<table>
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<th>Design</th>
<th>Randomization determines</th>
<th>Most useful when</th>
<th>Advantages</th>
<th>Disadvantages</th>
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| **Basic Lottery** | o Which treatment the unit receives  
|                  | o Unit keeps treatment status throughout the evaluation  
|                  | o Treatment differential comes from withholding treatment | o When program is oversubscribed, when demand exceeds supply  
|                  |                        | o When resources are fixed for evaluation period  
|                  |                        | o When it is acceptable that some people will receive no program assistance (as when a program is being piloted) | o Ubiquitous and familiar  
|                  |                        | o Universally understood  
| Phase in         | o The time (in a gradual expansion) at which the unit will start receiving treatment  
|                  | o Unit permanently switches from comparison to treatment when it starts receiving treatment  
|                  | o Treatment differential comes from withholding treatment | o When everyone must eventually receive treatment  
|                  |                        | o When resources are growing over time  
|                  |                        | o When treatment is being replicated | o Common  
|                  |                        | o Easy to understand  
|                  |                        | o Facilitates continued cooperation by the comparison (in anticipation of treatment) | o Treatment group eventually goes away  
|                  |                        | o Anticipation of treatment may cause participants to change behavior, masking outcome differences  
|                  |                        | o Time over which impact can be measured may be limited (the switch may come before the program has had time to have an effect)  
|                  |                        | o Difficult to estimate long-term impact | o Differential attrition—units in the comparison group more likely to drop out (because they get no benefits from continued participation) |
| Rotation         | o The time period (in a cyclical schedule) in which the unit receives the treatment, before the treatment rotates away to other units  
|                  | o Unit switches treatment statuses if the evaluation period is longer than treatment period  
|                  | o Treatment differential comes from withholding treatment | o When everyone must receive the treatment at some point but there are not enough resources to treat everyone at the same time  
|                  |                        | o When resources are fixed and can only be used one group at a time  
|                  |                        | o When treatment is seen not as beneficial but as a burden to be shared | o Ubiquitous and familiar (same idea as taking turns with duties or timesharing a vacation home)  
|                  |                        | o There is always control and a comparison group as long as the cycle continues (and the groups switch replications) so you can keep testing different hypothesis  
|                  |                        | o Facilitates continued cooperation by the comparison (in anticipation of treatment) | o Anticipation of treatment may cause participants to change behavior, masking outcome differences  
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<td>Encouragement</td>
<td>- Whether the units receives inducement to access the treatment&lt;br&gt;- Unit keeps treatment status throughout the evaluation&lt;br&gt;- Treatment differential comes from higher program take-up among the encouraged</td>
<td>- When program is under-subscribed: when it is open to all comers but take-up is not universal (either program is unknown or unpopular)&lt;br&gt;- When no eligible units can be excluded (as with entitlement programs)</td>
<td>- Allows evaluation of programs that cannot exclude or delay treatment to anyone (as when there are enough resources to cover everyone)</td>
<td>- Ability to generalize findings to the population of interest depends on who the inducement attracts&lt;br&gt;- If inducement is too attractive it could end up attracting the wrong people, if it’s not attractive enough there is not treatment differential</td>
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<td>Varying levels of treatment</td>
<td>- How much of the treatment an individual or cluster receives</td>
<td>- A treatment is divisible</td>
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<td>Two-Stage Randomization</td>
<td>First stage: &lt;br&gt;- Which clusters receives (which) treatment(s) and which clusters are control&lt;br&gt;- Unit keeps treatment status throughout the evaluation  &lt;br&gt;Second stage &lt;br&gt;- Which individuals within a treated unit receive direct treatment&lt;br&gt;- Which individuals within a treatment village will not be directly treated, but may receive indirect benefits from having treated neighbors</td>
<td>- There are significant spillovers or crossovers within a cluster.&lt;br&gt;- Treating all individuals within a cluster is not feasible&lt;br&gt;- The implementing organization is trying to cut costs</td>
<td>- There are significant spillovers.&lt;br&gt;- It is valuable to learn not just the direct treatment effect, but also indirect effects.&lt;br&gt;- If it is important to varying intensity</td>
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