

# Improved health outcomes through better performance

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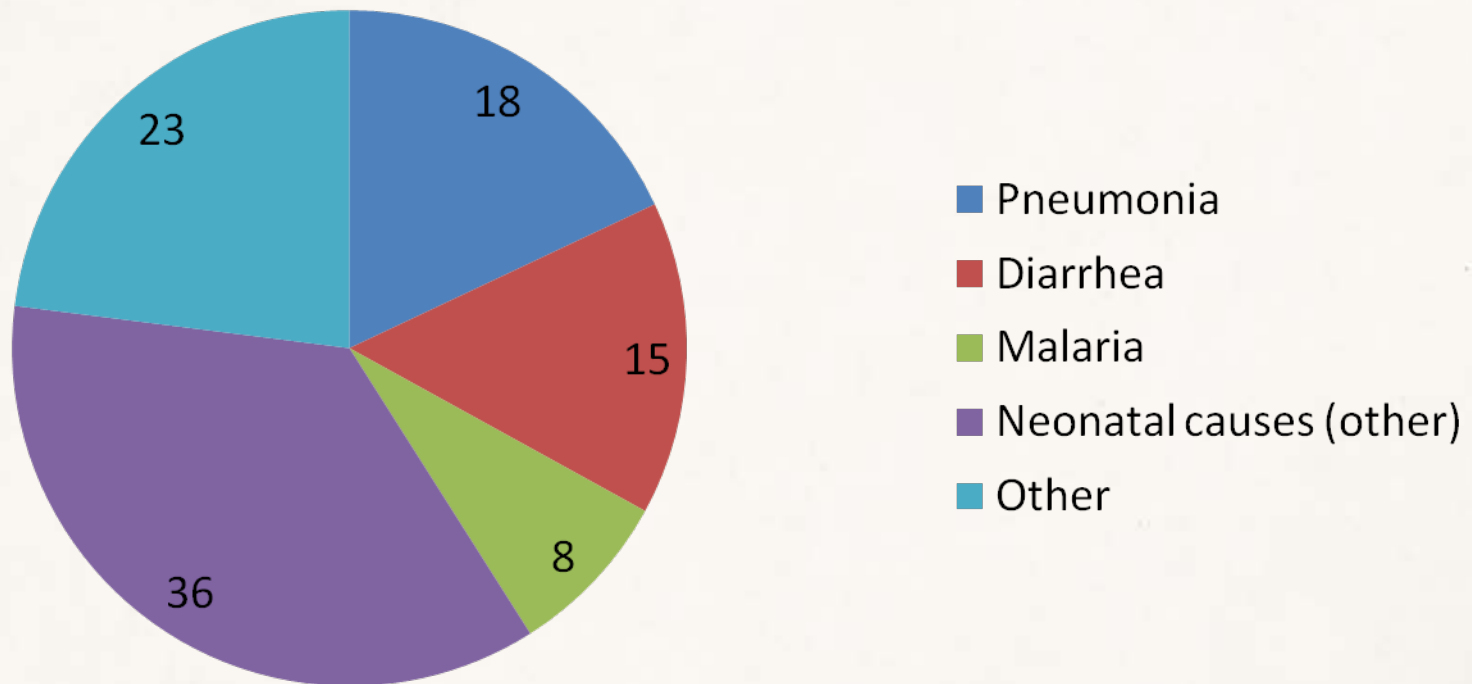
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- Large health improvements can be achieved with **existing health workforce...**
- ... by making health workers do **more of what they can do**

# Why do 8 mill children die every year?



Source: Black et al. (2010), *The Lancet*

- How **thorough** is diagnostic process?
- Could health workers have done **better**?

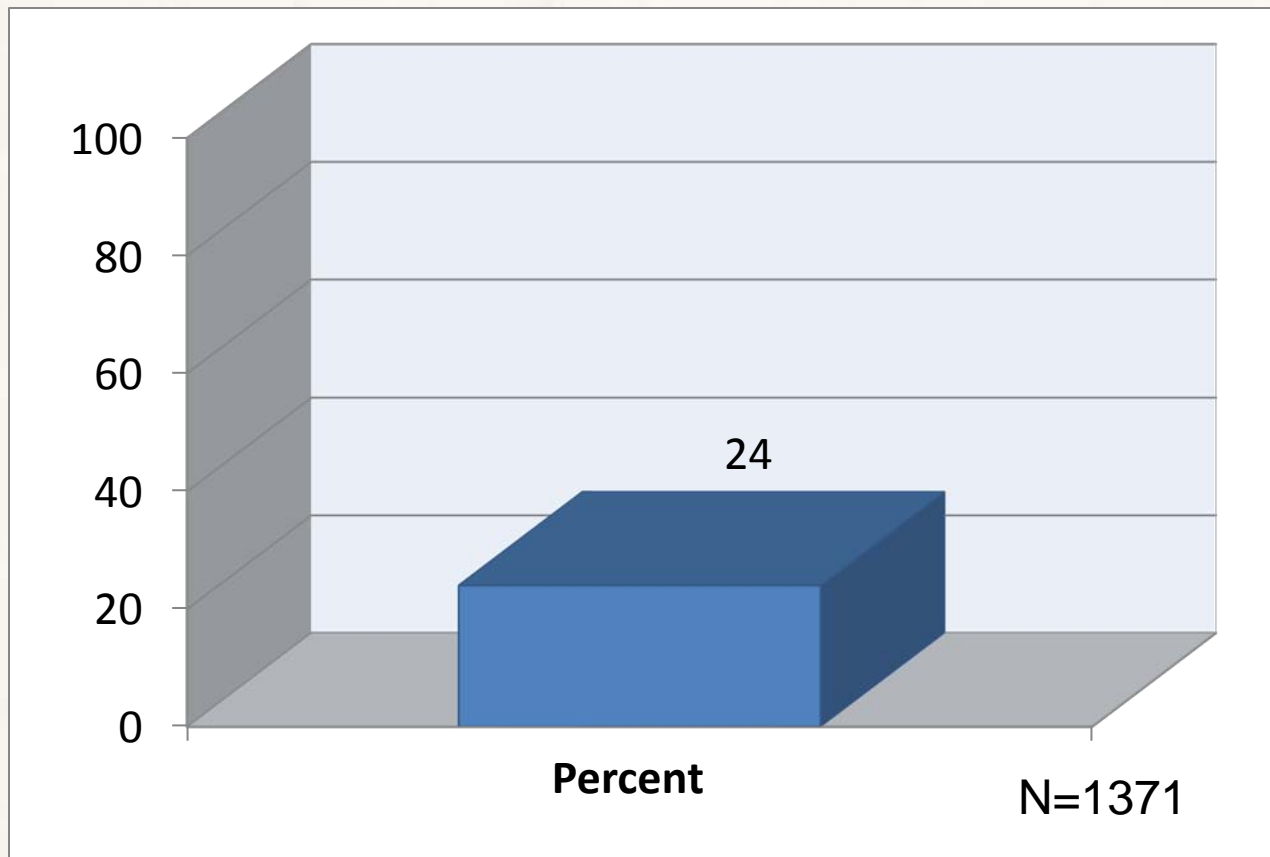


# MAP project, Tanzania (2006-10): Health worker Motivation, Availability and Performance

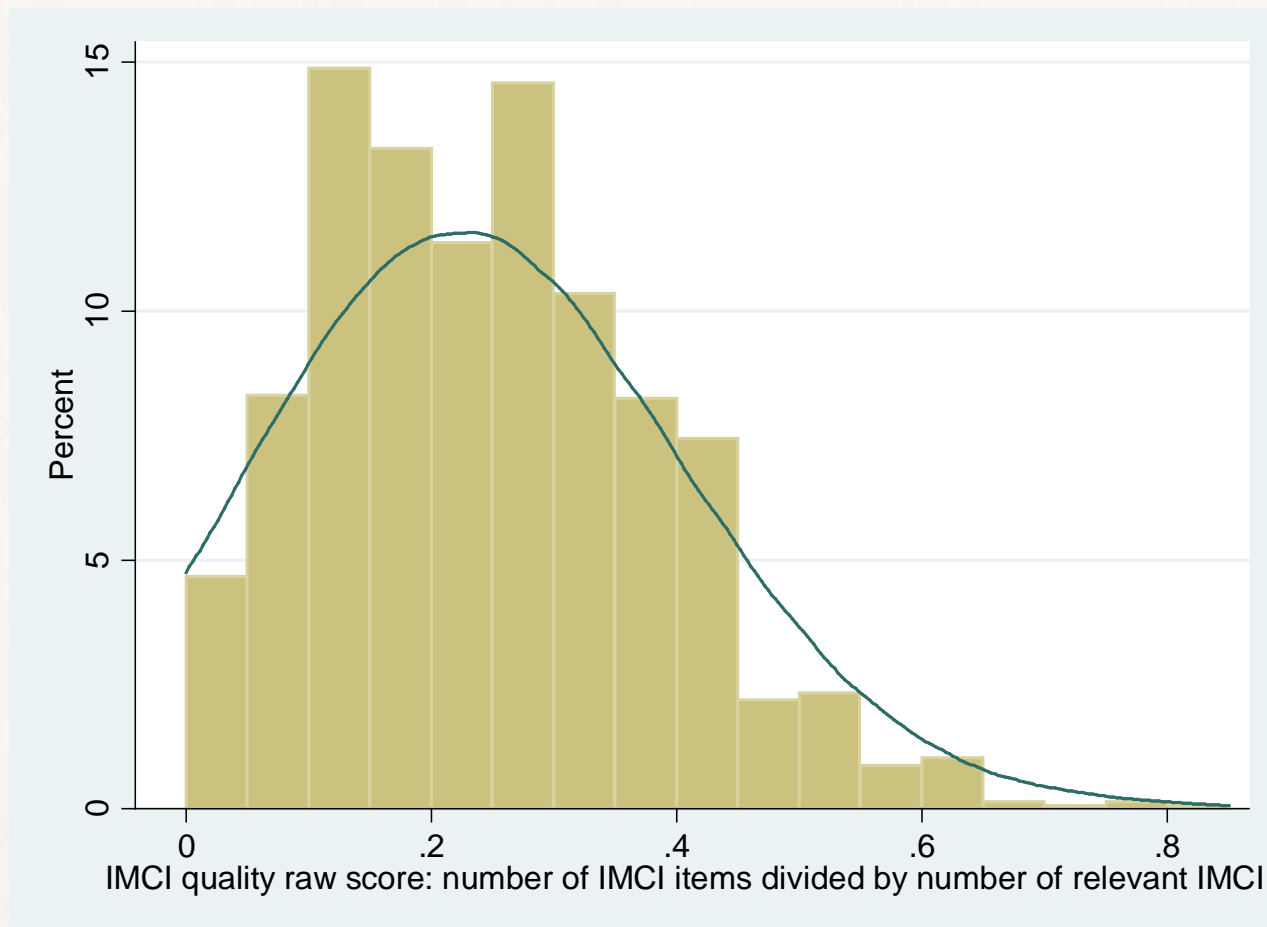


- 9 rural districts
  - 126 health facilities (up to first referral level)
  - 159 prescribers
  - 3494 outpatient consultations
- 1354 children (<5 years)
    - fever, cough, diarrhea

# Adherence to IMCI guidelines (Integrated Management of Childhood Illnesses)



# Performance differs across children



# Why low performance?

Lack of  
opportunity

Knowlegde  
Time  
(Equipment)

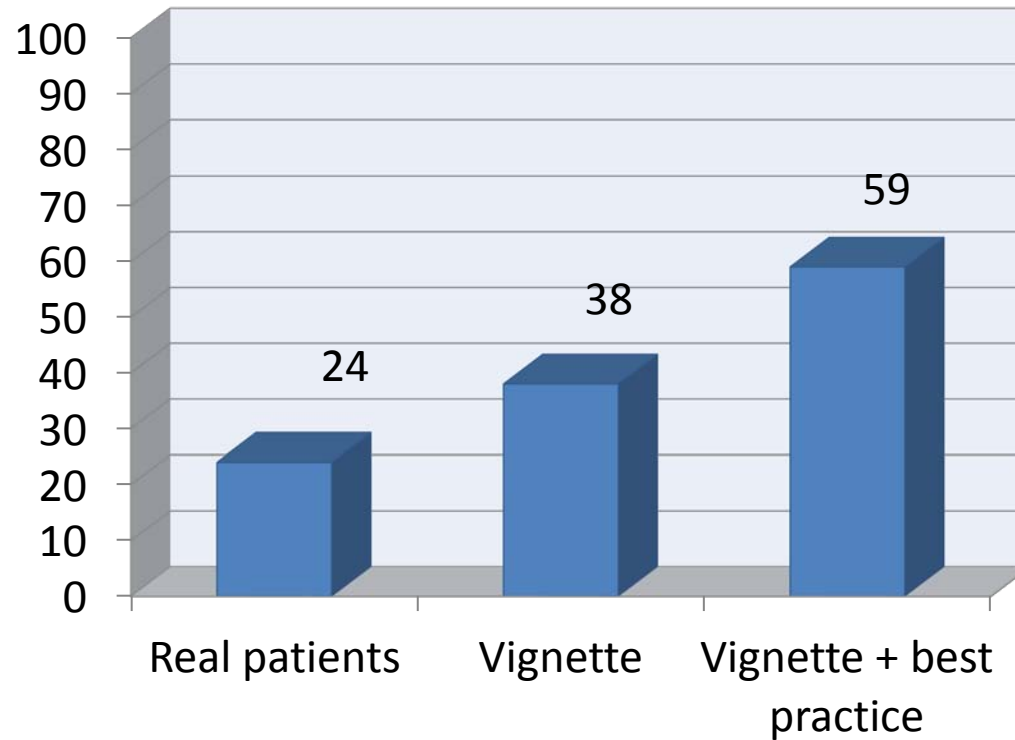
Lack of  
motivation



# Measuring knowledge

1. Vignettes  
(*patient case simulations*)
2. Vignettes + "best practice" with own patients

# Knowledge exceeds performance – by far

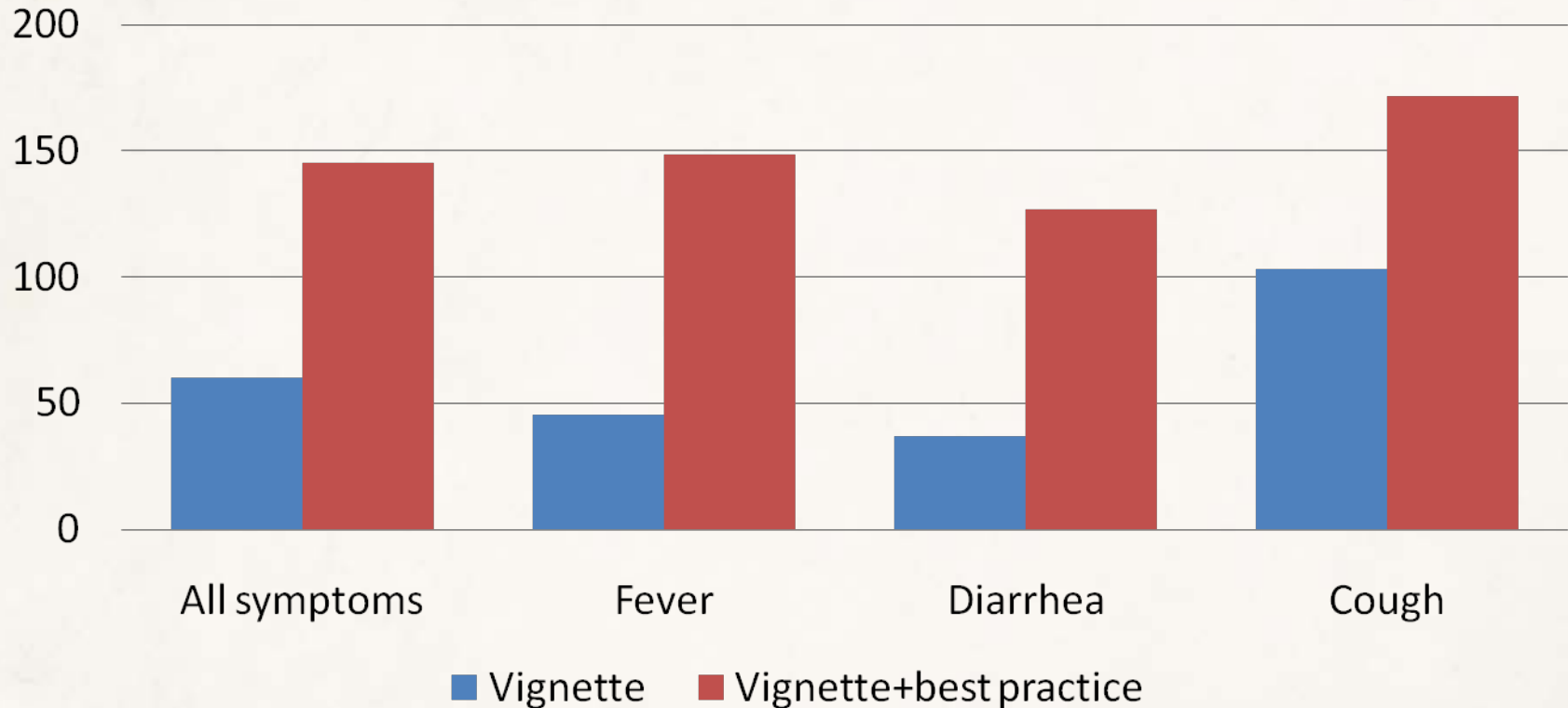


# Large know-do gap (examples)

Symptom	IMCI investigation	Score		Difference (a)-(b)
		Vignette (a)	Real children (b)	
Cough	Auscultate the chest (wheezing, stridor)	0.747	0.214	0.533
Diarrhea	Pinch abdominal skin (check dehydr)	0.758	0.311	0.447
Diarrhea	Vomits everything	0.724	0.299	0.425
Diarrhea	Examine for sunken eyes	0.708	0.292	0.416
Diarrhea	Inability to drink or breastfeed	0.714	0.332	0.382
Cough	Count respiratory rate	0.562	0.195	0.367

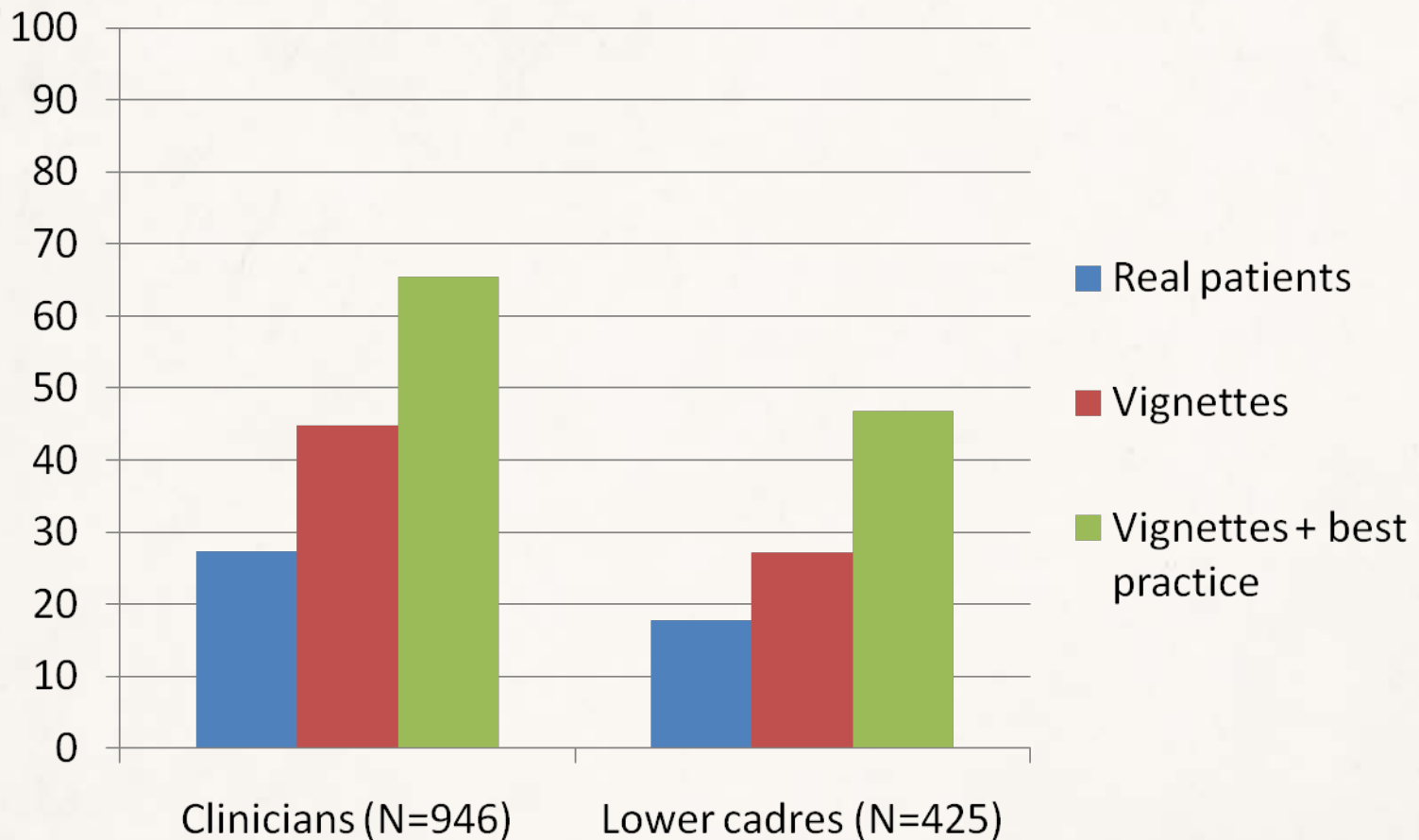
# Know-do gap (%)

*Demonstrated knowledge relative to performance with real children*



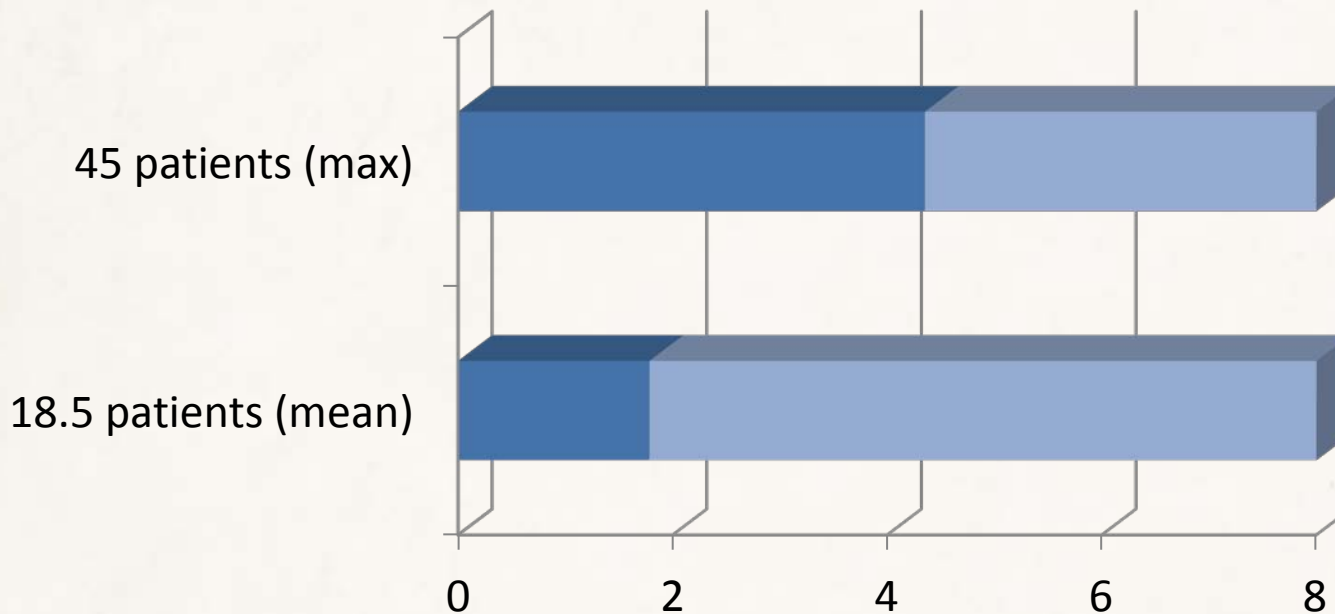


# Performance by level of training



# High workload?

5.7 minutes per patient



Hours per day

■ consultations    ■ other activities

Mæstad *et al.* (2010)  
*Journal of Health Economics*

# Conclusions

## Large potential for improvement of diagnostic quality

- Weak adherence to IMCI guidelines (24%)
- A sizeable know-do gap (50-150%)

## What can be done?

- Higher number of staff would not help (workload not a constraint)
- Training helps, but not much
- Motivation seems to be the key

