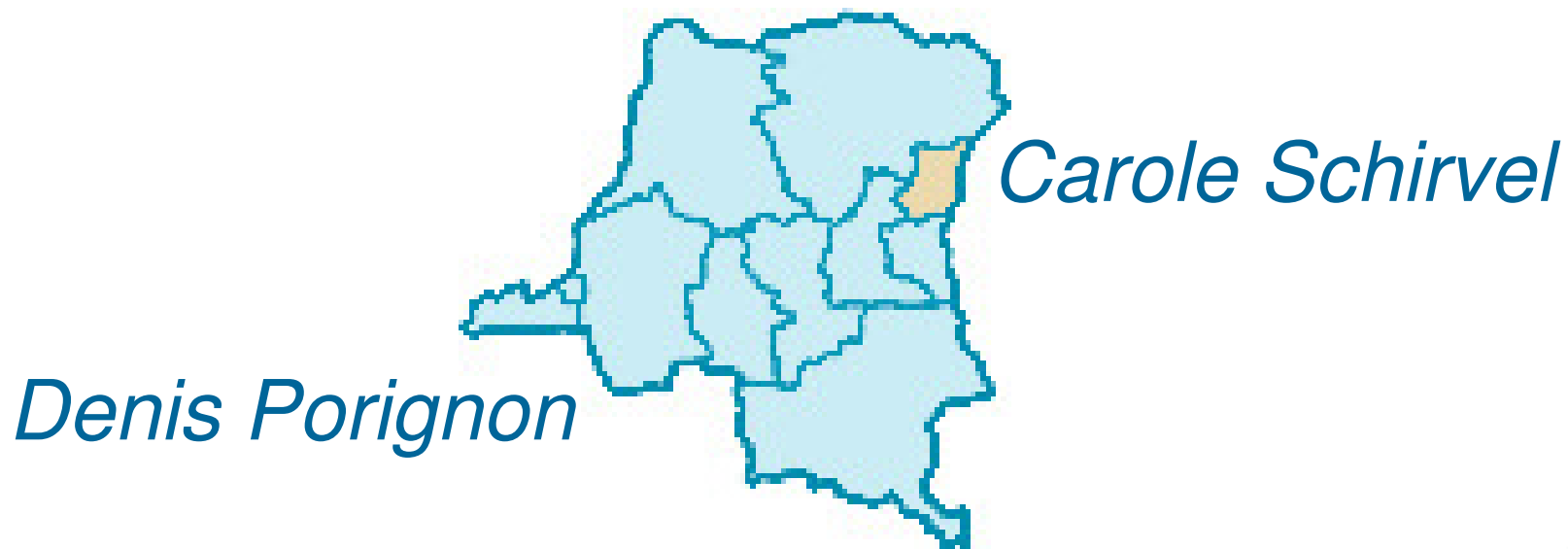
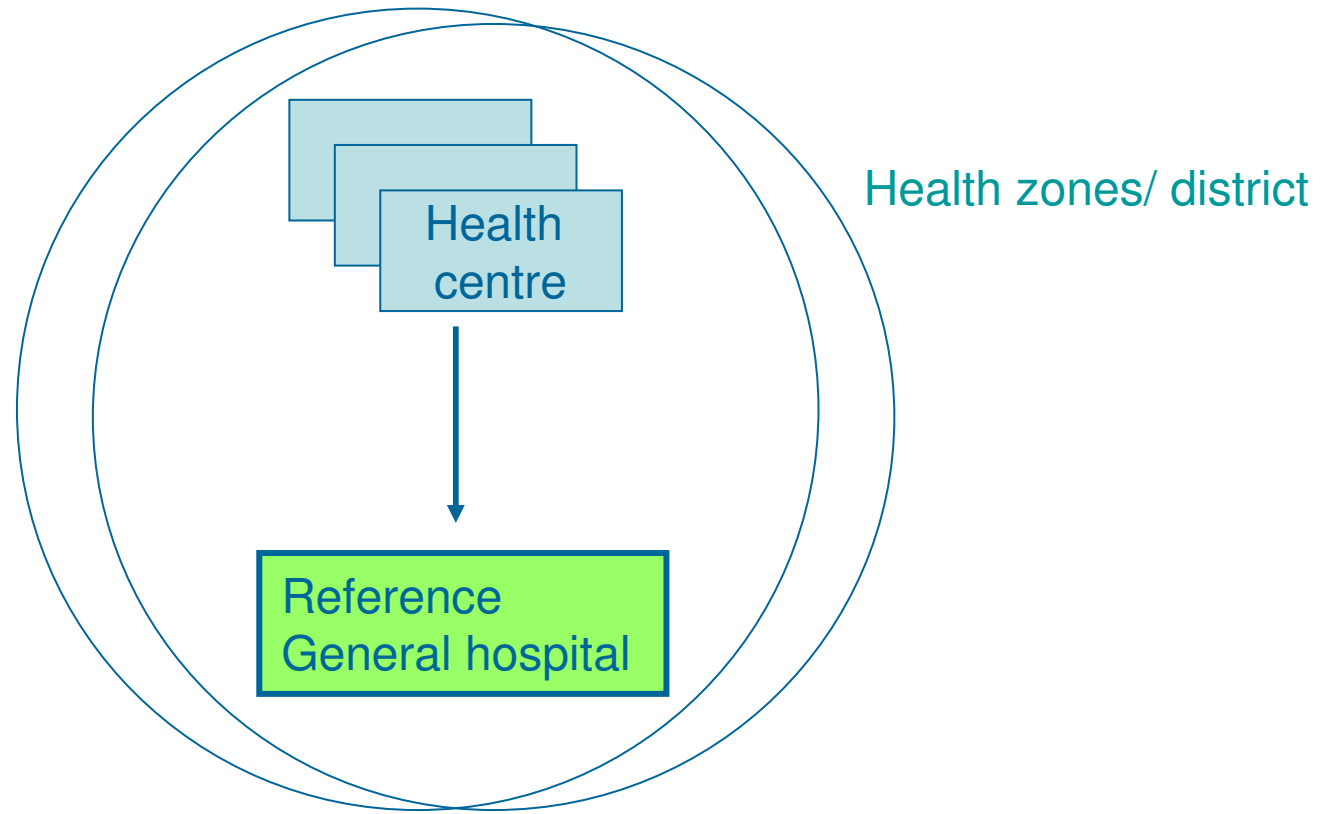


Is comprehensive more effective? Vaccination covering and health system performance in North Kivu province, DR Congo.



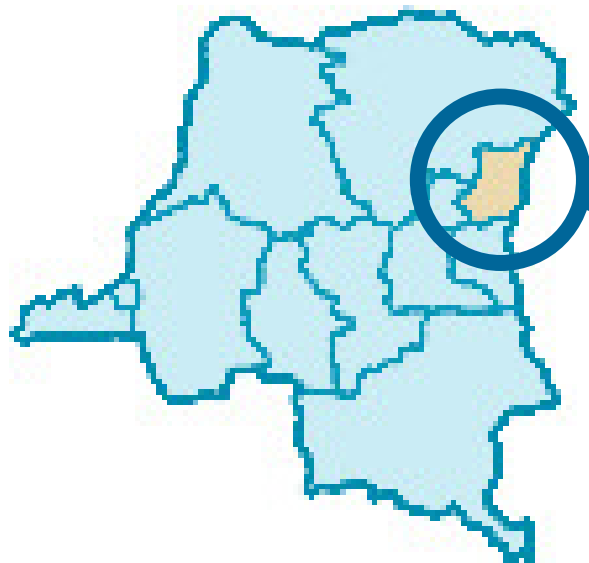
- Democratic republic of Congo:
 - Low income developing country
 - Eastern part: conflict settings since years (including North Kivu)
 - North Kivu:
 - 5 millions inhabitants; area: 60.000 km²
 - Geographic hill setting
 - Health system based on primary health care organisation



Provincial inspection of health

Ministry of health





**Democratic
Republic of Congo**

North Kivu Map

25 health zones

Légende:

LACS: PERMANENTS



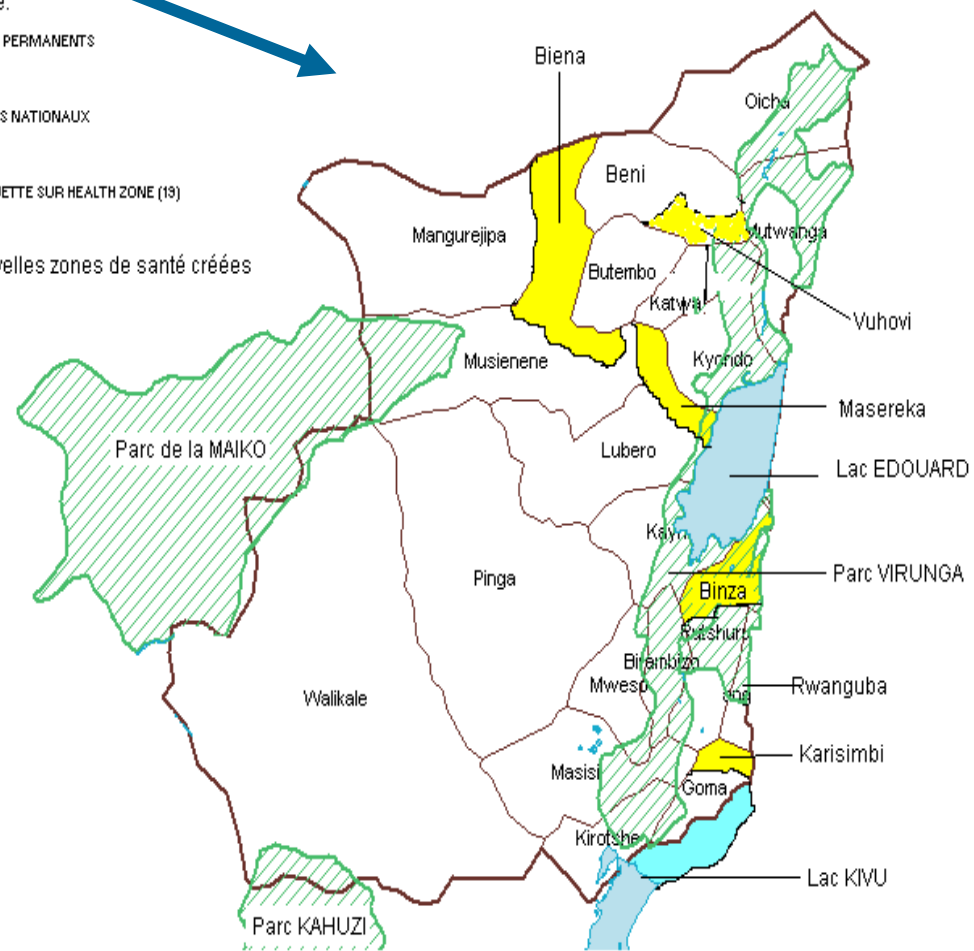
PARCS NATIONAUX



ETIQUETTE SUR HEALTH ZONE (19)



Nouvelles zones de santé créées



One Inch = 40,2 Miles



Methodology

- Purpose of the study:
 - To find out arguments to promote systemic approach for health development in North Kivu.
- Design: epidemiological ecological study
 - Transversal analysis of vaccination performance according to the health center score.
 - Health center = primary unit of analysis.

Methodology (2)

- Vaccination data obtained for 2004.
 - Sanitary health information (from GESIS program)
 - 399 health centres in North Kivu province dispatched into 25 health zones (total for the province =404 HC)

Methodology (3)

- Datas: score construction (compared to provincial average) (1/ 0)
 - Utilisation of curative care consultations (new case/ inhabitant /year)
 - Antenatal care coverage (%)
 - Obstetrical coverage (%)
 - + Quinine out of stock



SCORE BETWEEN 0 AND 4

FOR EACH HEALTH CENTER

Methodology (4)

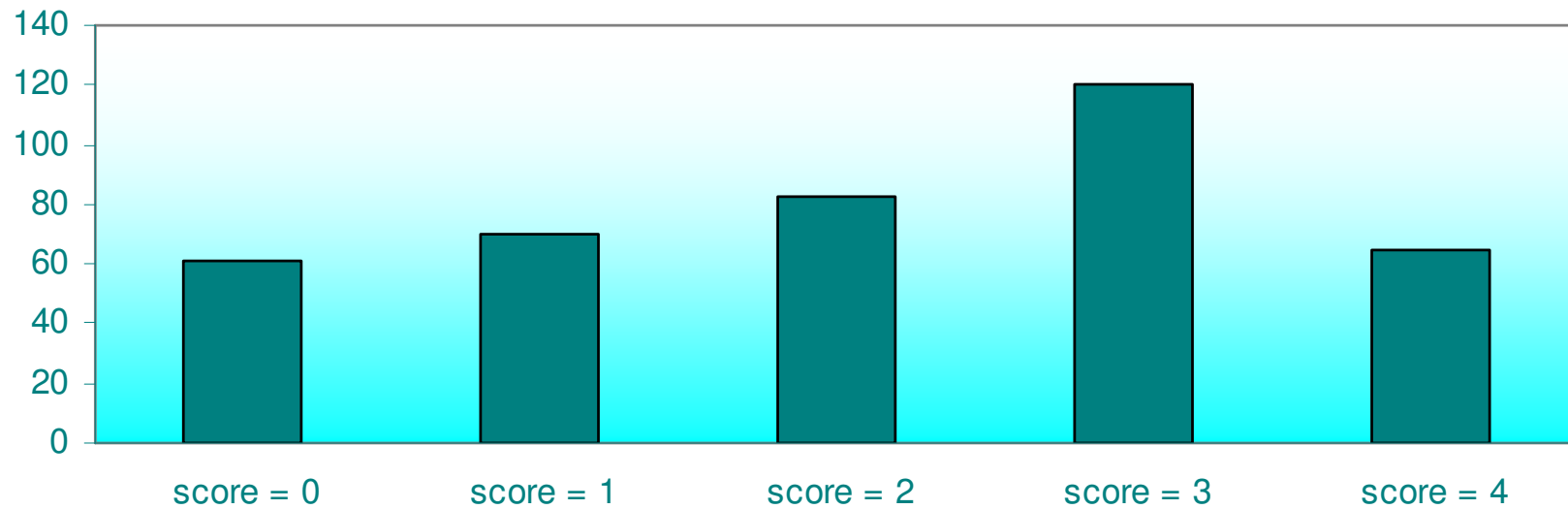
Provincial average:

- Utilisation of curative care consultations (new case/inhabitant /year): 0,31 NC/yr
- Antenatal care coverage: 73 %
- Obstetrical coverage: 40 %

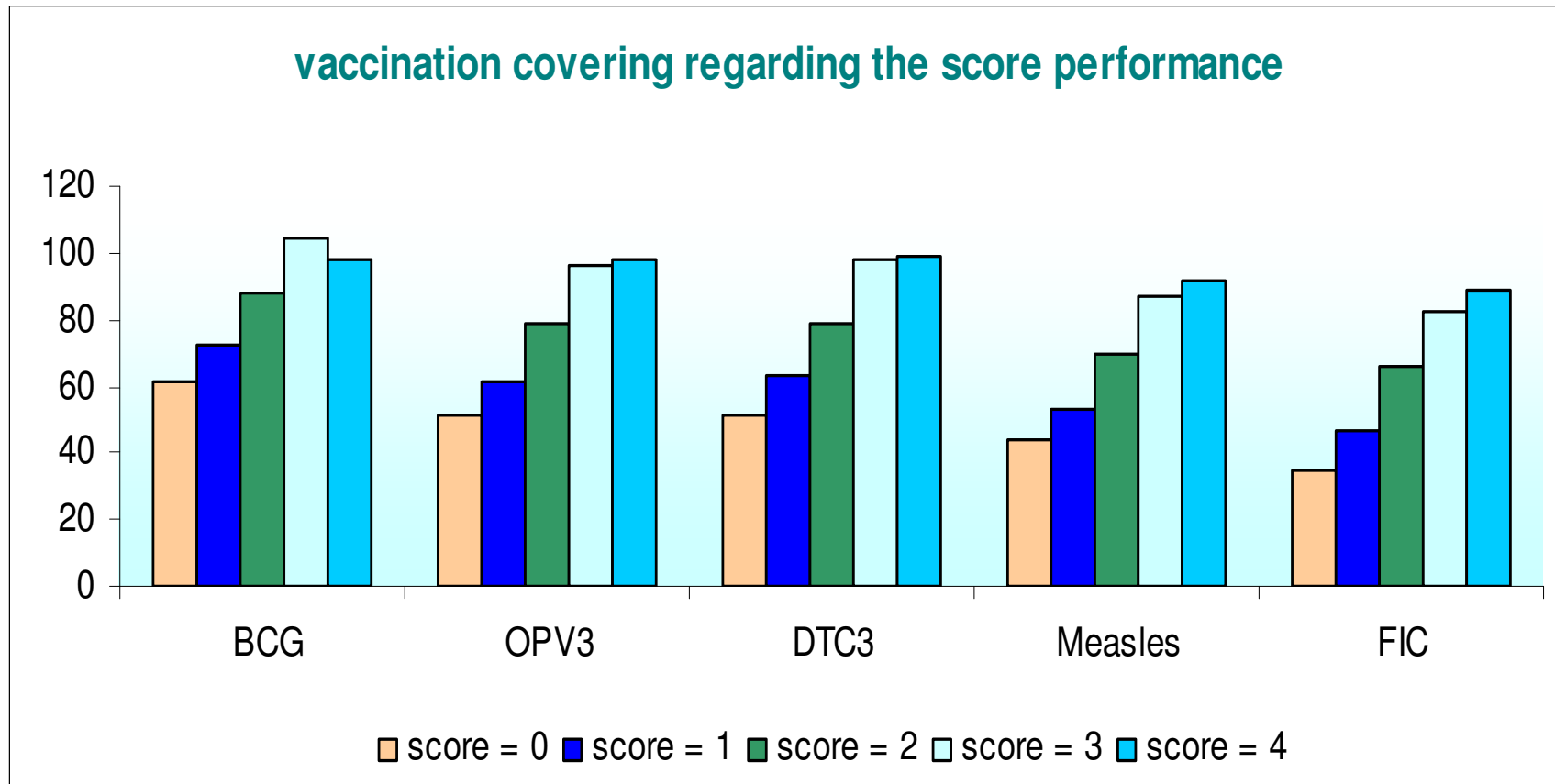
Quinine out-of-stock: only one rupture = 0

Results (1)

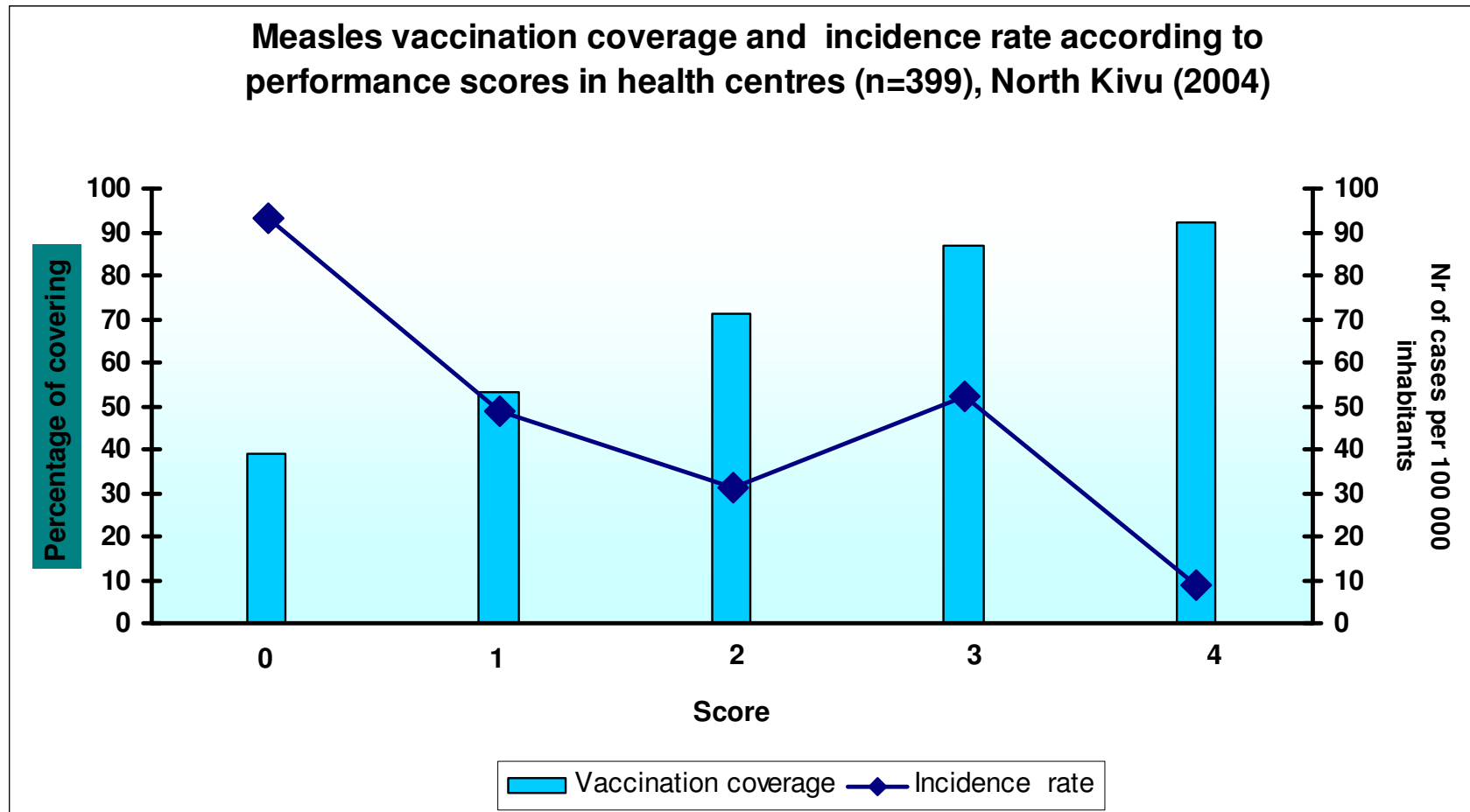
Number of health centres by score



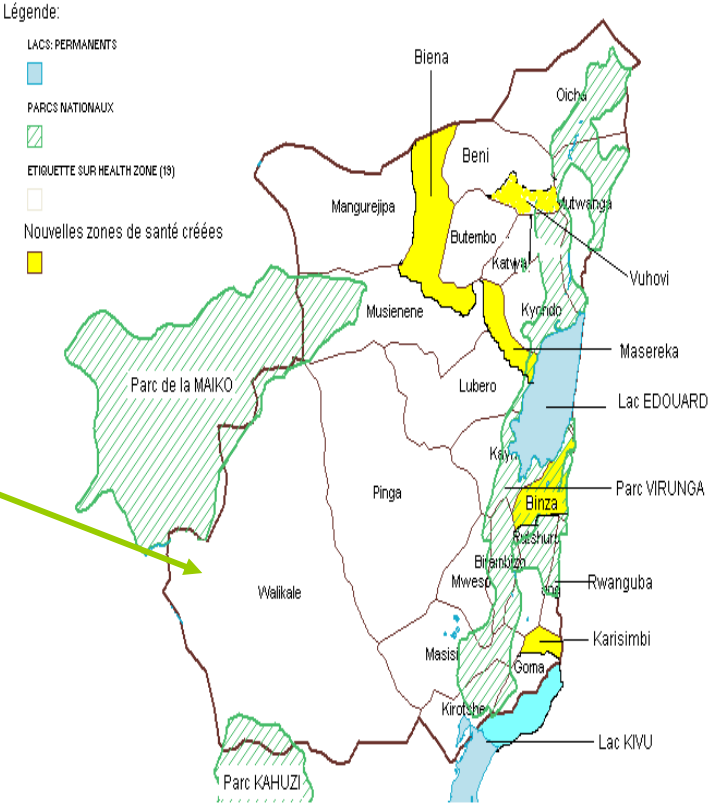
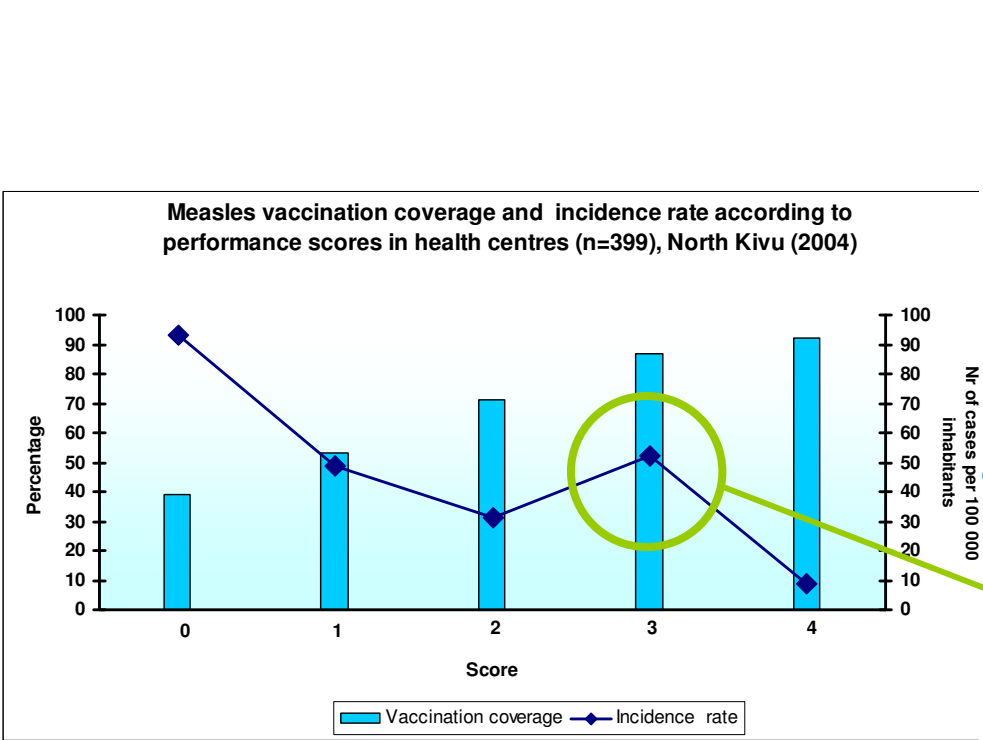
Results (2)



Results (3)



Results (4)

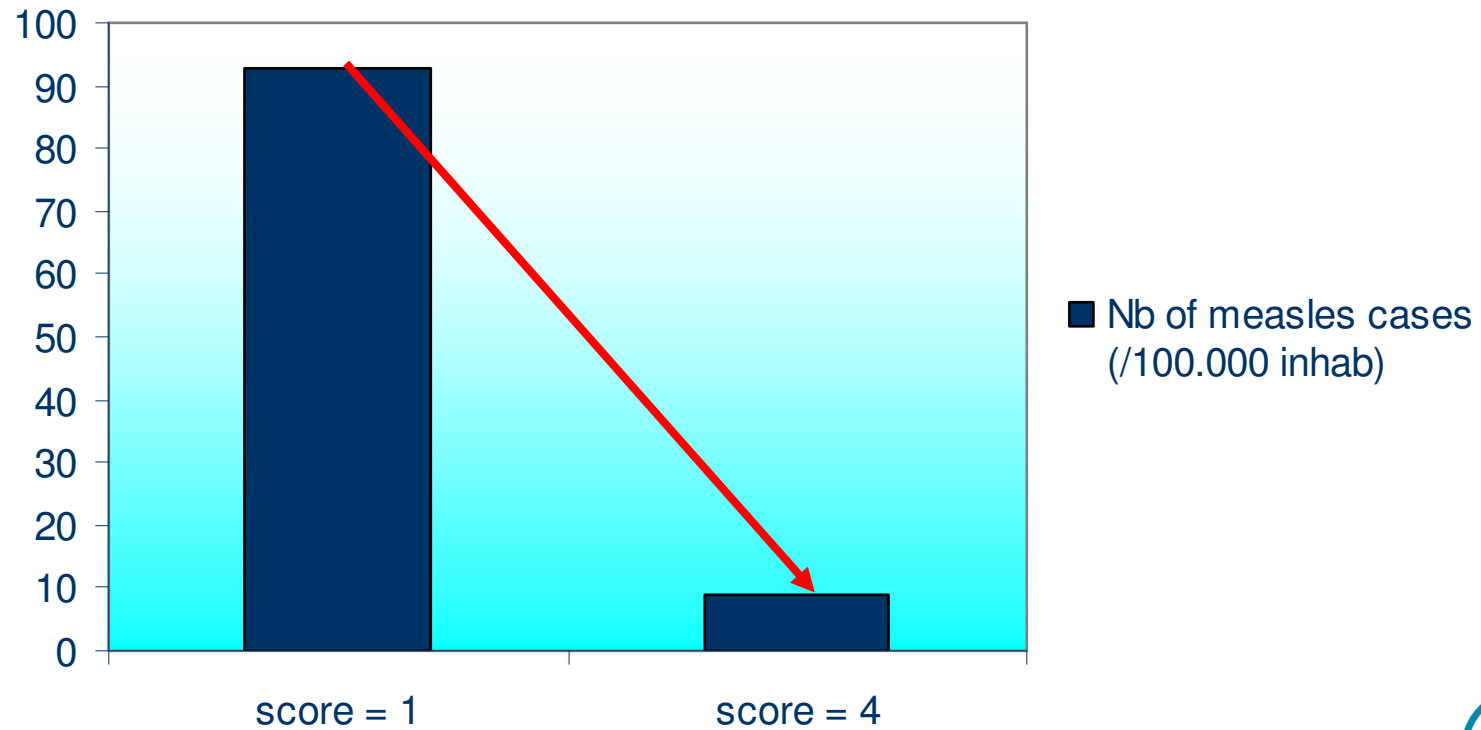


One Inch = 40,2 Miles



Results (5)

Nb of measles cases in 2004/ health centre (median)



Conclusion

- Health centres performance are quite low in this region.
- Routine sanitary information could be usefull for basic performance analysis
- Integration of strategies = improvement of health system.

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