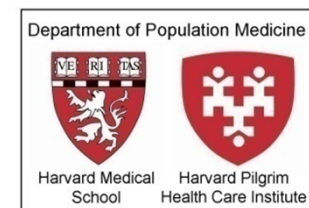


Use of Medicines: Getting Value for Money Requires Measurement

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Quality Use of Medicines

The rational use of drugs requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements for an adequate period of time, and at the lowest cost to them and their community.

WHO conference of experts Nairobi 1985

- Appropriate indication
- Appropriate medicine (efficacy, safety, no contraindications & affordable cost)
- Appropriate dosage, administration, duration
- Correct dispensing & appropriate information for patients
- Patient adherence to treatment

Inappropriate Use of Medicines

Overuse

- ❑ Poly-pharmacy
- ❑ Use of injections

Underuse

- ❑ Medication non-adherence
- ❑ Chronic disease therapies
- ❑ Oral rehydration solutions

Misuse

- ❑ Use of medicines when no medicines is indicated
- ❑ Use of inappropriate medicines (uncertain efficacy or safety)
- ❑ Incorrect administration, dose, or duration
- ❑ Failure to prescribe in accordance with clinical guidelines
- ❑ Inappropriate self-medication

Impacts of Inappropriate Drug Use



Reduced quality of therapy



- Morbidity
- Mortality

Risk of unwanted effects



- Adverse reactions
- Bacterial resistance

Psychosocial impacts



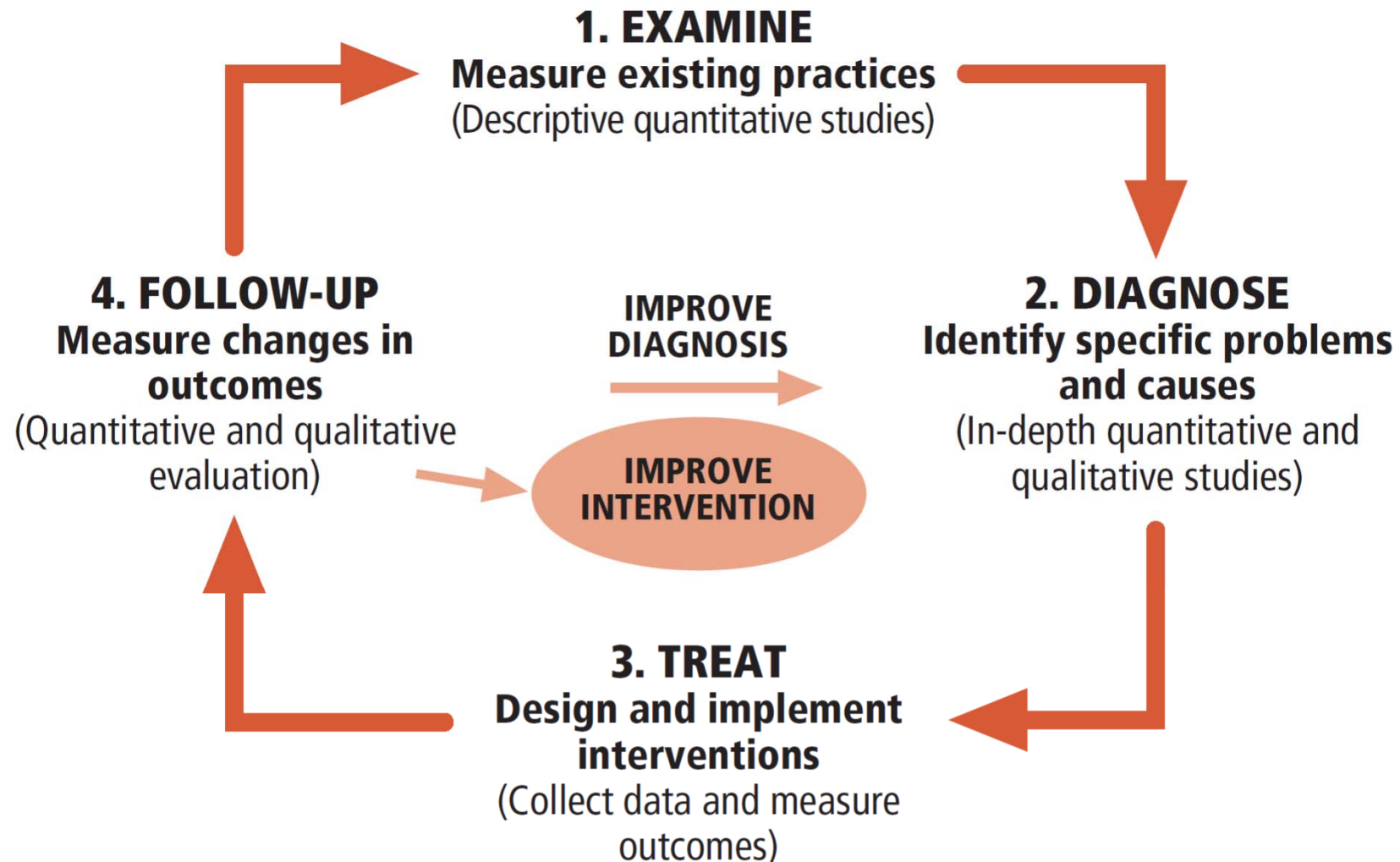
- Patients rely on unnecessary drugs

Waste of resources



- Reduced availability
- Increased cost

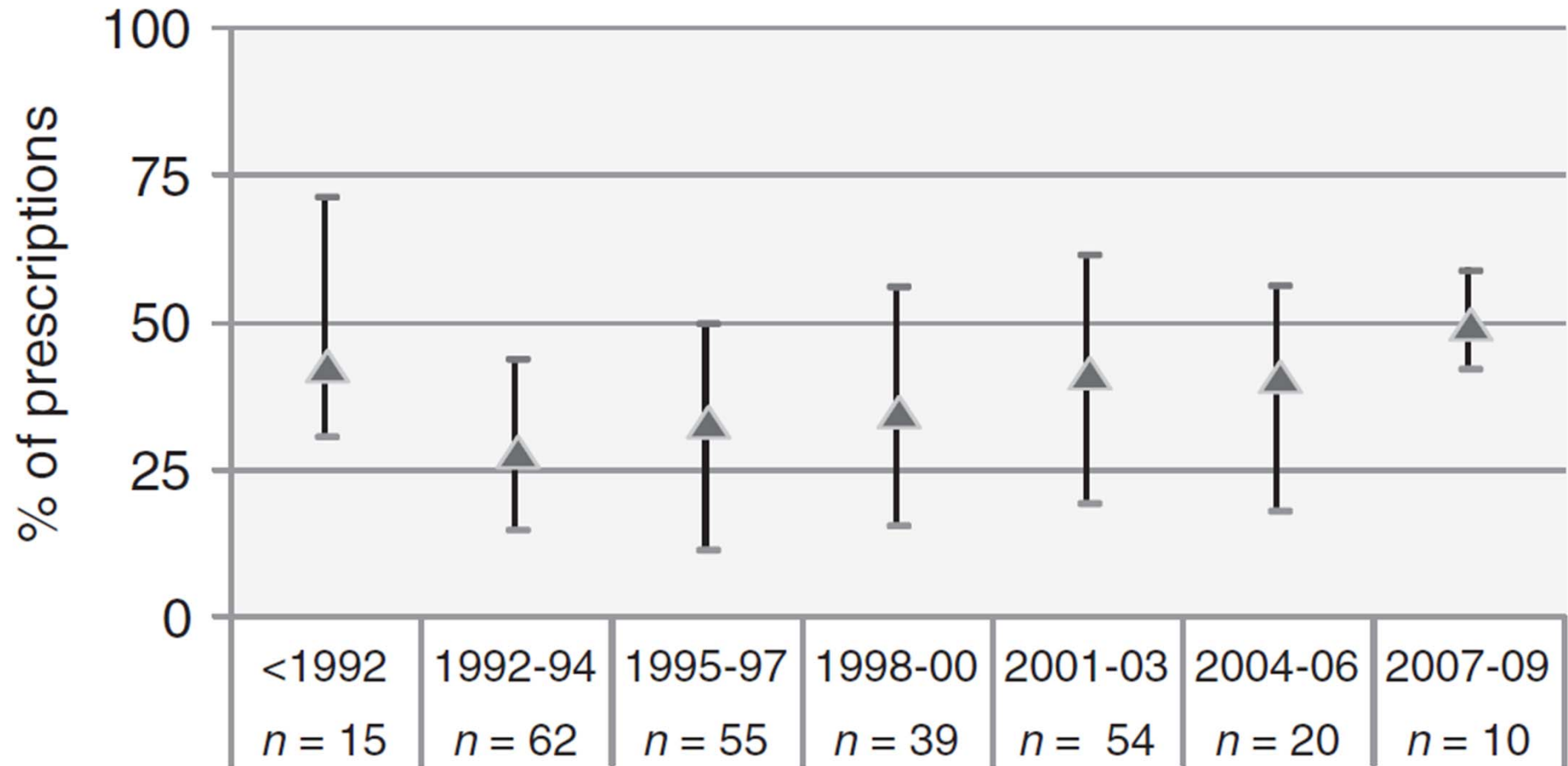
Improving Quality Use of Medicines



Measures of Medication Use

- Average number of medicines prescribed / patient
- % patients receiving antibiotic
- % patients receiving injection
- % medicines prescribed from EML
- **% medicines prescribed by generic name**
- **% patients treated in accordance with STG**

Adults: % compliance with STGs

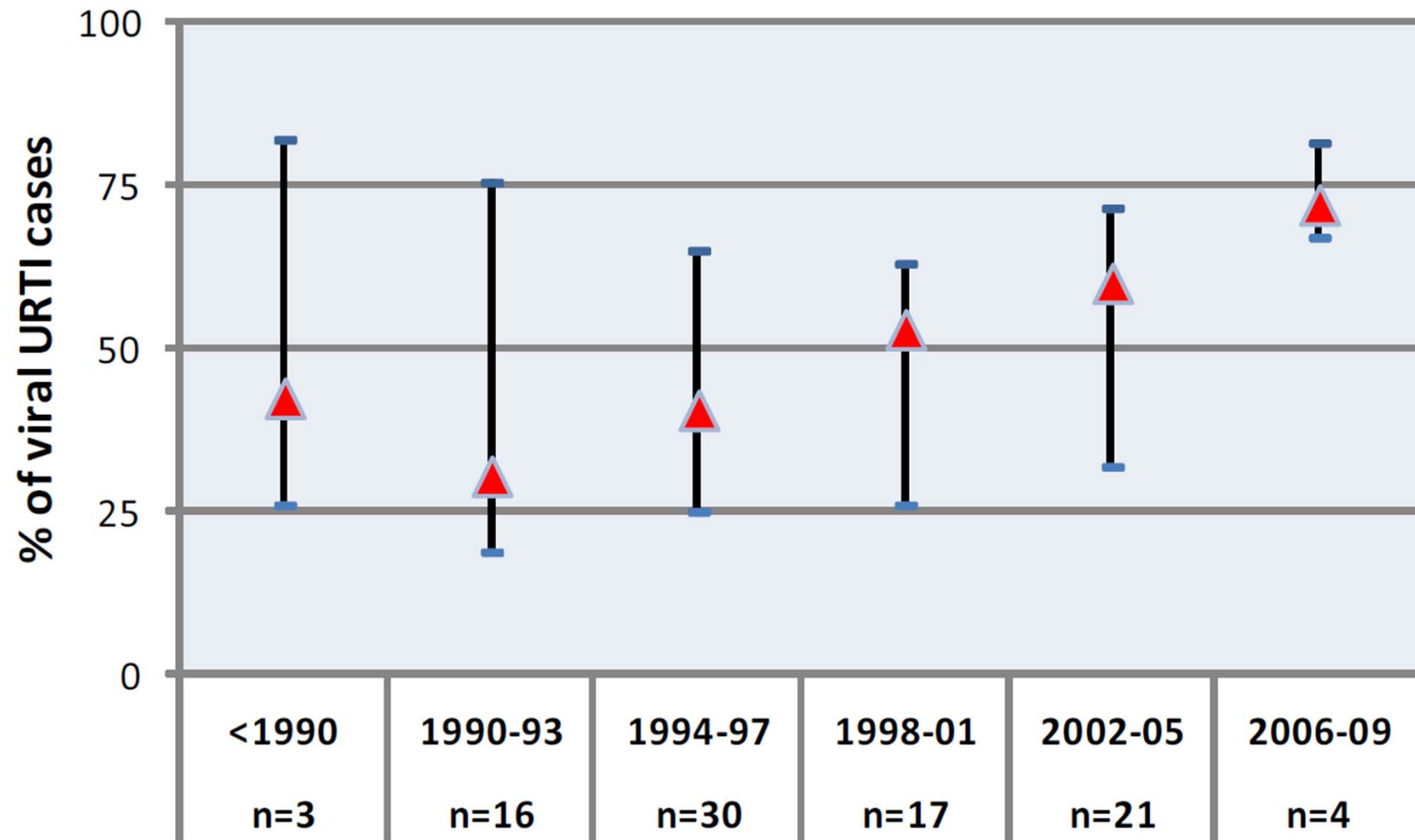


Measures of Medication Use

For acute illness in children

- % diarrhea cases receiving ORS
- % diarrhea cases receiving antidiarrheal
- % diarrhea cases receiving antibiotic
- % pneumonia cases receiving appropriate antibiotic
- % viral URTI cases receiving antibiotic
- % malaria cases receiving appropriate antimalarial

Children: % viral URTI cases treated with antibiotics



Holloway K et al. Under review

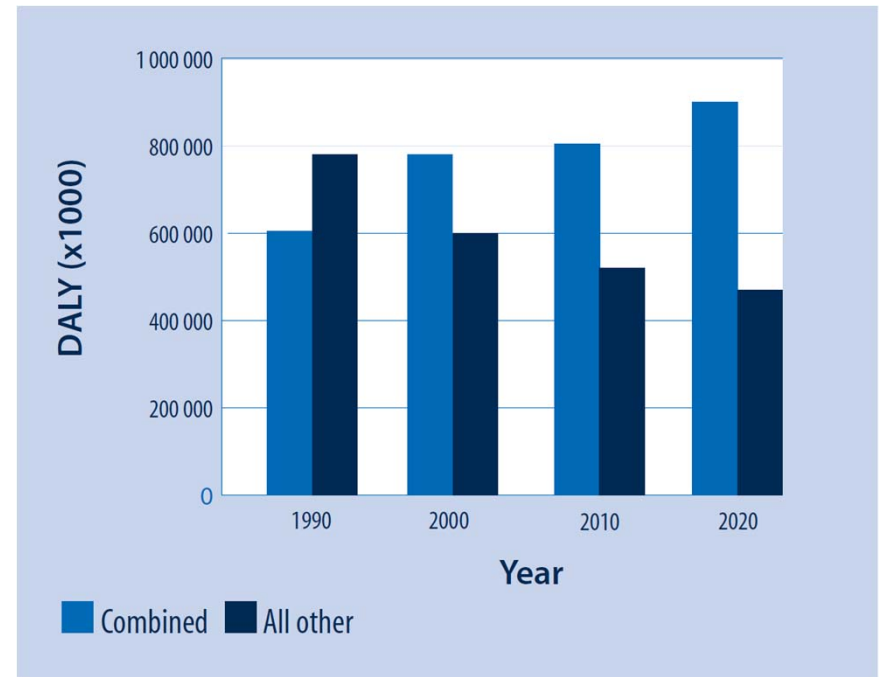
Measures of Adherence

- Pill counts, self-report, provider / caregiver assessment, electronic monitoring devices

Automated pharmacy data

- Medication availability (PDC, MPR)
- Discontinuation / continuation
- Switching

Andrade S et al. Pharmacoepi Drug Saf 2006
WHO 2003, Adherence to long-term therapies



Source: reference (30)

DALY, disability-adjusted life year;

Combined, noncommunicable diseases + mental disorders + AIDS + TB.

Are We Getting Value For Money?

