

Secondary data use: quality data for operations *and* research

Or, will your data be used for or against
you?

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(Some) Uses of patient data

Health Care Operations

Direct patient care

QA (individual level)
 - surgical case review
 - infection control
 - M&M conference
 - credentialing/privileging
 - etc.

QI (process mgmt; population level)
 - planning
 - evaluation

Population-level care delivery

Billing

System planning
 - location, level, and organization of health services

Epidemiologic Research

(Observational; population-level)

Non-identifiable patient data

Identifiable patient data
 (usually for record linkage)

Direct patient contact

Experimental Research

Experimental treatments

Oversight through enforceable policy

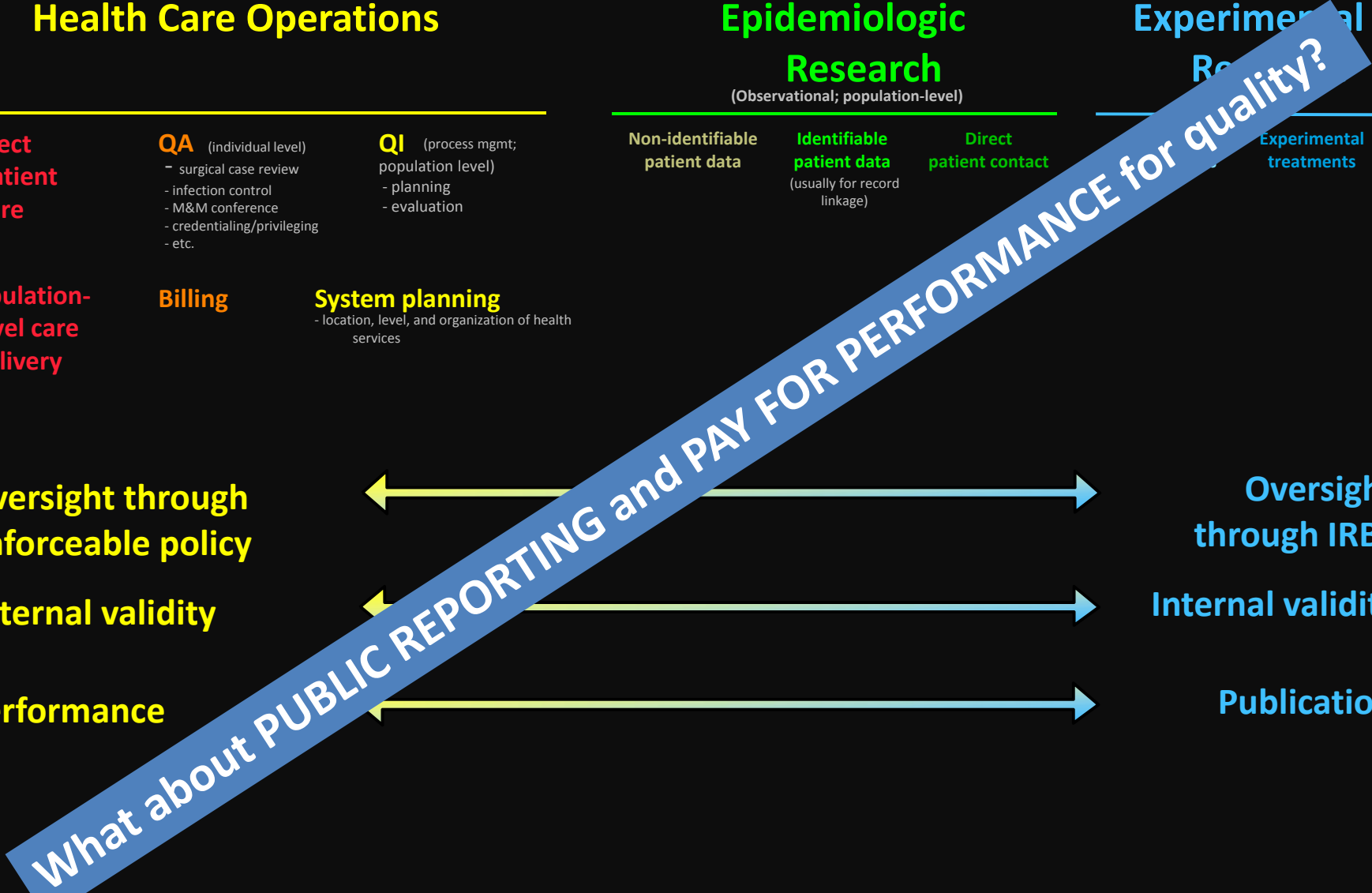
External validity

Performance

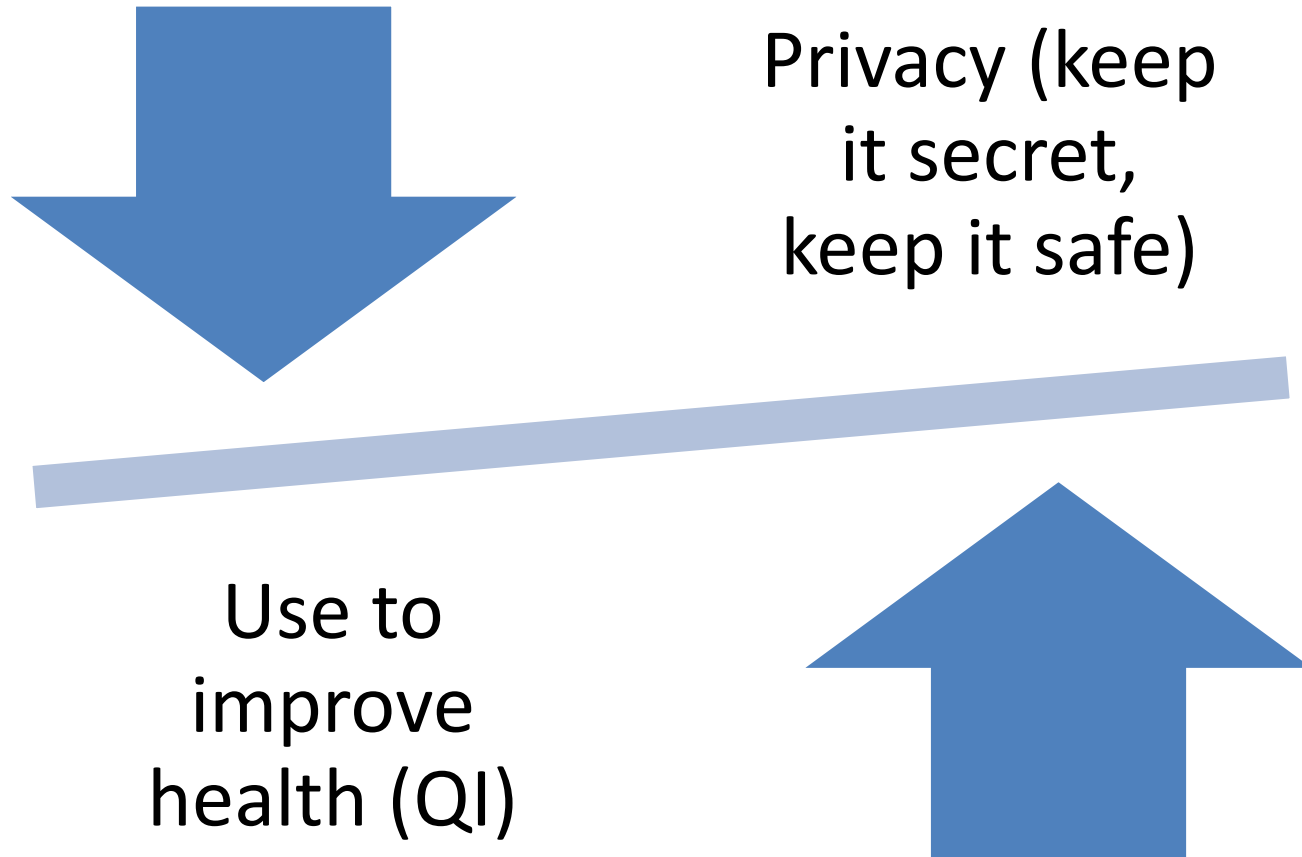
Oversight through IRBs

Internal validity

Publication



Institutional Conflict: Improving health vs. privacy and security

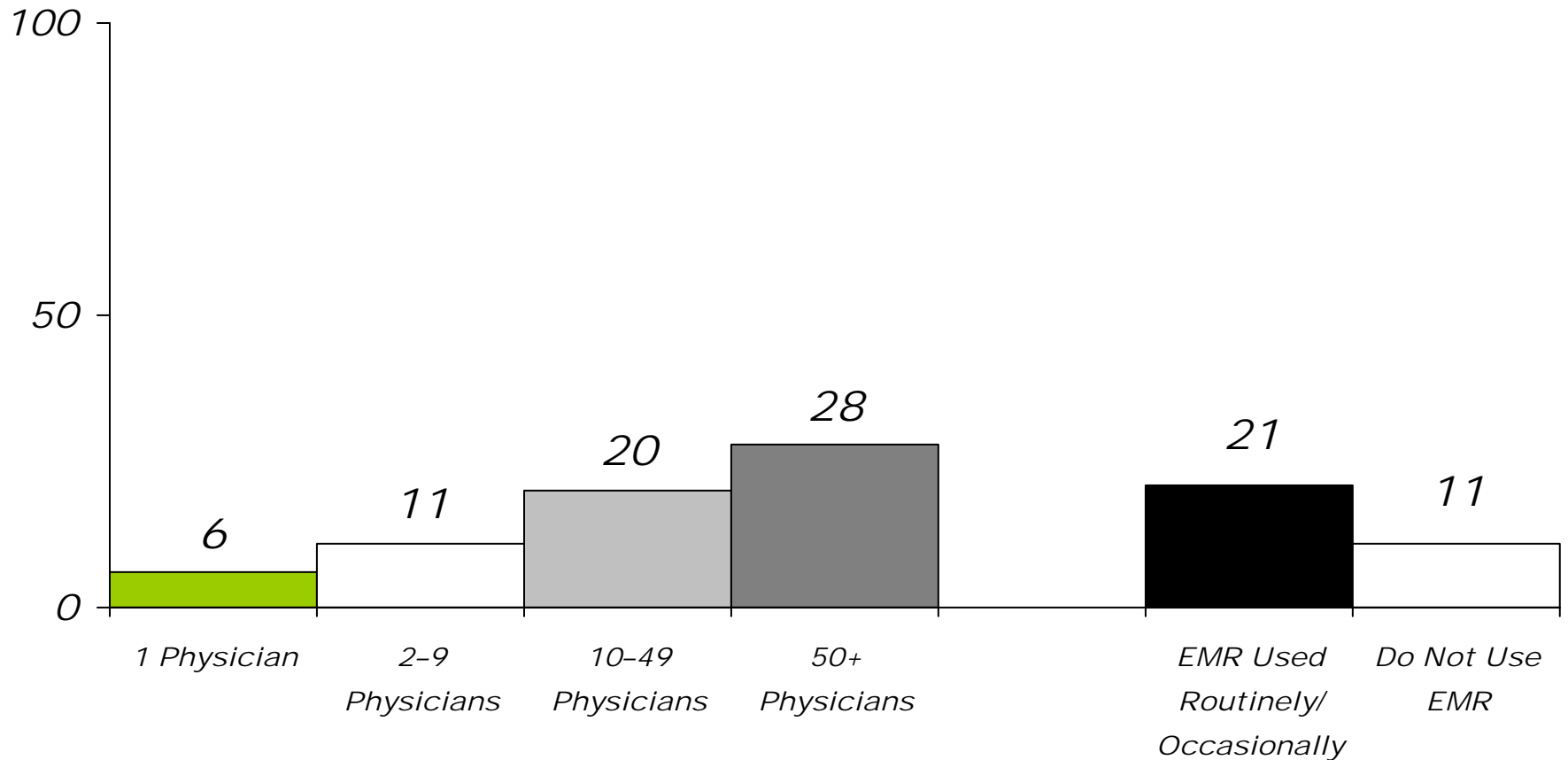


Specific strategies to improve quality – Information technology

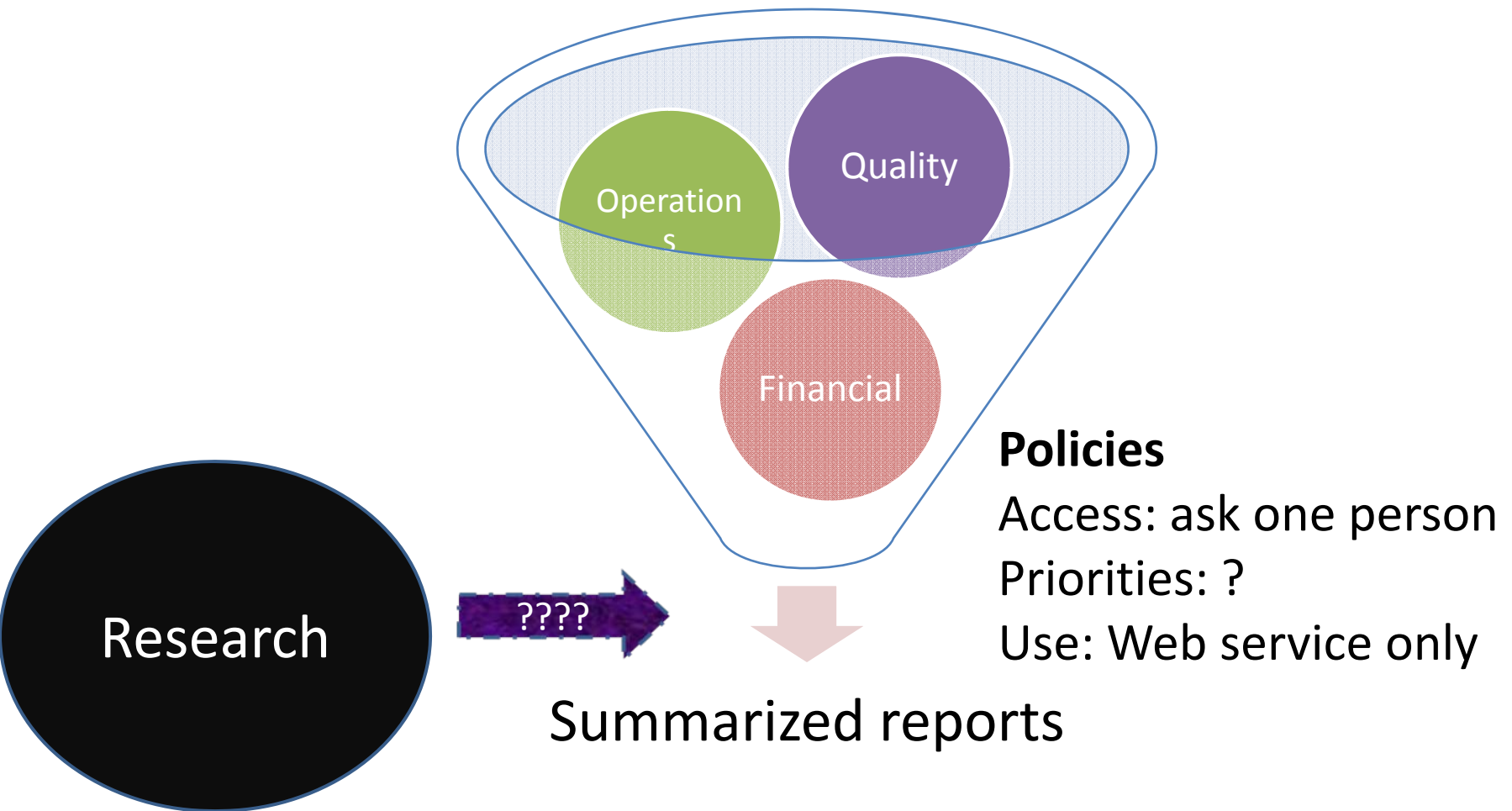
Strategy	IT example
General QI process	Cycle management; audit and feedback – using IT not clear
Clinical Decision support	Alerts – Fatigue
Population-based surveillance	Registries, health information exchange, etc. – workflow fit
Patient portals	Home monitoring; improved service quality – active sharing
Organizational change	Active design / re-engineering with EHR development (anticipate changes) – 1000 blind informatics

Physicians' Ability to Generate Any Quality-of-Care Data Internally

Percent indicating they receive quality-of-care data from internal sources



A local story: Data use

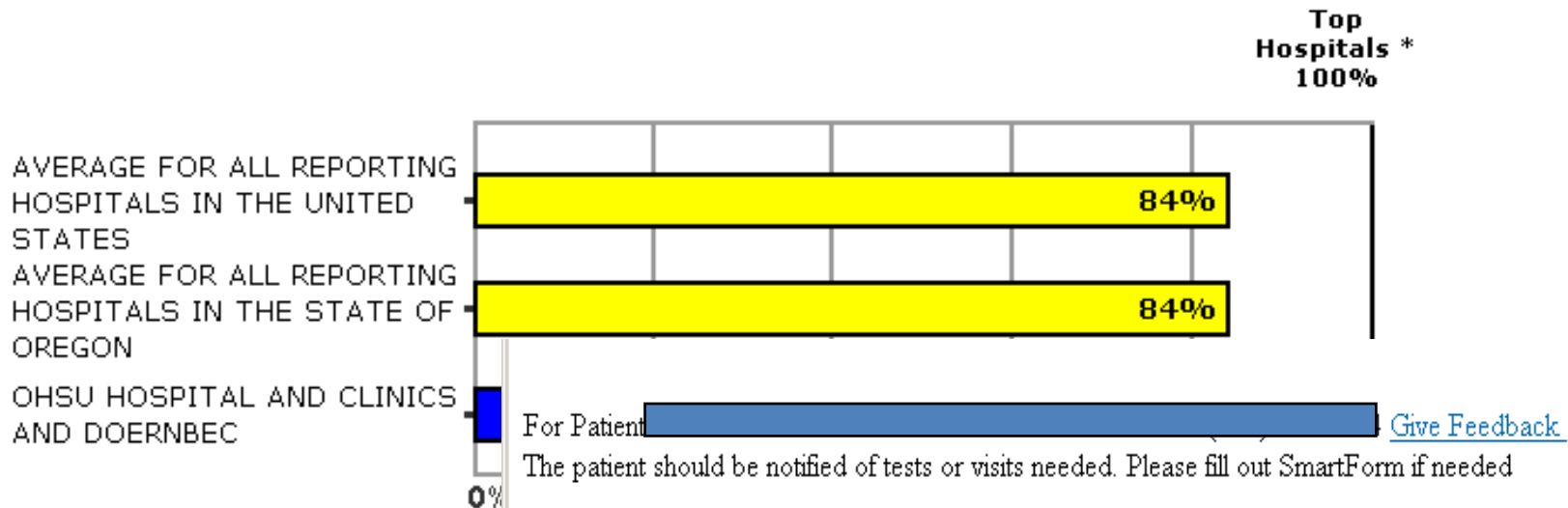


Data use

Example	Health Care Operations (Policy)	Epidemiologic -> Active Public Health (Mostly IRB)	Structured studies (IRB)
Quality measures	Yes	<No?>	
Chronic illness management	Yes	Yes?	No?
Care Management Plus	Yes	Yes	Yes!
EHR change management	Yes!	Maybe?	Yes!! Bless the students!

Comparison of data use

Percent of Heart Attack Patients Given Beta Blocker at Discharge



The patient should be notified of tests or visits needed. Please fill out SmartForm if needed

What is necessary for IMPROVING CARE?

Process

1. Order **HbA1c test** (suggested every 6 months): Last 06/16/05
2. Order **LDL test** (due every 12 months): Last 10/28/03
3. Order **Microalbumin test** (due every 12 months): Last *Unknown*
4. Order/check on **eye exam** (due every 12 months): Last *Unknown*
5. Check for **monofilament foot exam**, bring in if not done (due every 12 months): Last *Unknown*
6. Check on / order **flu shot** (due every 12 months): Last 01/12/05
7. Check for / order **pneumovax** (due every 5 year): Last *Unknown*

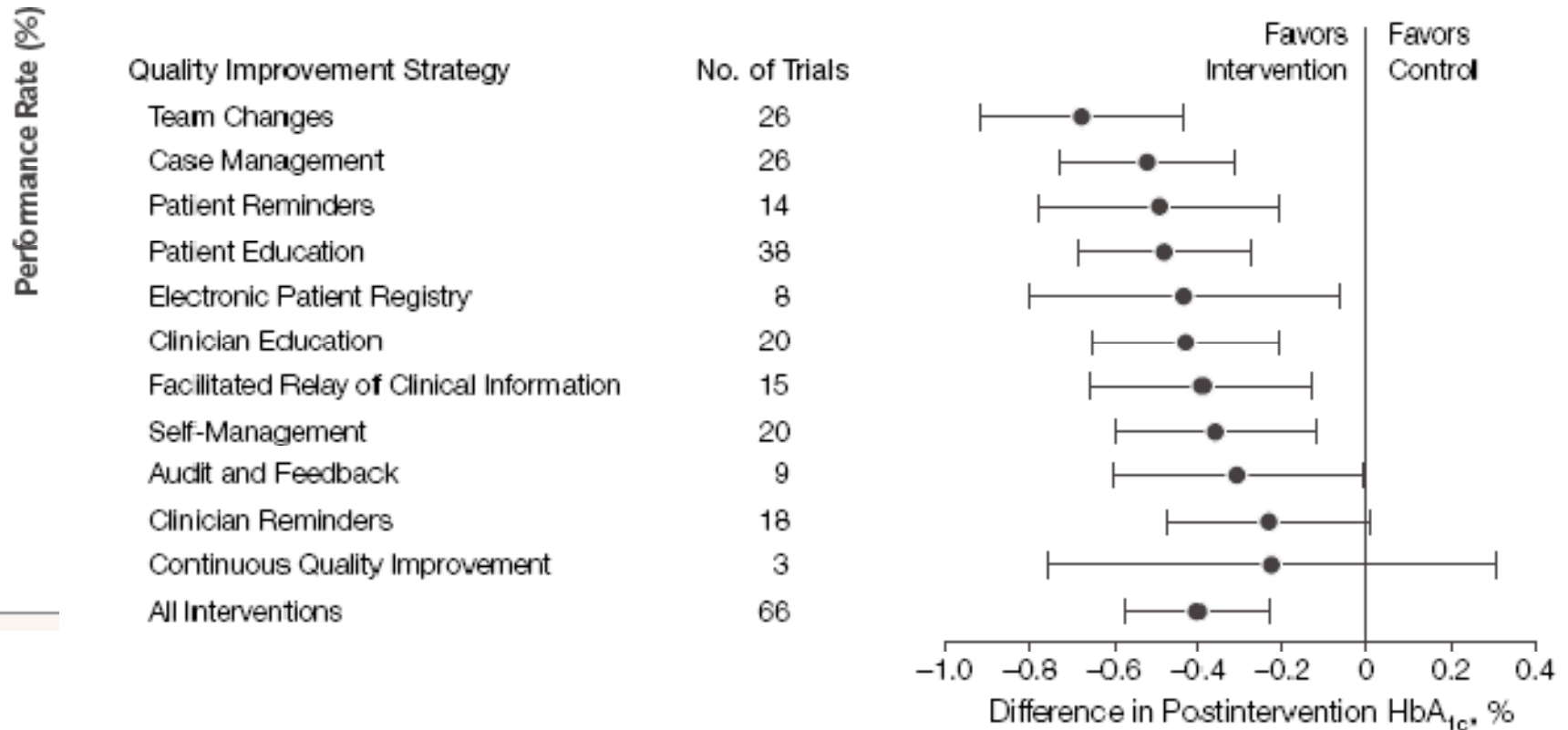
Outcomes

1. Intensify **cholesterol treatment**: Last LDL 104
2. Monitor for nephropathy: Last microalbumin *Unknown*

Effects of data use

D Composite of 10 Measures

Figure 2. Postintervention Differences in Serum HbA_{1c} Values After Adjustment for Study Bias and Baseline HbA_{1c} Values



Progress

- EHR – lots of data and interest
- External pressures = fundamental challenge for institution
- CTSA – OCTRI – developed a research pathway for data use, with the policies and procedures
- Clinical informatics reorganization – (re)developing the policies, with more updated

Thank you!

- For additional information,

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www.caremanagementplus.org

Primary care and chronic diseases: Care management processes

- Care management processes: help provide the care you are supposed to!
- Casalino reviews evidence for each.

Care management process	Example
Case management	Additional resources (an RN) can be used for complex pts.
Physician feedback	Feedback about specific process steps.
Disease registry	Can identify all patients with illness.
Clinical practice guidelines	Must have adoption, training, and some access.
Self management skills	Program to teach skills.

What helps get quality processes in place?

External incentives

- Forced to report measures
- Public recognition
- Contracting

Clinical IT

- Problem / notes /med list
- Ordering + reminders
- Lab / Radiology result

- Despite Limited IT use in organizations
 - Only 1.4 of 6 functions, mostly lab and radiology results
 - Doesn't differentiate between the various types