1. Experiments on Amazon Mechanical Turk

a) The name of the experiment is Investment Experiment. It's an academic investment experiment requiring participants to view material and answer 3 related short questions.
b) The payment consists of flat rate and bonus. The flat rate is $0.50 and the bonus is $0.25 per correct answer for 3 questions, so at most a participant can get $0.75 bonus.
c) It has 4 requirements: (i) Previous participation has not been granted; (ii)HIT approval rate (%) is greater than 95; (iii) Location is US; (iv) Investment Experience is 100
d) This job supposed to take up to 10 minutes. So the implied hours rate is from $3.00 per hour (no correct answer) to $7.50 per hour (3 correct answers).
e) It will expire at 10:06 am on 11/30/2018.
f) For one participant, the highest payment is $1.25, so if 1 million people participated in the task, it could take the HIT experiment creator $1,250,000 at most.

3. Analytical exercise

a) If the research funds are limited and there is persuasive evidence showing that the systematic difference in factors affecting vaccination uptake between different clinics can be ignored, or the values of those factors can be got and analyzed directly rather than by comparing with other hospitals, then it's better to focus resources on a small number of clinics, because with less fixed costs, we can have more participants. On the other hand, if characteristics of different hospitals are so different, and we have sufficient funds, it's better to spread them more widely to eliminate the effect of heterogeneity on our results and make the research more precise and persuasive.
b) There are several factors determine the smallest effect size that we will be able to reliably detect with your budget. The first one is funds, as mentioned in the former question, if we have sufficient funds, we can spread them more widely, have more participants and the mean value of treatment group and control group are more similar to the true mean value of those who receive text message reminders and those who don't, so even a small effect size can be detect. If the effect size is small and we have limited participants, it's likely that mean values are affected by randomness and hard to get the correct effect size. The second is the similarity of different clinics, since each one has 600 potential participants, if they are similar, then all of the participants can be taken as the same regardless of which clinic he or she comes from. Under that condition, the difference mainly comes from treatment and the effect size is easy to detect even it is small. The third one is experiment design, whether the participants are randomly allocated to control group and treatment group, whether participants in the treatment group really read the reminders, whether other extraneous variables are strictly controlled, all of them can contribute to the validity of the experiment and affect the measurement of effect size. If the experiment is not well-designed, the error of measurement can be large and thus the effect size will be large.