

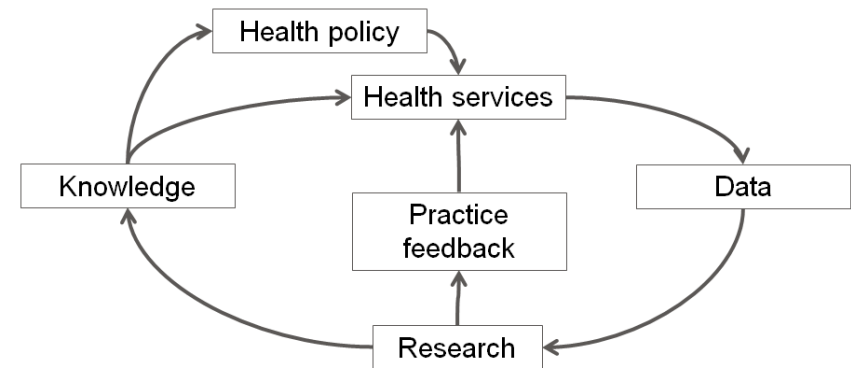


# NIVEL

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### Programme leader Health Data & the Learning Health System

- Nivel: Netherlands Institute for Health Services Research
- Independent not for profit research institute. 150 employees.
- Motto: Research for better care.
- Nivel Primary Care Database
  - Multidisciplinary
  - Electronic health records based
  - Linkable with other data sources
  - Longitudinal
  - > 1.7 million individuals (10% of NL population)
  - Feedback portal. Prescriptions, consultations, etc.

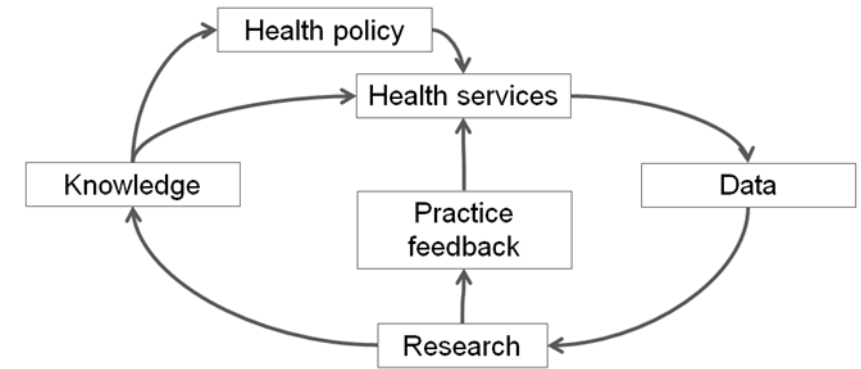


# A learning health system is a system in which.....

.... knowledge generation is

a natural product of the healthcare delivery process and

leads to continuous improvement in care.



[US institute of medicine, 2010]

# Challenges for the role of feedback in the learning health system

## Organisational

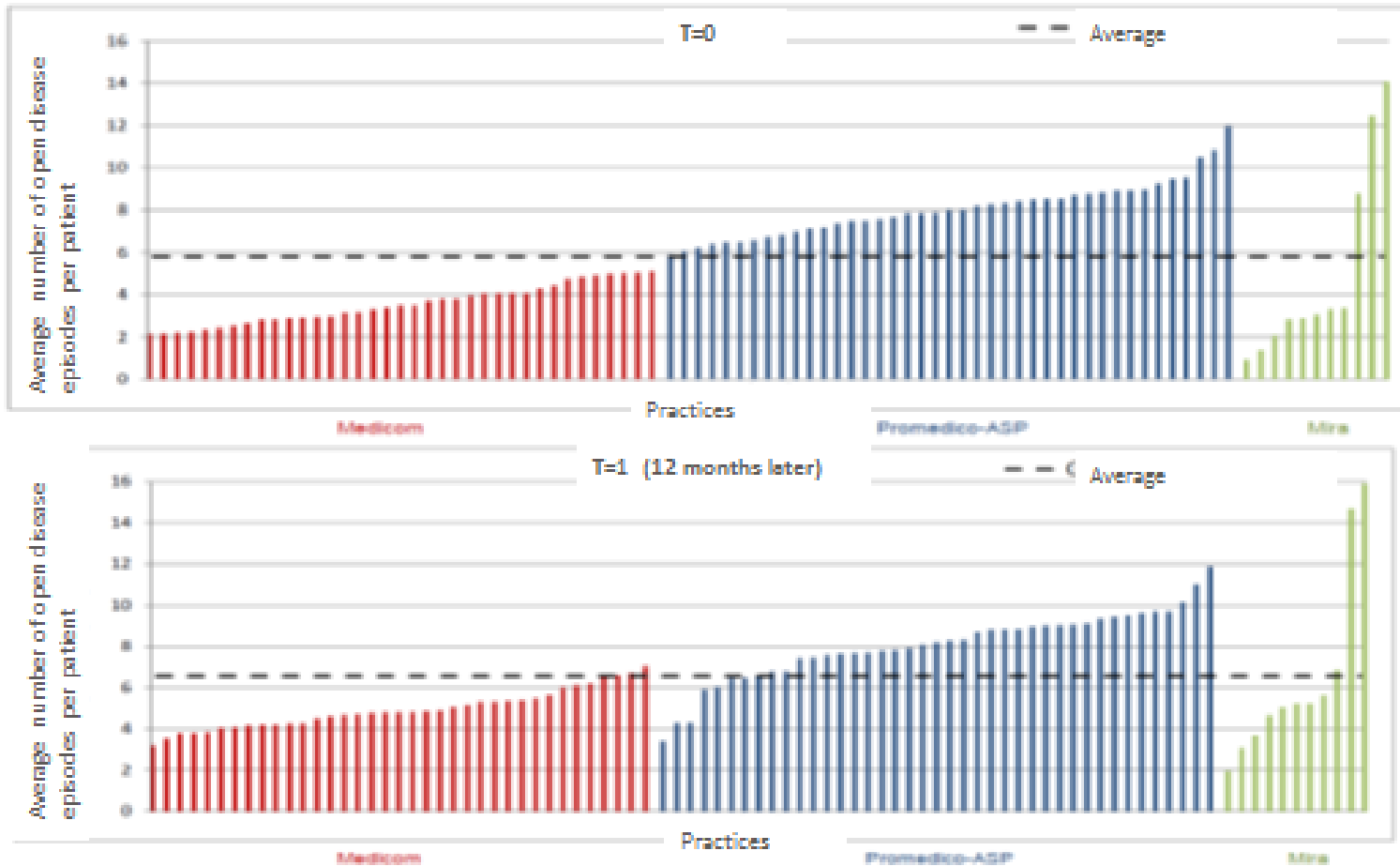
1. **Learn to learn.** Learn professionals how to learn from data.
2. **Mechanisms** to stimulate feedback use. Use the professionals' intrinsic motivation to provide good quality care.
3. **Health insurers involvement.** Be reluctant to use feedback reports for financial reimbursement. Be aware of perverse incentives.
4. Invest in **relationships between health care professionals, health insurers and ICT vendors.** Don't forget the ICT people! Learn each others' language.

## Data related

1. **Access to data.** Increasing need to use data from different sources. Also from other disciplines. How do we gain access to that data across disciplinary borders?
2. **Data quality, fit for purposeness.** Feedback usefulness dependent on data quality. Invest in data quality. Use feedback to increase data quality and make the knife cut both ways (Nivel's data quality feedback tool)\*

\*van der Bij S, Khan N, Ten Veen P, de Bakker DH, Verheij RA. Improving the quality of EHR recording in primary care: a data quality feedback tool. Journal of the American Medical Informatics Association : JAMIA. 2016 Jun 6.

# Example. Effects of feedback on quality of recording in electronic health records systems by GPs. Average number of active episodes per patient.



Bij, S. van der, Khan, N., Veen, P. ten, Bakker, D.H. de, Verheij, R.A. Improving the quality of EHR recording in primary care: a data quality feedback tool. JAMIA: Journal of the American Medical Association. 2017, 24(1), 81-87