

Introduction to patient level data- Scotland as an exemplar

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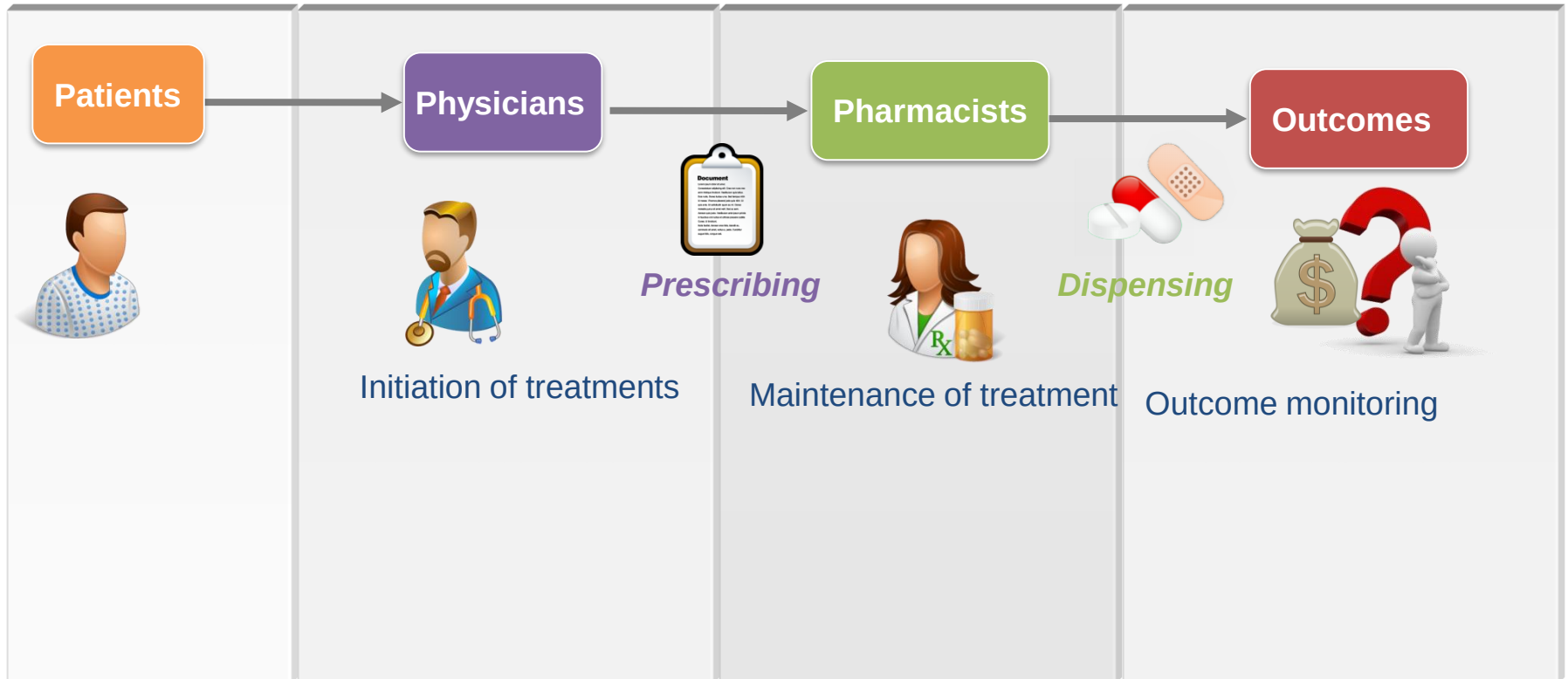
And

Professor Brian Godman

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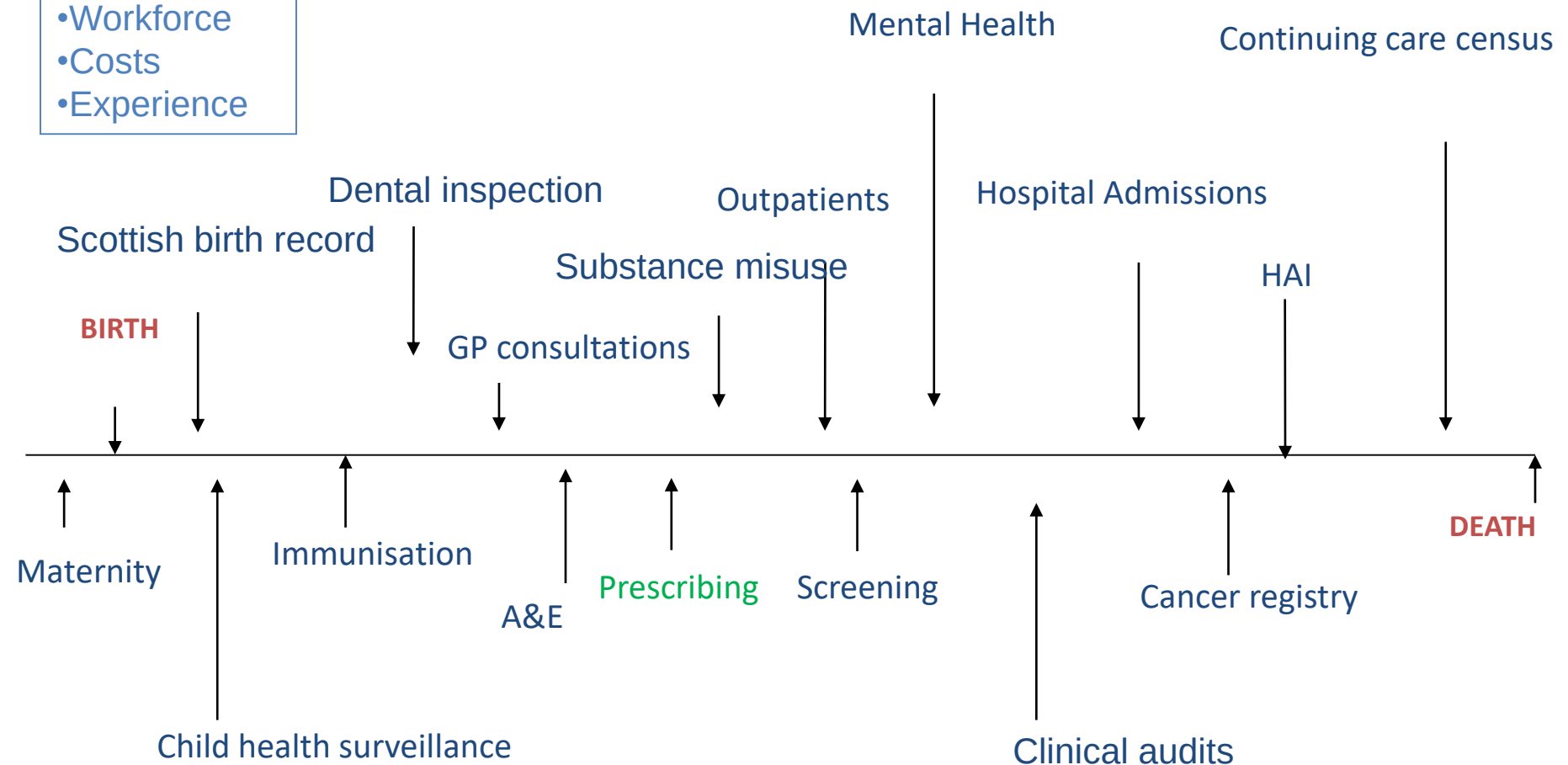


Drug Utilisation Process



Data from cradle to grave (selected data sources)

Plus
•Workforce
•Costs
•Experience



Paper prescription

Patient's details ←

Drug details ←

Prescriber details ←

GPI0(SS)(5) NATIONAL HEALTH SERVICE (SCOTLAND)

Name	Ms Pat Services
Address	1 South Gyle Crescent Edinburgh
Age if under 12 yrs	
Postcode	EH 1 2 9 E B
Yrs / Mths	

CHI No. 0101704445

CEFALEXIN caps 250mg
Send <28> capsule(s)
Label: TAKE ONE 4 TIMES/DAY
<000000000323883007>

One prescription on form

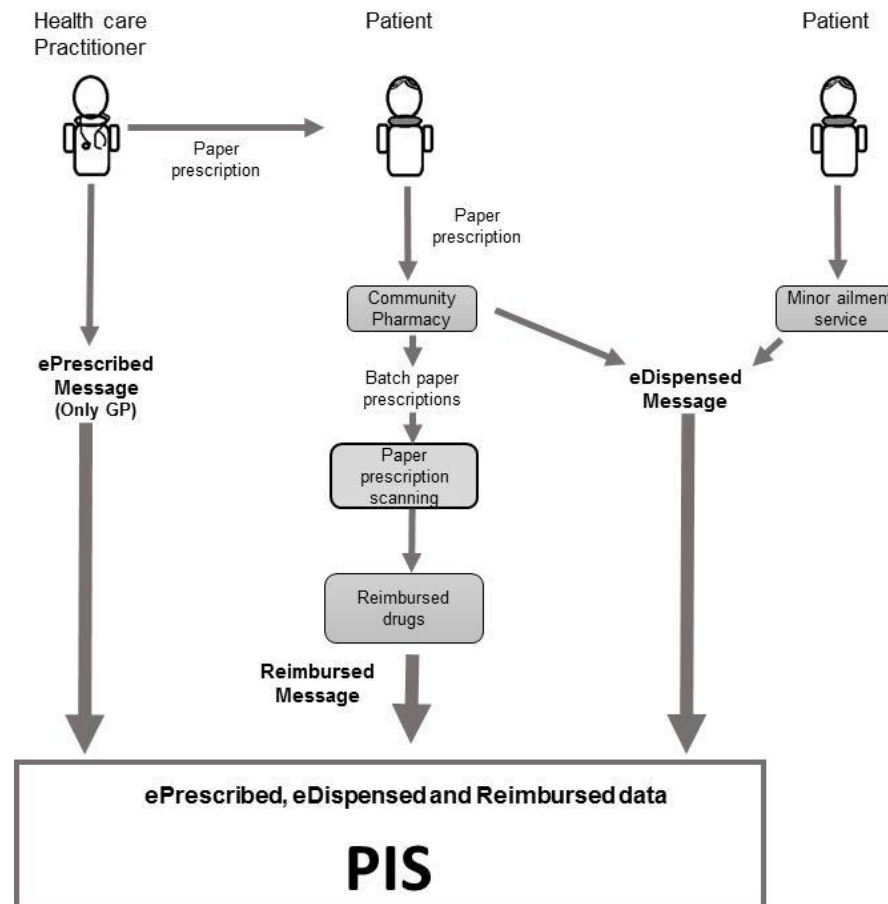
SAMPLE 20.05.2011

Signature of Doctor: Dr Christine Green
Address: 3 Appleton Place
Appleton Parkway
Tel: 01506 606375
1111113

00830083

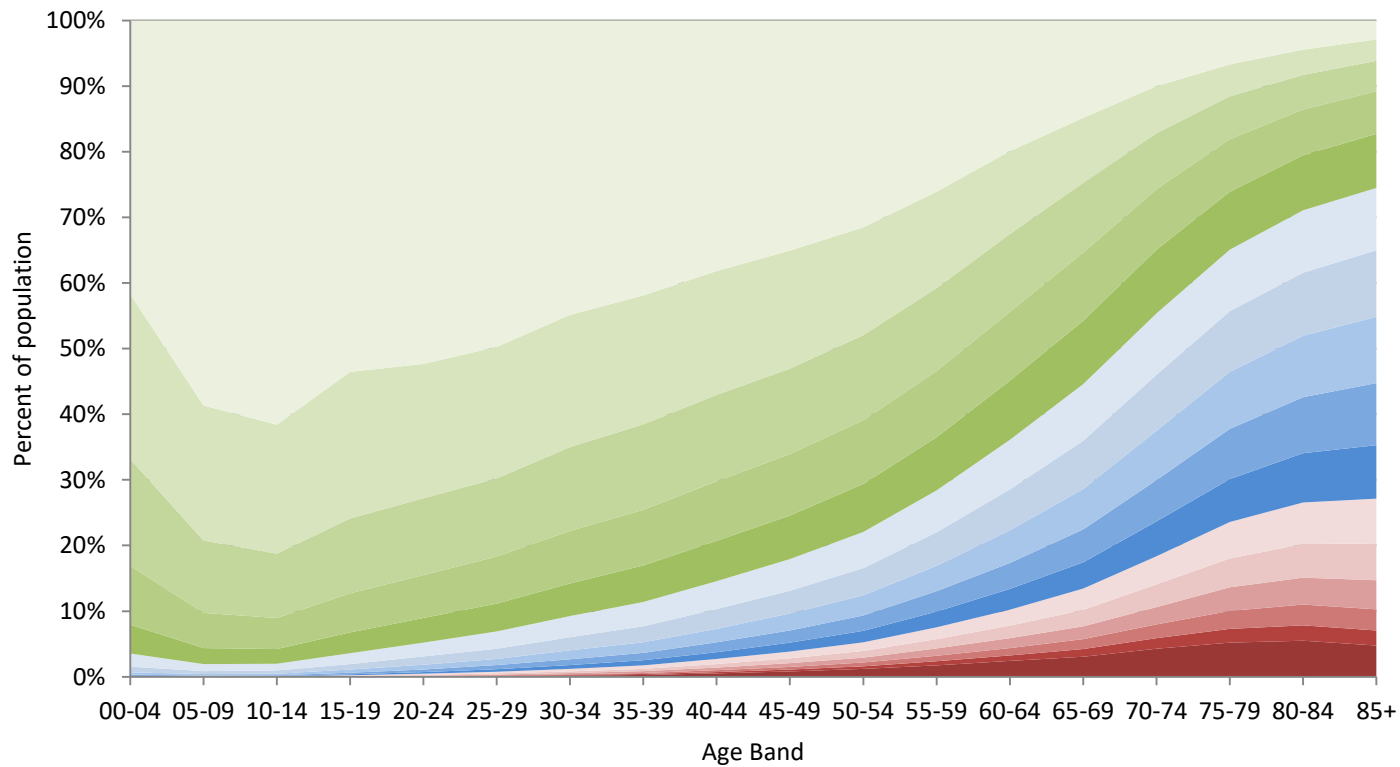
Community
Health
Index
(CHI)

Prescribing Information system

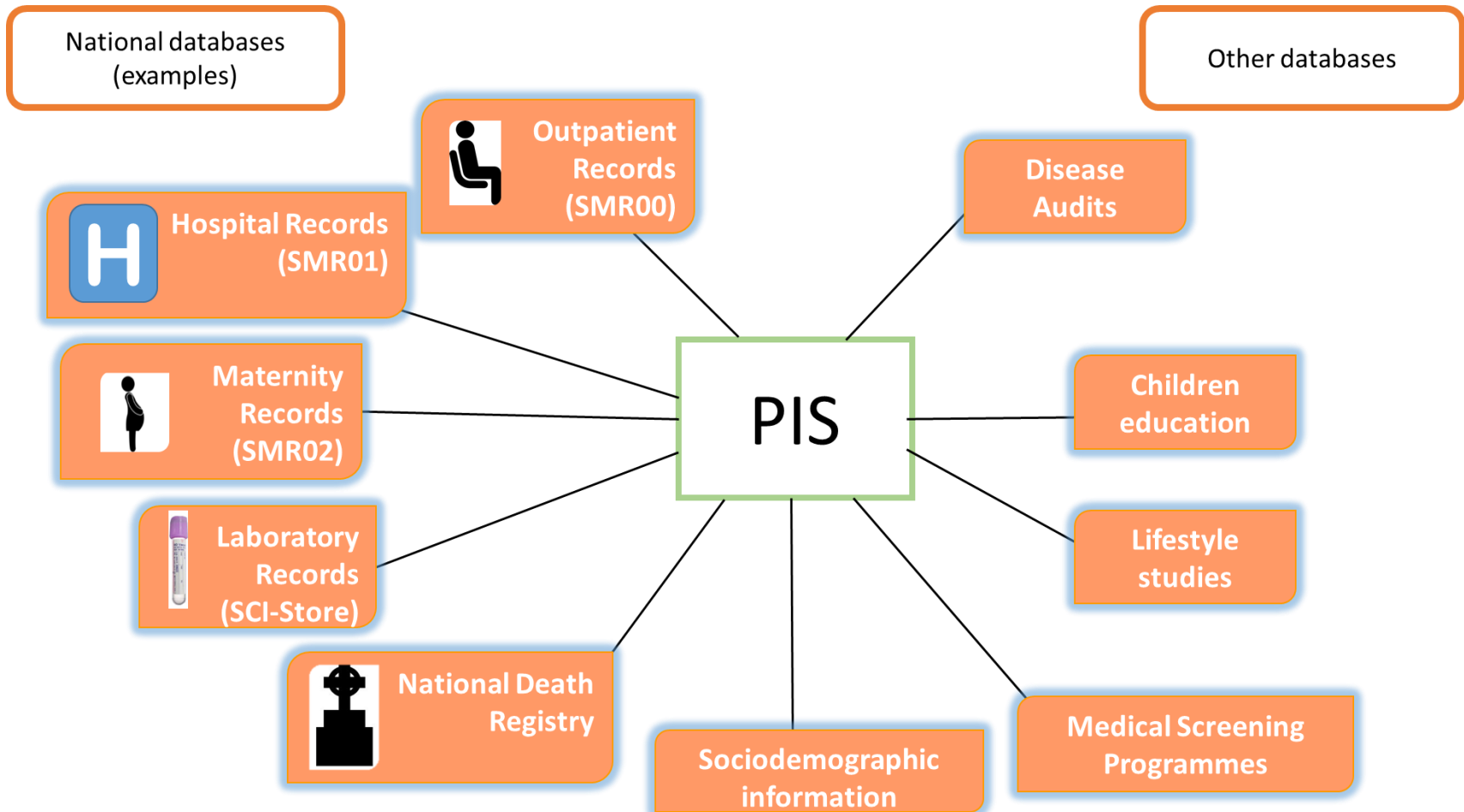


University of
Strathclyde
Science

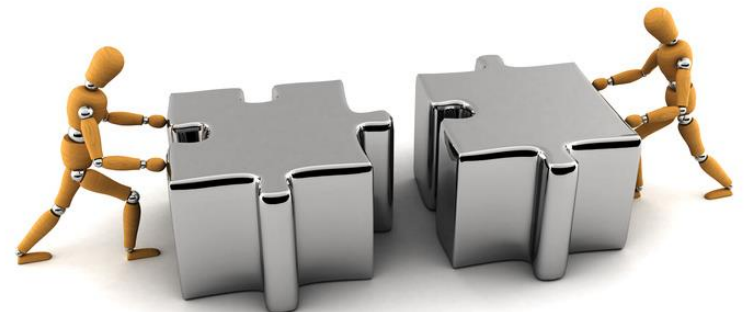
No items dispensed
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 ≥15



PIS- supporting evidence generation



Patient Level Prescribing Data – shaping clinical practice



EFIPPS

Effective Feedback to Improve Primary care Prescribing Safety

Background

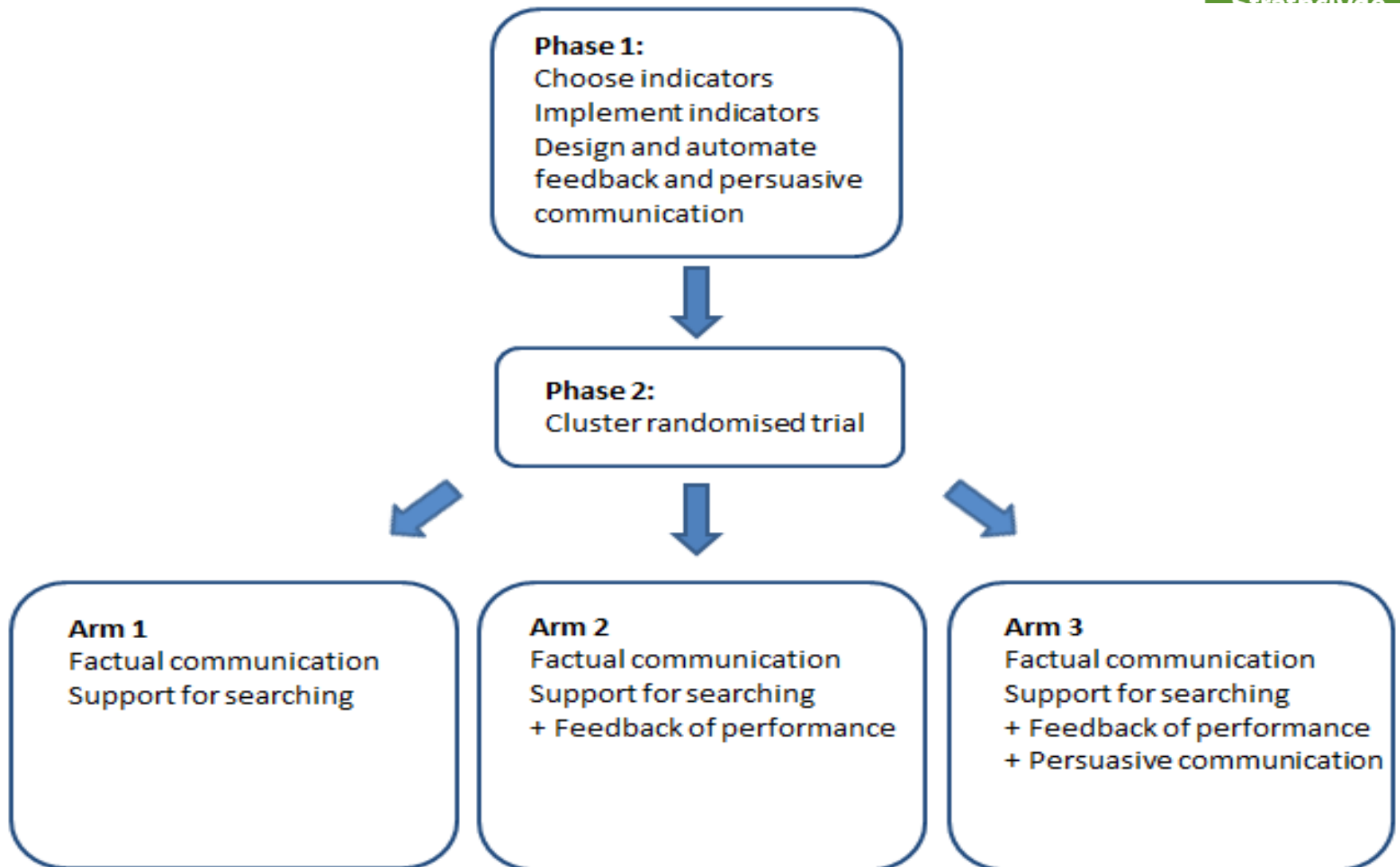
- High risk prescribing is common and causes considerable harm
- Cochrane Review (2006)* on audit and feedback
 - Called for more theory based interventions
 - Head to head comparisons of different ways of doing audit and feedback
- 2012 update - similar findings

* Jamtvedt G et al (2006) Audit and feedback: effects on professional practice and health care outcomes. The Cochrane database of systematic reviews: CD000259

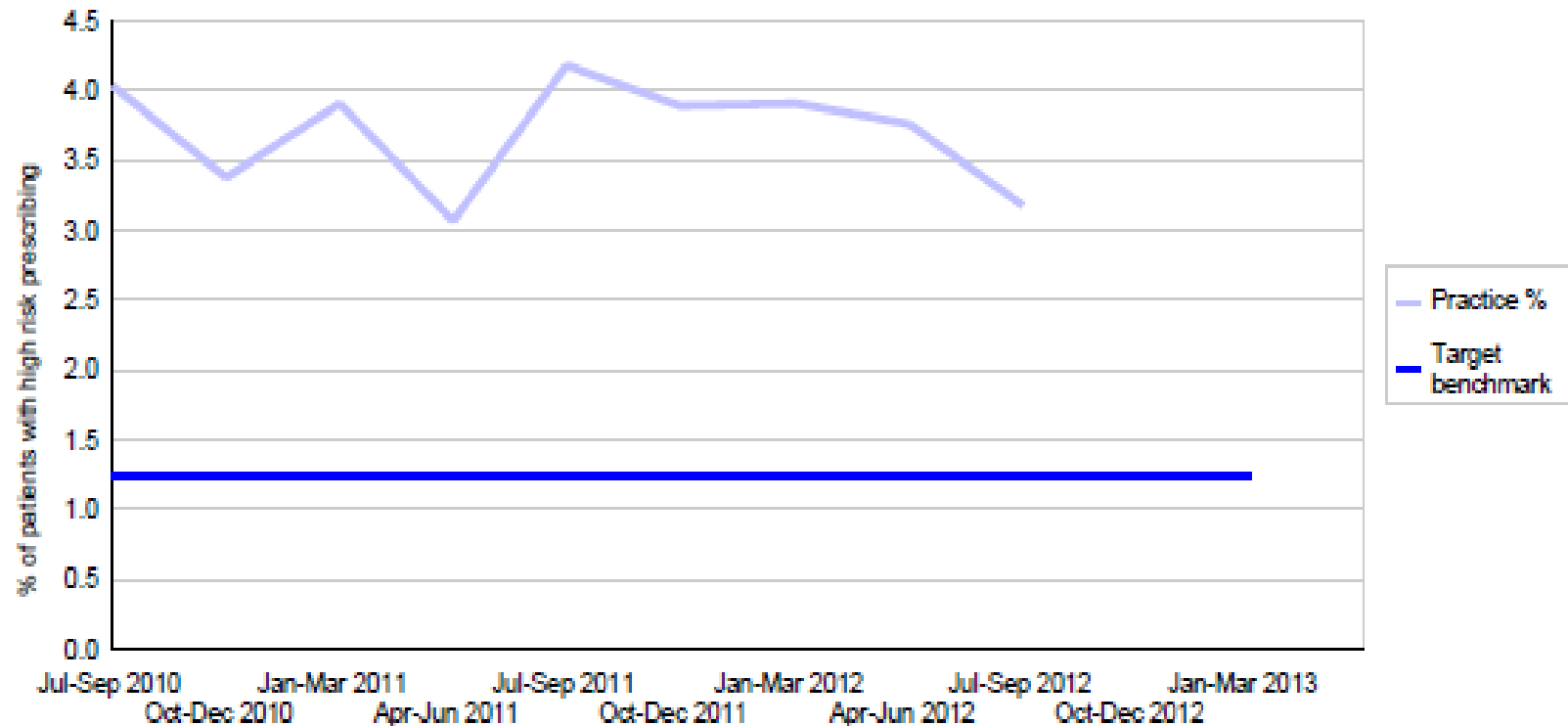
Phase 1 – selected indicators

1. Oral **antipsychotic prescription** to a patient aged 75 years and over
2. Oral **NSAID** prescription to a patient aged 65 years and over who is currently prescribed a **diuretic and an ACE inhibitor or Angiotensin Receptor Blocker**
3. Oral **NSAID** prescription to a patient aged 75 years and over who is not currently prescribed a gastroprotective drug.
4. Oral **NSAID** prescription to a patient aged 65 years and over who is currently prescribed either **aspirin or clopidogrel**, but is not currently prescribed a gastroprotective drug
5. Oral **NSAID** prescription to a patient currently prescribed an **oral anticoagulant** but who is not currently prescribed a gastroprotective drug
6. **Aspirin or clopidogrel prescription** to a patient currently prescribed an **oral anticoagulant** but who is not currently prescribed a gastroprotective drug

EFIPPS – Effective Feedback to Improve Primary care Prescribing Safety



Indicator 4. Older person (≥ 65 years) currently taking either aspirin or clopidogrel who is prescribed an NSAID without gastroprotection



Enrolment

278 practices assessed for eligibility

Excluded 16 practices
CHI completeness < 93% (n=15)
Practice formed after Jan 2011 (n=1)

Randomized 262 practices

Allocation

Allocated to
ARM 1 postal educational material only
(88 practices and 55896 patients at risk at baseline)

Allocated to
ARM 2 postal educational material plus feedback
(87 practices and 56194 patients at risk at baseline)

Allocated to
ARM 3 postal educational material plus feedback plus psychology informed intervention
(87 practices and 58569 patients at risk at baseline)

Follow-up losses

2 practices, 497 patients at risk at baseline
Practice merger or split

1 practice, 170 patients at risk at baseline
Practice merger or split

1 practice, 281 patients at risk at baseline
Practice merger or split

Analysis

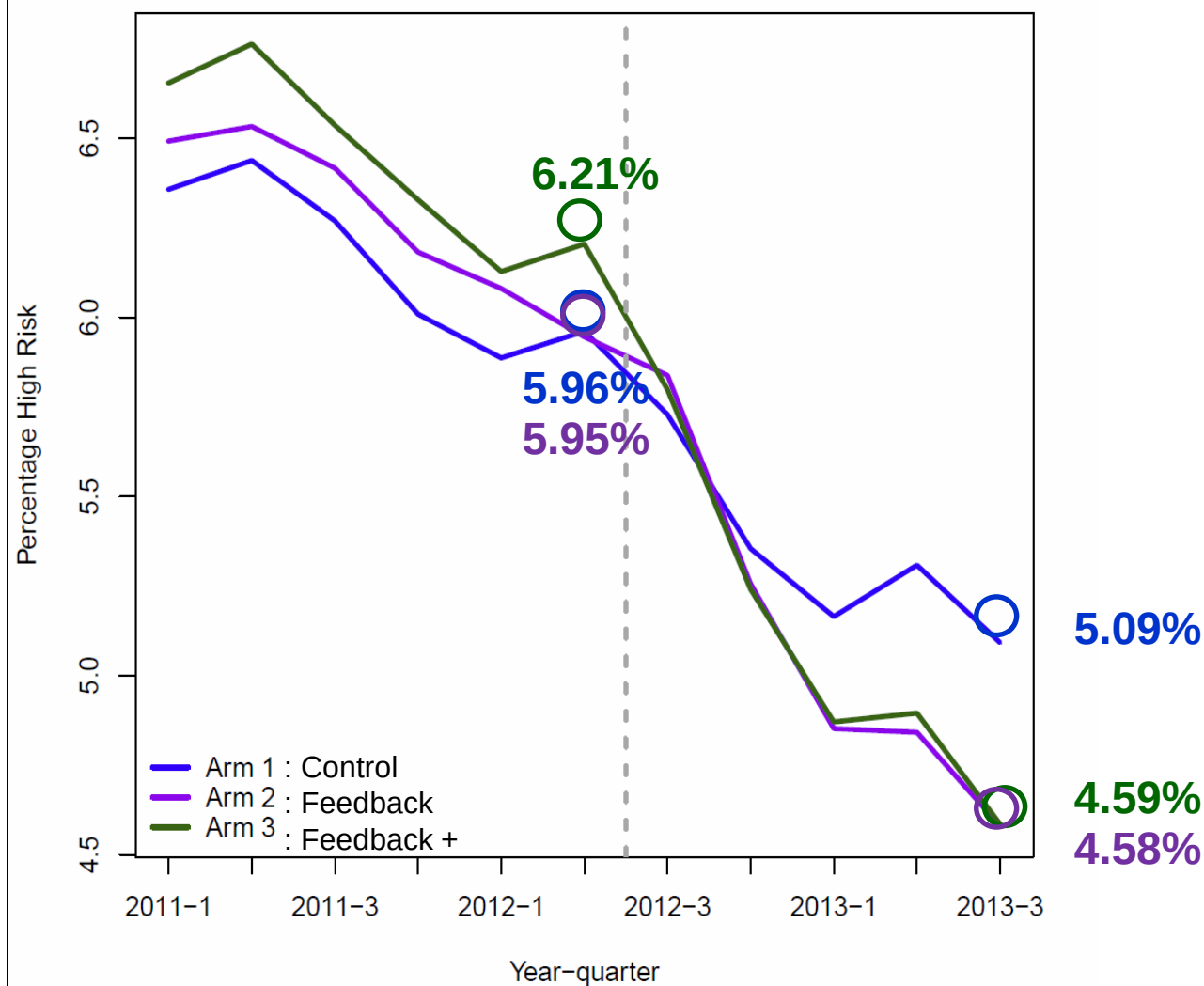
Analysed n = 86 practices, 55872 patients at risk at end of trial

Analysed n = 86 practices, 56478 patients at risk at end of trial

Analysed n = 86 practices, 58582 patients at risk at end of trial

Number eligible **Arm 1: 55896** **Arm 2: 56194** **Arm 3: 58569**

Time of
randomisation



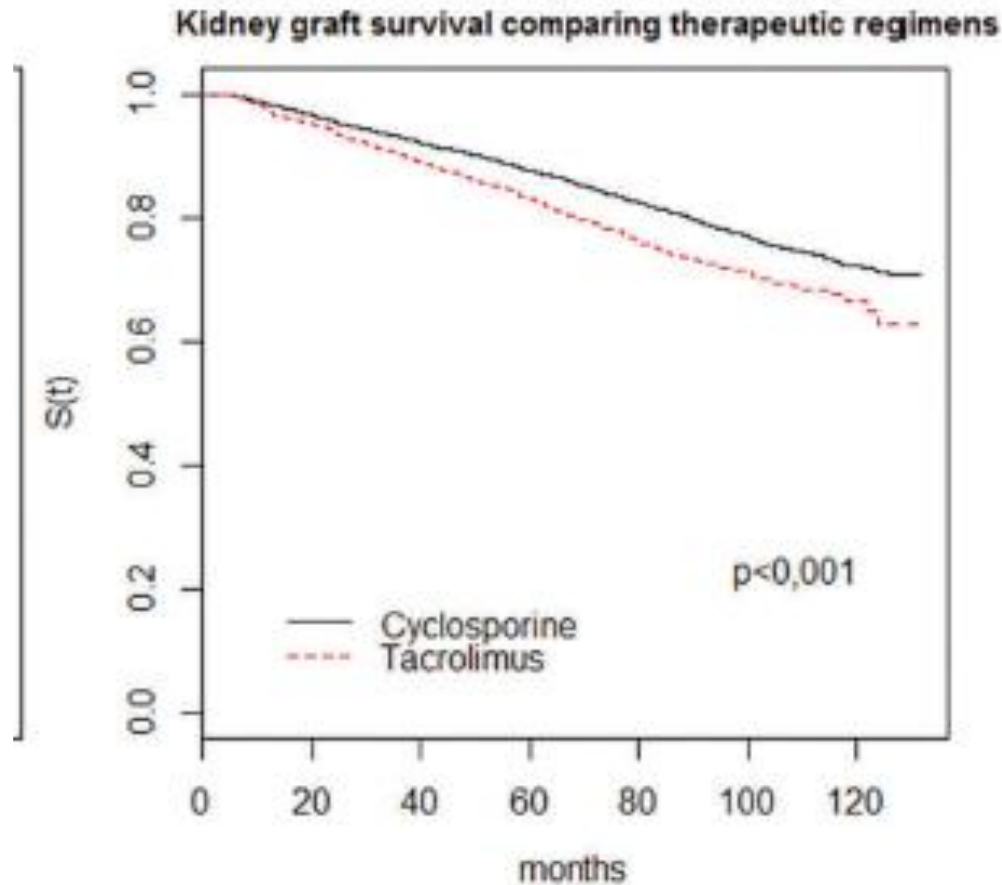
**Arm 2 significantly lower
Arm 1 (-0.51)**
(OR=0.87, 95%CI(0.8,0.96))

**Arm 3 significantly lower
Arm 1 (-0.5)**
(OR=0.86, 95%CI(0.8,0.94))

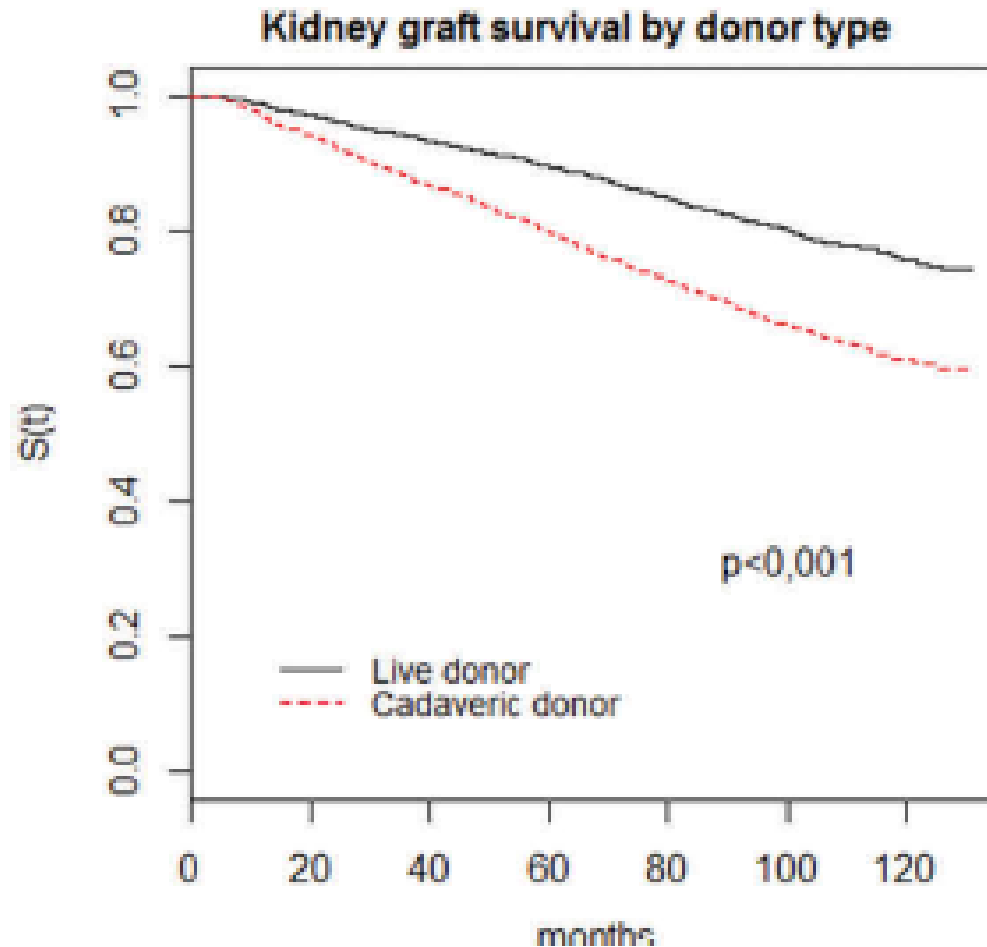
Practices in “High” HR
group still higher HR
prescription than “Low”
group
(OR=2.2)

No significant difference in
intervention effect between
health boards

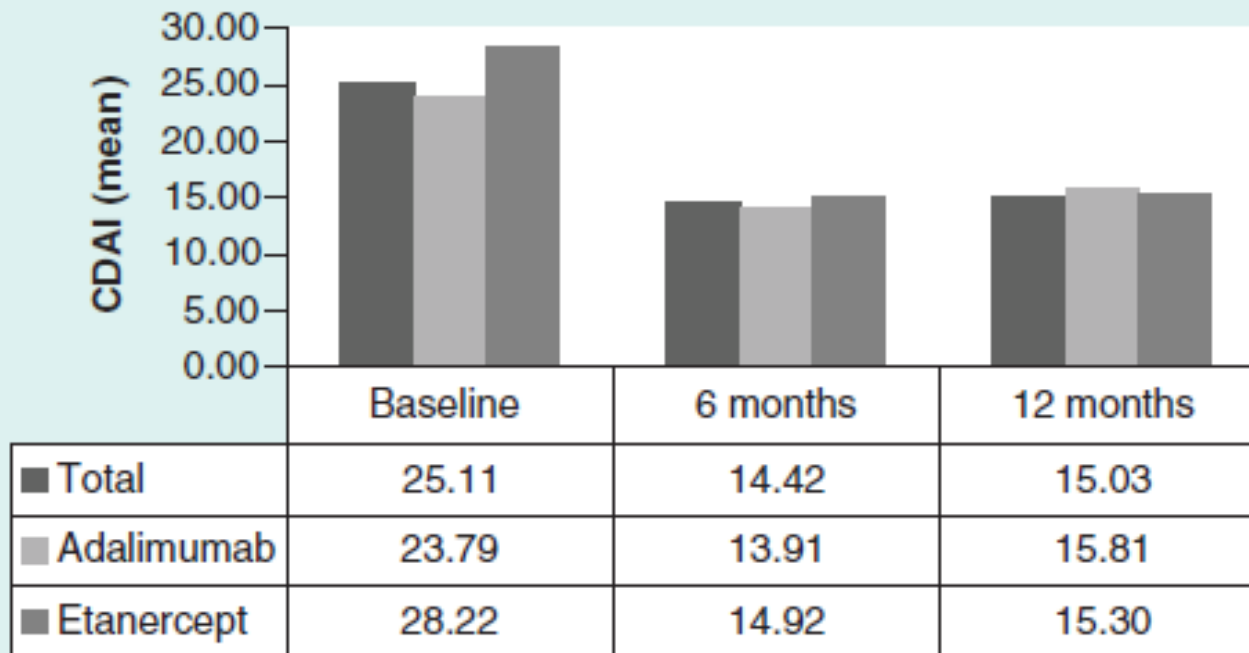
In Brazil, following kidney transplant patients for 10 years showed superiority of cyclosporin among public health (SUS) patients



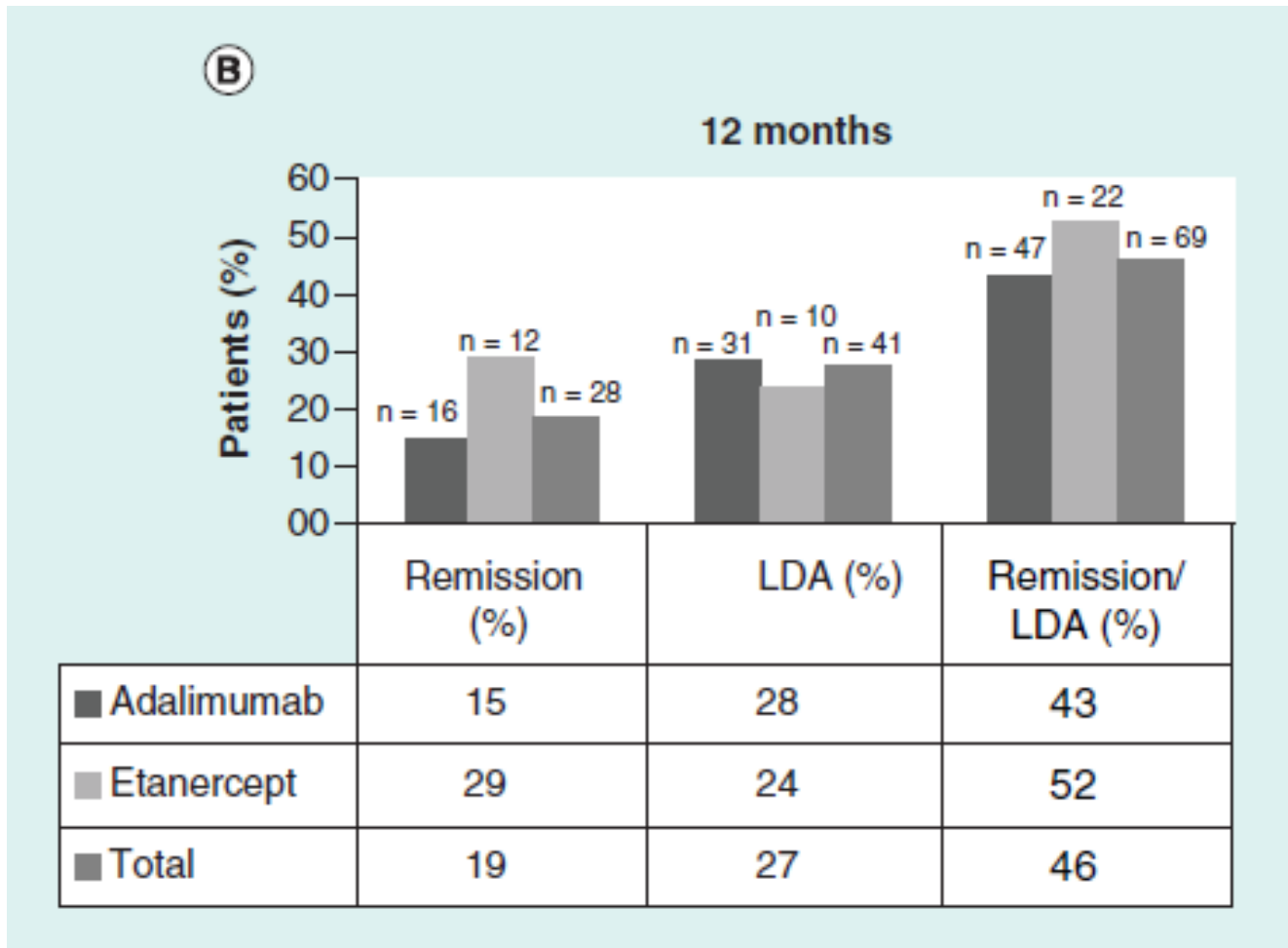
Not surprisingly kidney graft survival is longer with live donors



Similar effectiveness for biologicals funded in Brazil via SUS – based on data entered onto the SUS database



Greater remission was seen in both groups among patients with low disease activity (LDA)



ARB prescribing restrictions in Sweden built on existing county measures to enhance efficiency



- The instigation of prescribing for ARBs by the TLV in Sweden also built on existing county (regional) activities to enhance prescribing efficiency for the renin-angiotensin drugs - providing direction to others
- Within 4 months of TLV reimbursement restrictions:
 - ❑ Patients initiated on ARBs decreased by 24%
 - ❑ Patients initiated on ACEIs and CCBs increased by 14% and 12% respectively
 - ❑ Proportion of patients prescribed an ARB having first been prescribed an ACEI increased from 51% to 67%
 - ❑ Total expenditure decreased by 4.7% vs. same period previous year

Thank You

Any Questions!

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