



Constructing Indicators

Technical details
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When is a number enough?

- Counting “how many” is enough:
 - When you are simply counting inputs or outputs
 - When you are using the indicator for awareness rather than reporting – e.g. “we have reduced the annual number of deaths by 500”
 - When there is simply no other way
- Simple numbers can be inflated by calculating them “per day” or “per minute”
 - If the count is per year, simply divide by 365 to get per day
 - If by minute, divide by 365 then by 24 then by 60

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What are percentages?

- A percentage is simply an “easy-to-understand” fraction “out of 100”
- Sometimes fractions are more understandable or easier for advocacy
 - 1 in 8 adults is arrested each year = 12.5%
- The percentage of the prison population which is pre-trial is the often called (slightly incorrectly) the **pre-trial rate or ratio**
- To calculate it:
 - number of pre-trial prisoners divided by total number prisoners; multiply the answer by 100.

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When do you use percentages?

- When the “whole” (which is 100%) e.g. the total population prison population varies over time or across place
- When you want to compare fractions over time or across place
- E.g. overcrowding. If you have more people than the allocated space (which is 100%) then you will have more than 100% occupancy.
- Total space varies as more prisons are built.

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What are rates?

- Rates are very similar to percentages, except instead of “per 100” you use “per 100 000 people in the country” or something similar
- So the pre-trial rate “per 100 000” is simply the number of pre-trial detainees, divided by the total population of the country and then multiplied by 100 000
- Rates per 100 000 population shows how common pre-trial detention is amongst the country’s population
- Using rates you can compare countries and within countries over long time periods

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Why and how do we sample?

- Lack of data about the whole population (all prisoners, all claimants) means we must often use sample data
- We can sample
 - people in prison as at a date (“snapshot”)
 - admissions to prisons
 - releases from prisons
- Each kind of sample tells us something slightly different as it refers to a different population

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Ideally we want a representative sample

- This is an unbiased (representative) sample chosen from the total population we want to know about
- We need to use a selection process that is random
- This means no part of the population has a greater chance of being selected than any other part – this should make the sample representative
- If we have a representative sample of data, we can make population estimates about the whole population
- For each record selected for the sample, we note all the details we are interested in e.g. duration of detention

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Measuring duration of detention

- Usually prisons at least keep the date of admission of a detainee
 - If you have today's date and the date of admission then you can calculate the duration
 - Excel will do it for you as long as you specify each column as a date
 - The duration column is then the one date subtracted from the other
 - If you can record for all prisoners great
 - Otherwise draw a sample
 - Sort the data from biggest to smallest to get median

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