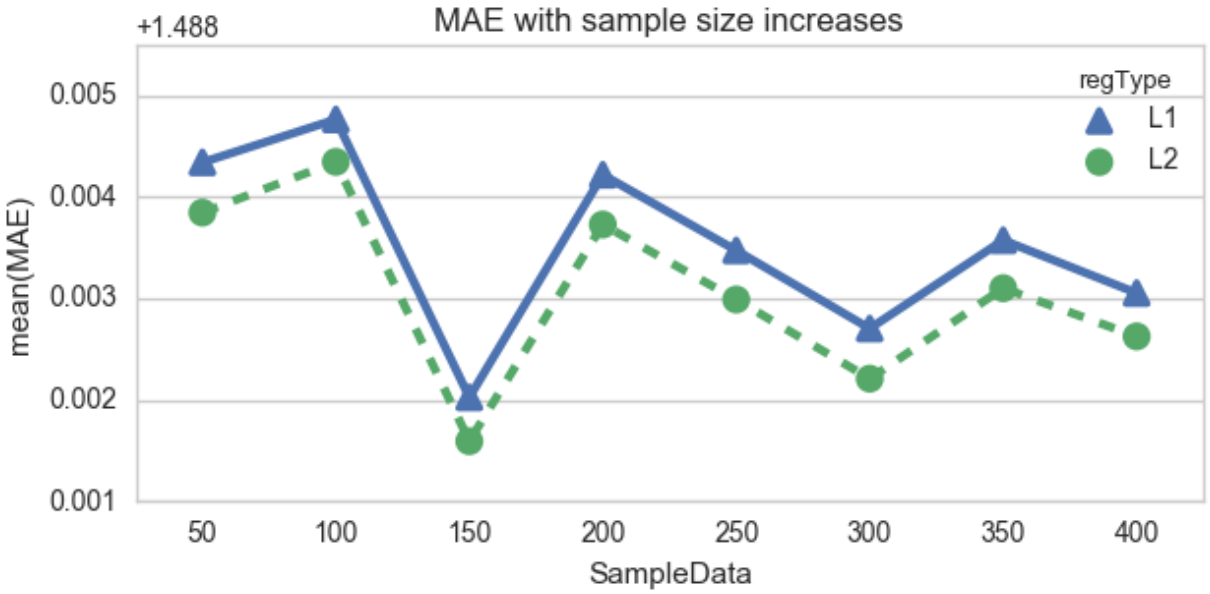
In [1]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline

import seaborn as sns
sns.set(style="whitegrid", color_codes=True)
```

In [2]:
```
metric = pd.read_csv('linear_model_evaluation.csv')
```

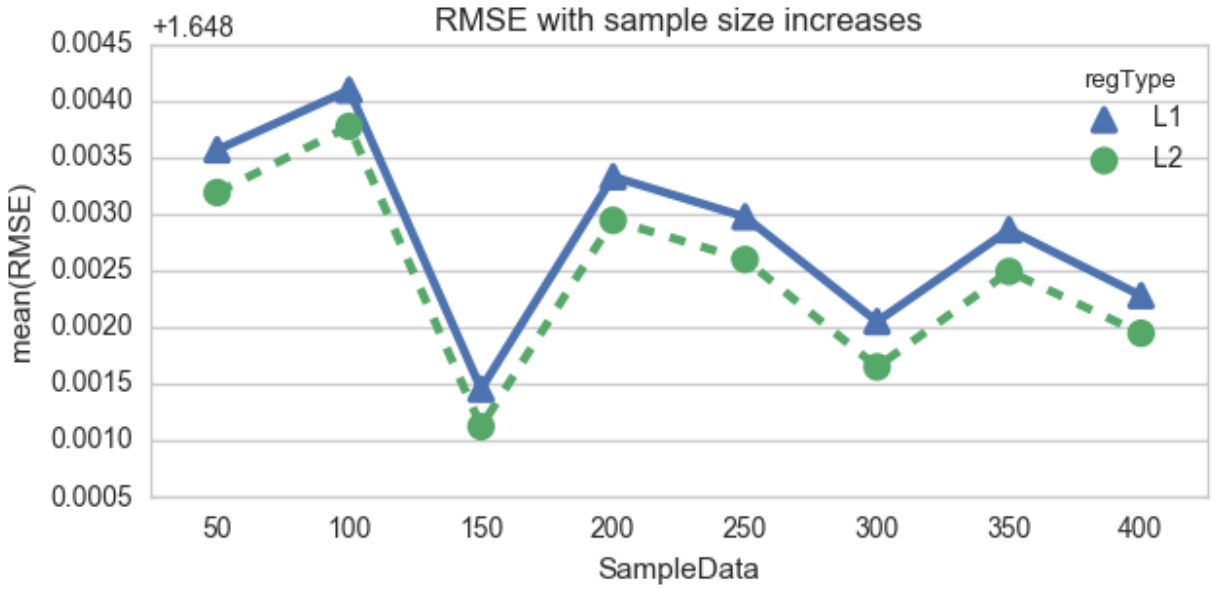
In [3]:
```
sample = metric[(metric['regParam'] == 0.001)&(metric['iterations'] == 1000)
```

In [4]:
```
sample = sample[2:]
```

In [5]:
```
f, ax = plt.subplots(figsize=(7, 3))
plt.title('MAE with sample size increases')
sns.pointplot(x=sample['SampleData'], y=sample['MAE'], hue=sample['regType'],
              markers=["^", "o"], linestyles=["-", "--"]);
```



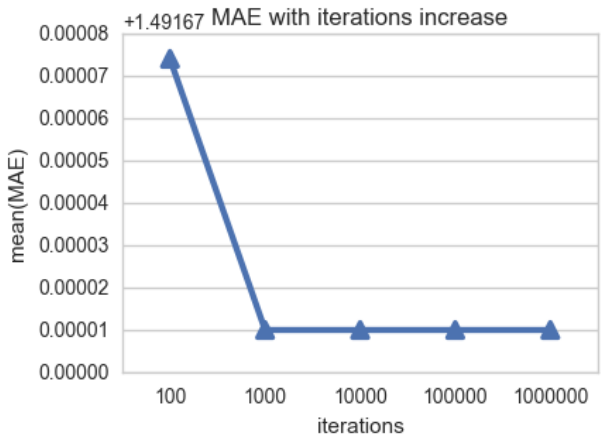
In [6]:
```
f, ax = plt.subplots(figsize=(7, 3))
plt.title('RMSE with sample size increases')
sns.pointplot(x=sample['SampleData'], y=sample['RMSE'], hue=sample['regType'
              markers=["^", "o"], linestyles=["-", "--"]);
```

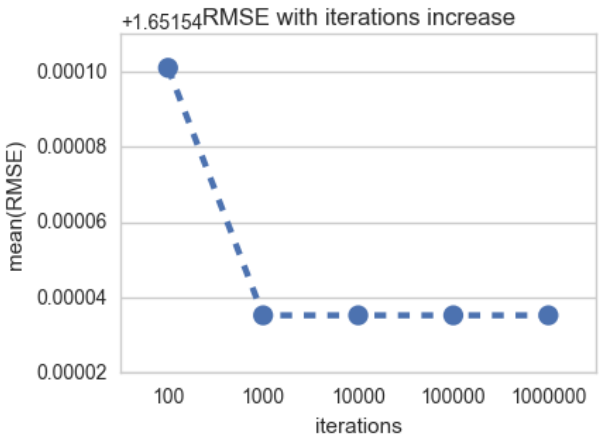


In [7]:
```
s = metric[(metric['SampleData'] == 50)&(metric['regType'] == 'L2')&(metric[
```

In [8]:
```
iters = iters[:-2]
```

In [9]:
```
#f, (ax1,ax2) = plt.subplots(figsize=(7, 3))
f, (ax1, ax2) = plt.subplots(1, 2,figsize=(10, 3))
ax1.set_title('MAE with iterations increase')
sns.pointplot(x=iters['iterations'], y=iters['MAE'],  data=iters,
              markers=["^"], linestyles=["-"],ax = ax1);
ax2.set_title('RMSE with iterations increase')
sns.pointplot(x=iters['iterations'], y=iters['RMSE'],  data=iters,
              markers=["o"], linestyles=["--"],ax = ax2);
f.subplots_adjust(left=0.125, bottom=0.1, right=0.9, top=0.9,
                  wspace=0.3, hspace=0.2)
```

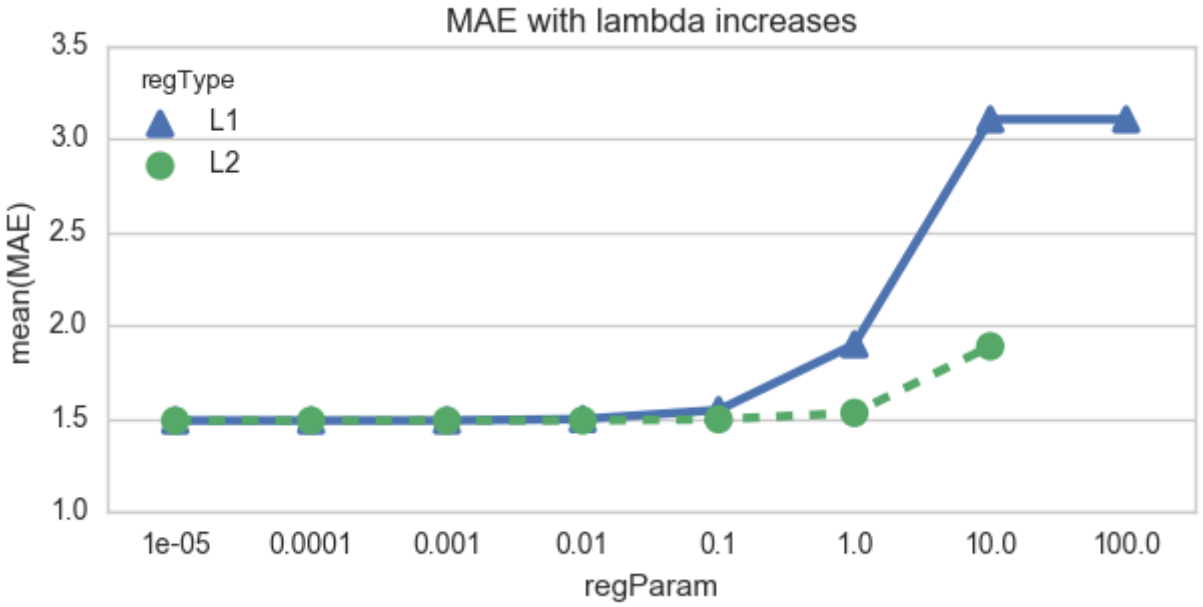




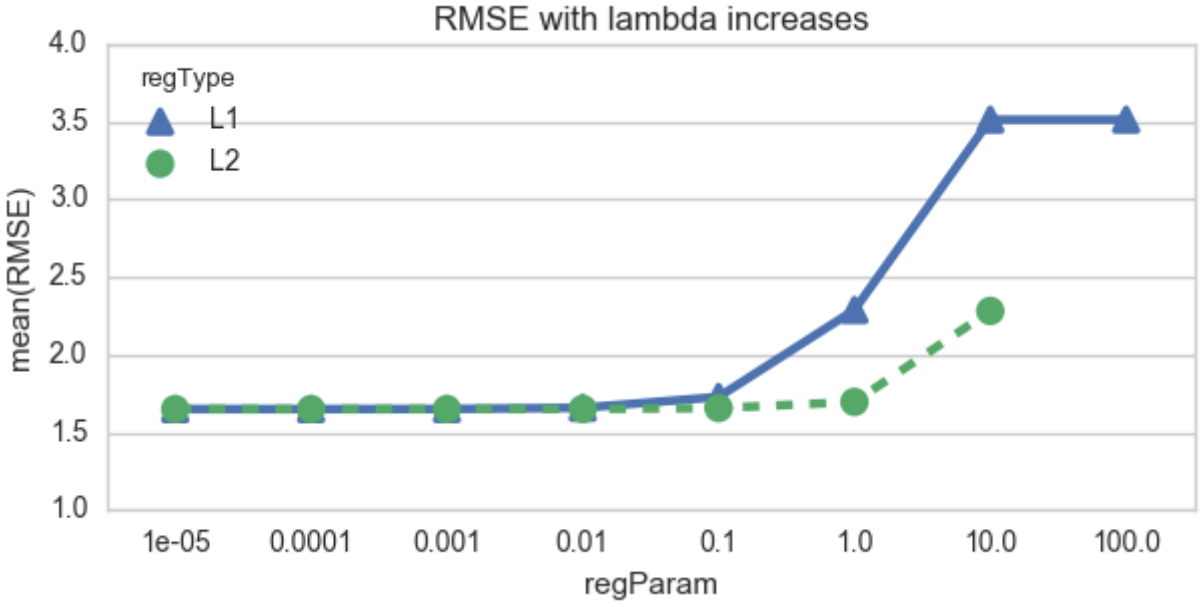
In [10]:
```
param = metric[(metric['SampleData'] == 50)&(metric['iterations'] == 1000)]
```

In [11]:
```
param = param[2:]
```

In [12]:
```
f, ax = plt.subplots(figsize=(7, 3))
plt.title('MAE with lambda increases')
sns.pointplot(x=param['regParam'], y=param['MAE'], hue=param['regType'], dat
              markers=["^", "o"], linestyles=["-", "--"]);
```



In [13]:
```
f, ax = plt.subplots(figsize=(7, 3))
plt.title('RMSE with lambda increases')
sns.pointplot(x=param['regParam'], y=param['RMSE'], hue=param['regType'], da
              markers=["^", "o"], linestyles=["-", "--"]);
```



In [ ]: