EXAMPLE 1 FROM RESEARCH IDEA TO RESEARCH HYPOTHESIS BASED ON STEPHEN'S RESEARCH TOPIC

Research idea:
PMTCT intervention in HIV positive pregnant women.

PICO question:
P = Infants born to HIV positive women
I = PMTCT intervention (ARV to mother; formula milk to infant; etc)
C = Control group of babies born to HIV positive women who do not receive the intervention
O = No of one-year olds negative for HIV infection.

Research hypothesis:
20% of infants born to HIV positive mothers in Rwanda who receive formula milk throughout their first year of life will be HIV positive at their first birthday compared to 30% of infants born to HIV positive mothers in Rwanda who receive no formula milk.

More details are required to make it a "real" operational research hypothesis. Who exactly are these women; where in Rwanda; how is HIV positivity assessed; what formula milk is provided; etc

Please note that such a research hypothesis is falsifiable!
Please note that such a research hypothesis is inevitably linked to a certain research design: an experimental study – maybe a randomised controlled trial or similar.

EXAMPLE 2 FROM RESEARCH IDEA TO RESEARCH HYPOTHESIS BASED ON BARBARA'S RESEARCH TOPIC

Research idea:
What are the prevalences of different non-communicable diseases in Zambia?

PICO question:
P = Zambian population
I = not applicable
C = not applicable
O = Prevalence of non-communicable diseases, including cardio-vascular disease.

Research hypothesis:
The prevalence of cardio-vascular disease in the general Zambian population is 15%.

More details are required to make it a "real" operational research hypothesis. Who exactly will be sampled as the "general Zambian population?"; where in Zambia; how is CVD diagnosed; etc

Please note that such a research hypothesis is falsifiable!
Please note that such a research hypothesis is inevitably linked to a certain research design; a cross-sectional study maybe.