Slippery sam", "5...
## $ Other cath     <chr> "No", "Yes", "No", "No", "No", ...
## $ Flush?        <chr> "Yes", "Yes", "No", "Yes", "Yes...
## $ Bolus?        <chr> "No", "Yes", "No", "No", "No", ...
## $ pH            <chr> "7.390000", "7.167000", "7.3200...
## $ BG            <chr> "129.000000", "76.000000", "153...
## $ iCa           <chr> "1.110000", "0.690000", "1.0000...
## $ Lac           <chr> "1.300000", "0.800000", "2.2000...
## $ K             <chr> "3.460000", "8.470000", "4.0000...
## $ BUN           <chr> "28.000000", "150.000000", "23...
## $ Creat         <chr> "1.600000", "NA", "1.300000", "...
## $ Severe illness? <chr> "No", "Yes", "No", "Yes", "No",...
## $ Temp          <dbl> 102.8, 97.0, 101.8, 99.0, 101.8...
## $ HR            <dbl> 180, 190, 260, 200, 180, 250, 2...
## $ PCV           <chr> "38.000000", "37.000000", "46.0...
## $ TS            <chr> "5.800000", "6.000000", "7.3000...
## $ 2nd bldwk?    <chr> "No", "Yes", "No", "Yes", "Yes"...
## $ Azotemia resolved? <chr> "Not rechecked", "No", "Not rec..."
```

```

## $ Hrs to azotemia resolution      <chr> "NA", "38.000000", "NA", "32.00...
## $ Hyperkalemia resolved?         <chr> "Not hyperkalemic", "No", "Not ...
## $ Hrs to hyperkalemia resolution <chr> "NA", "32.000000", "NA", "6.000...
## $ Anemia?                         <chr> "No", "No", "No", "No", "No", "...
## $ Became anemic?                 <chr> "Not rechecked", "No", "Not rec...
## $ Transfusion?                   <chr> "No", "No", "No", "No", "No", "...
## $ X-rays: Bladder contents        <chr> "NA", "NA", "NA", "NA", "NA", "...
## $ X-rays: Effusion                <chr> "NA", "NA", "NA", "NA", "NA", "...
## $ Cryst - In                     <chr> "Struvite", "None", "Struvite",...
## $ Cryst - Out                    <chr> "Not checked", "Not checked", "...
## $ Crystals                       <chr> "Yes", "Yes", "Yes", "No", "Yes...
## $ Urine WBC                      <chr> "Not checked", "Not checked", "...
## $ Urine RBC                      <chr> "Not checked", "Not checked", "...
## $ Urine protein                   <chr> "Not checked", "Not checked", "...
## $ USG                            <chr> "Not checked", "Not checked", "...
## $ Urine pH                       <chr> "Not checked", "Not checked", "...
## $ Hrs of cath                    <dbl> 36.0, 79.0, 21.0, 39.0, 24.0, 2...
## $ Re-UO in hosp                  <chr> "No", "No", "No", "No", "Yes", ...
## $ PU at 1st visit                <chr> "No", "No", "No", "Yes", "No", ...
## $ Cyst at 1st visit              <chr> "No", "No", "No", "Yes", "No", ...
## $ LOH                            <dbl> 44.0, 95.0, 39.0, 65.0, 28.0, 3...
## $ Survival to dsg                <chr> "Yes", "Yes", "Yes", "Yes", "Ye...
## $ ID number                      <dbl> 155932, 156753, 158035, 156645,...
## $ Time to follow up (days)       <chr> "62.000000", "31.000000", "30.0...
## $ Home w/ relaxant               <chr> "Yes", "Yes", "No", "No", "Yes"...
## $ Home w/ pain med               <chr> "No", "No", "Yes", "Yes", "No",...
## $ Home w/ abx                    <chr> "Yes", "No", "No", "Yes", "No",...
## $ New food?                      <chr> "c/d", "No", "s/d", "c/d", "SO"...
## $ Prescription diet?             <chr> "Yes", "No", "Yes", "Yes", "Yes...
## $ Water                          <chr> "No", "More bowls", "No", "No",...
## $ Water Change                   <chr> "No", "Yes", "No", "No", "No", ...
## $ Environmental                  <chr> "No", "No", "More time", "No", ...
## $ Environment Change             <chr> "No", "No", "Yes", "No", "Yes",...
## $ Litter                         <chr> "No", "No", "New litter", "No",...
## $ Litter Change                  <chr> "No", "No", "Yes", "No", "Yes",...
## $ Total changes                  <chr> "No", "Yes", "Yes", "No", "Yes"...
## $ Medications after dsg          <chr> "No", "No", "No", "No", "Yes", ...
## $ Signs at home                  <chr> "Yes", "Yes", "Yes", "No", "Yes...
## $ Strainguria                    <chr> "No", "Yes", "No", "No", "Yes",...
## $ Hematuria                      <chr> "No", "No", "No", "No", "Yes", ...
## $ Lethargy                       <chr> "No", "No", "No", "No", "No", "...
## $ Pollakiuria                    <chr> "No", "No", "Yes", "No", "No", ...
## $ Inapp U.                       <chr> "No", "No", "No", "No", "No", "...
## $ Other                          <chr> "Licking", "No", "No", "No", "V...
## $ Duration of signs (days)       <chr> "<2", "7.000000", "<2", "<2", "...
## $ Prolonged signs?               <chr> "No", "Yes", "No", "No", "No", ...
## $ Seen by DVM again?             <chr> "No", "No", "No", "No", "Yes", ...
## $ Readmit?                       <chr> "No", "No", "No", "No", "Yes", ...
## $ Repeat UO?                     <chr> "No", "No", "No", "No", "Yes", ...
## $ Subsequent Sx?                 <chr> "No", "No", "No", "No", "PU", "...
## $ Survival 30 day                <chr> "Yes", "Yes", "Yes", "Yes", "Ye...

```

```
tally(~ Diet, data=ds)
```

```
## Diet
##      Both      Dry      DRY Unknown      Wet      <NA>
##       33       35       23         6       8         1
```

```
tally(~ `Access to outdoors?`, data=ds)
```

```
## Access to outdoors?
##      No Unknownw Unknown      Yes      <NA>
##      83         1         3      18         1
```