Do inter-professional practices (FHTs) have a higher capacity to care for patients?

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Do inter-professional practices
(FHTs) have a higher capacity to care for patients?

or

What happens to quality of primary care as providers in inter-professional practices look after more patients?

Context: changing models of primary care

Ontario reform models, from traditional FFS to:

- **Reformed Fee-For-Service**
  - FFS may encourage overproduction and possibly larger practices
- **Capitation** (blended)
  - Capitation rewards larger practice size
- **Capitation** + **Inter-professional** (Family Health Teams)
  - Teams are expected to increase their capacity to care for more patients

What we know

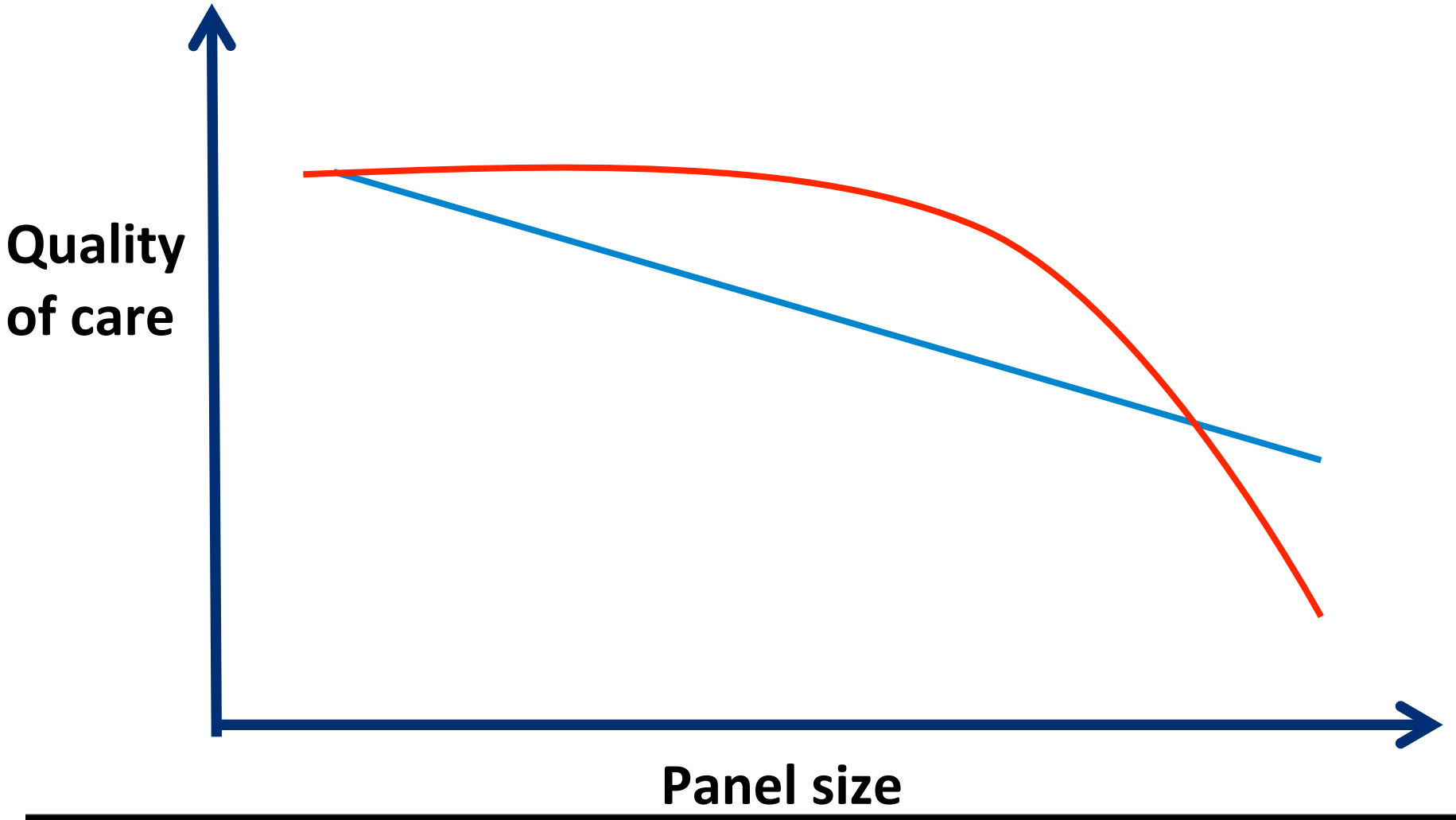
- Larger panel size = Lower quality of care
- Insufficient data to inform panel size benchmarks
- Ontario FHTs:
  - minimum target roster of 1300/FTE MD and maximum base salary at 1650/FTE MD
  - disincentive at > 2400/MD

Objective/Outcomes

Quantify the relationship between panel size and quality of primary care

- **Prevention** (% eligible receiving appropriate screening for colorectal, breast and cervical cancer)
- **Continuity** (% of primary care visits to own provider in previous 2 years, must have ≥ 3 visits)
- **Comprehensiveness** (% of 20 primary care services rendered by the most responsible provider/practice)
- **Chronic disease management** (% eligible patients receiving appropriate management for key chronic diseases)
- **Access** (rates of low triage ED use and avoidable hospitalizations)

Potential Outcome ?



What's new in this study?

- Large dataset
- Large range of panel sizes
- Breadth of quality indicators
- Can account for:
  - Non MD health professionals ✓
  - Patient complexity (medical, social) ✓
  - Context ✓
  - Other (EMR, vision, priorities?)

Methods

Design

- Cross sectional study in Ontario
- Health Administrative Data (from ICES)
- April 1st 2008 - March 31st 2010
- FHTs: 1,426 physicians, >2 million patients

Design

- **Panel size**: All patients under the care of a provider working "full time"

$$\frac{\text{\# Patients}}{\text{Family Physician FTE}}$$

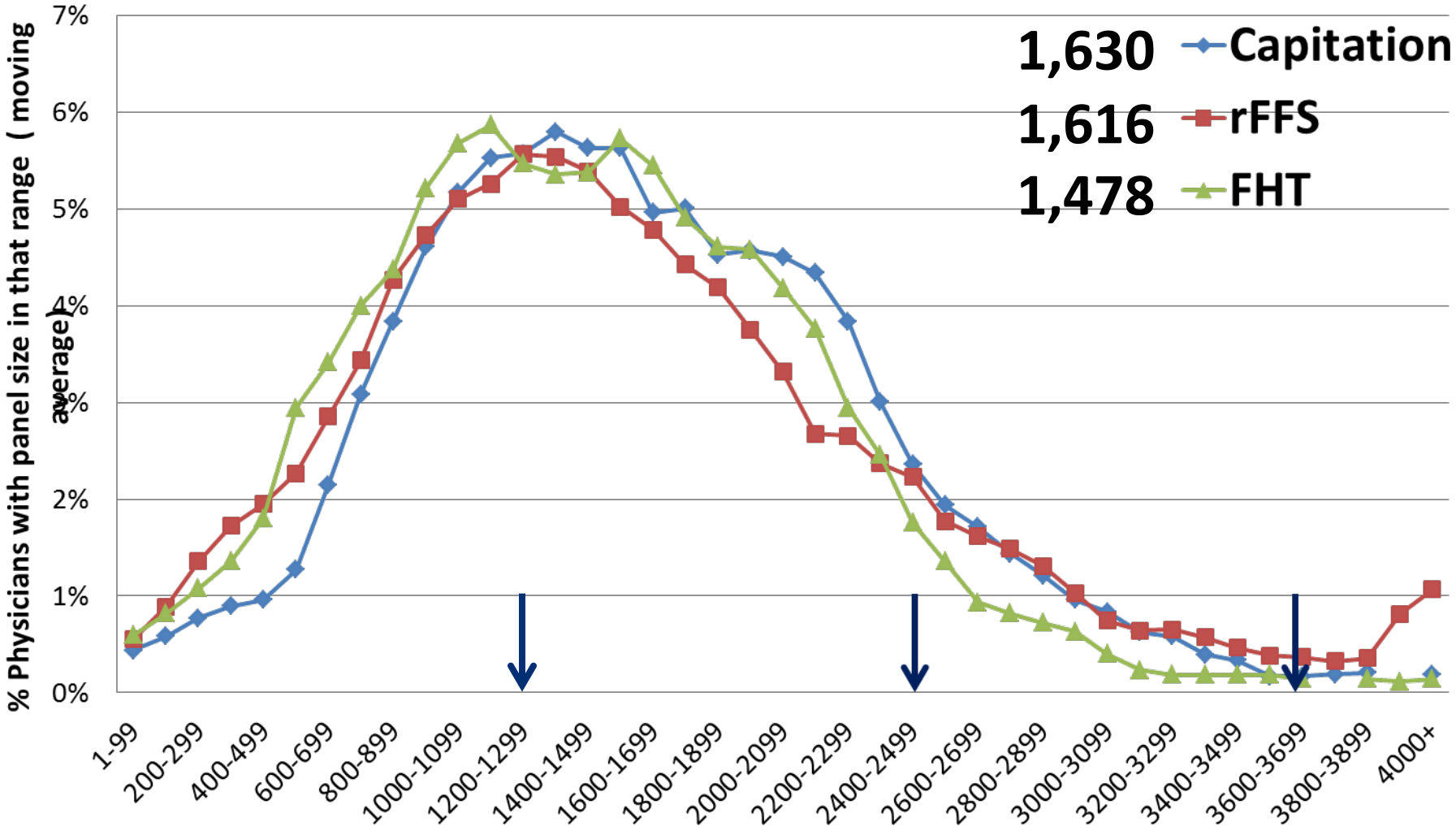
- Limit to Panel sizes ≥1,200
  - FHTs: 900 physicians, 1.7 million patients

Analysis

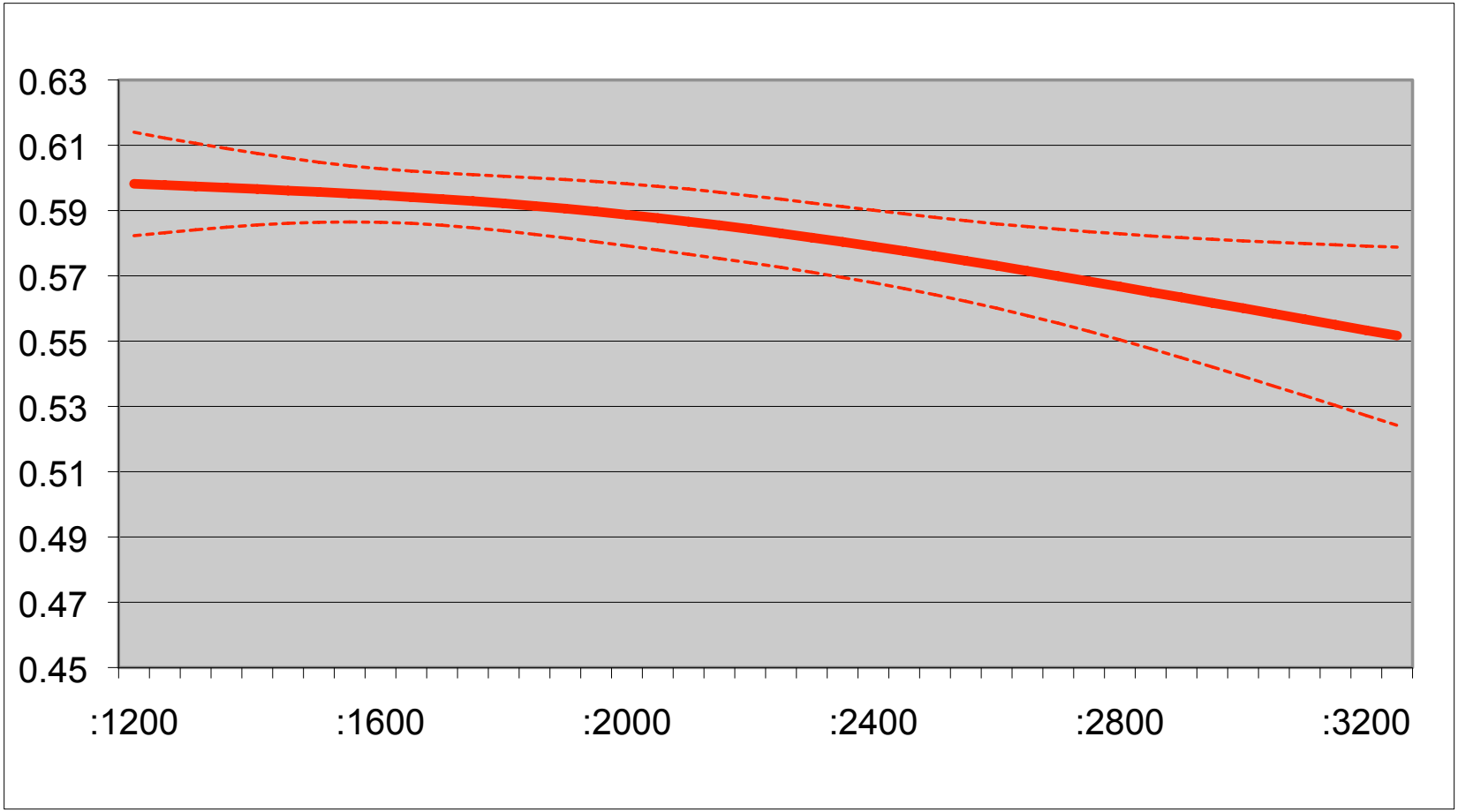
1. Descriptive
   - For panel size groups (score)
2. Logistic regressions
   - Unadjusted, and then adjusted for:
     - Physician: sex, age, foreign trained, # of MD in practice, time in model
     - Patient: sex, age, rurality, income level, immigration status, case mix (morbidity)

Results

Panel Size Distribution

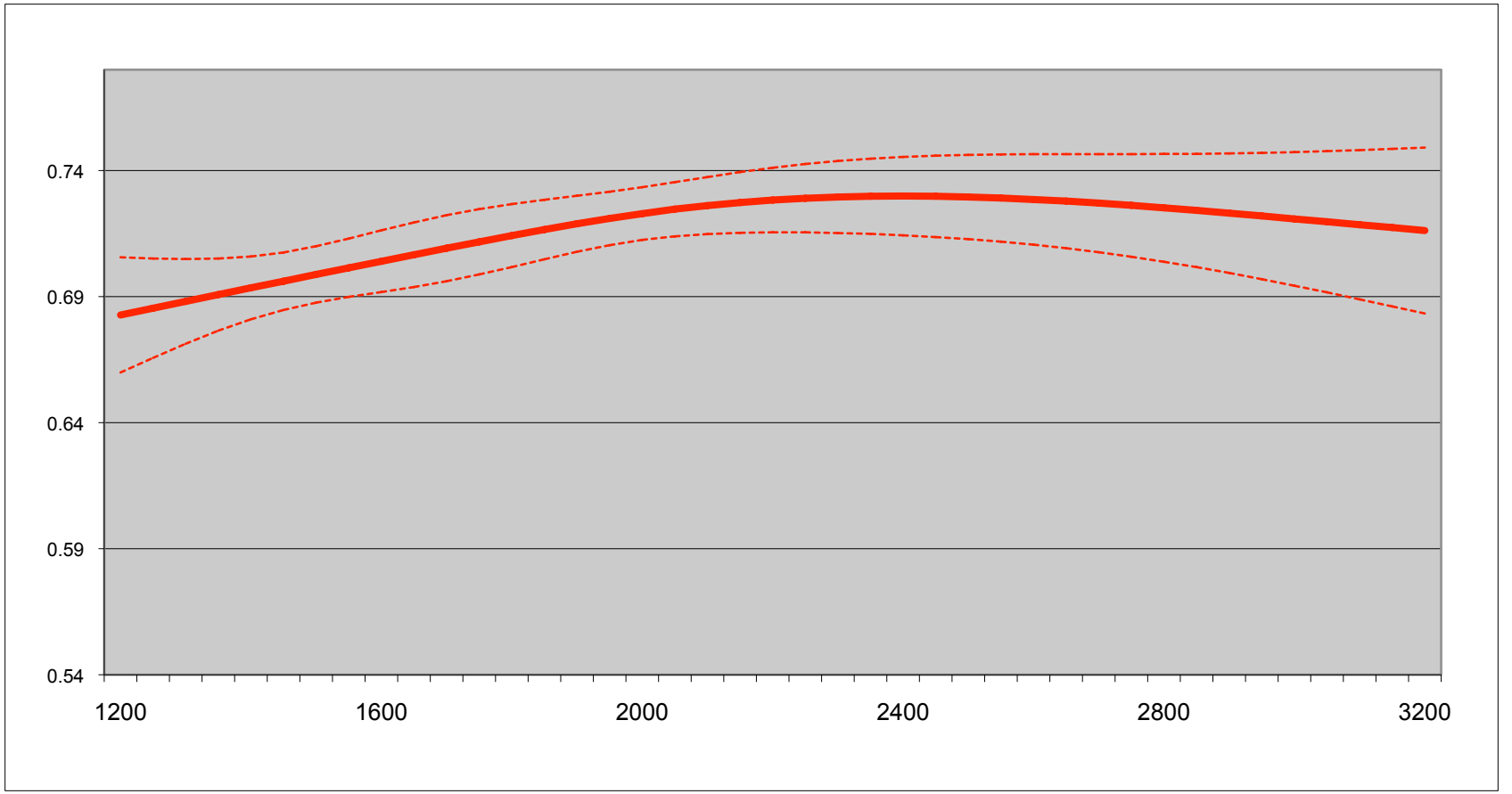


Prevention (Adjusted)



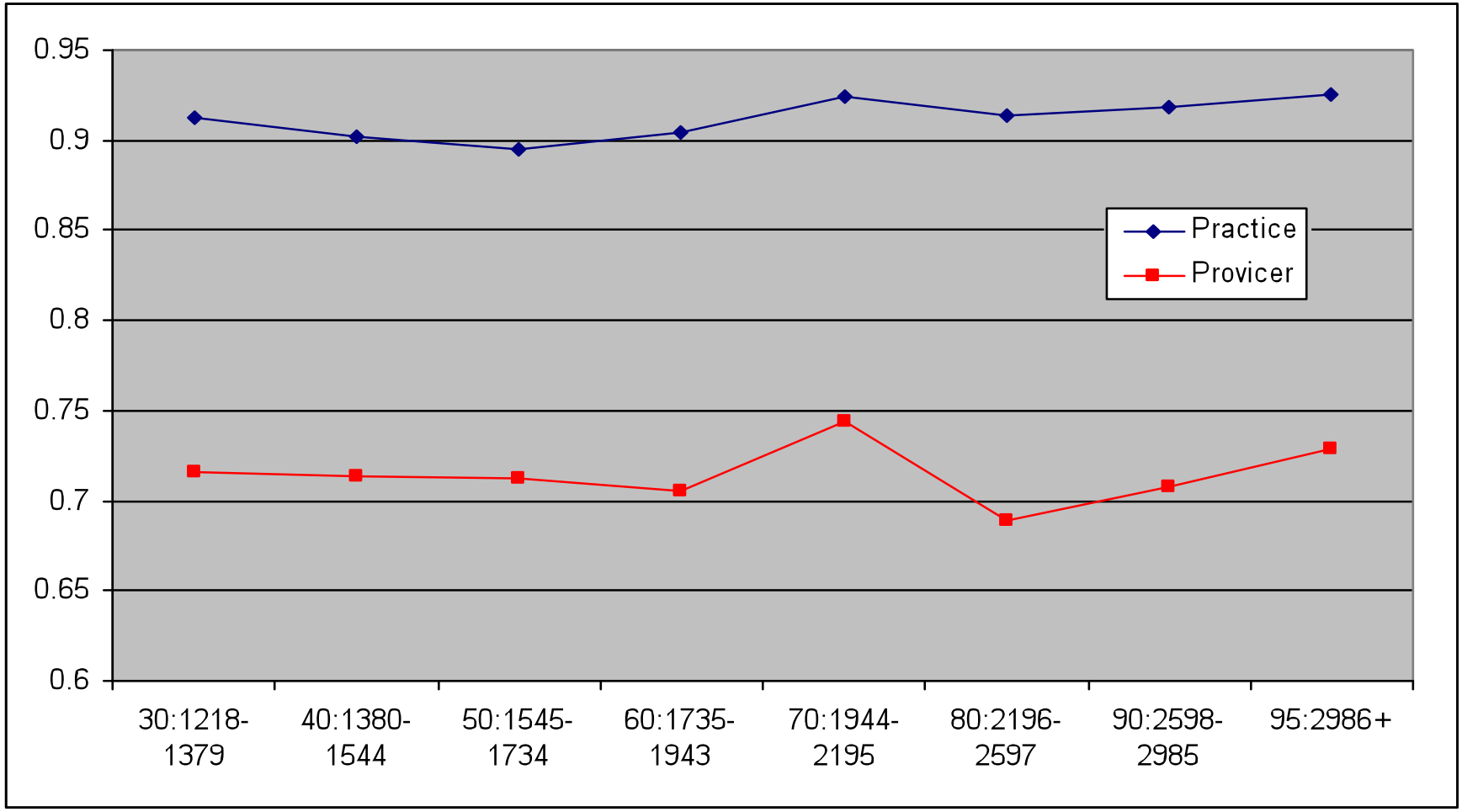
* Percentage of eligible patients receiving appropriate screening for colorectal, breast and cervical cancer

Continuity of Care (Adjusted)



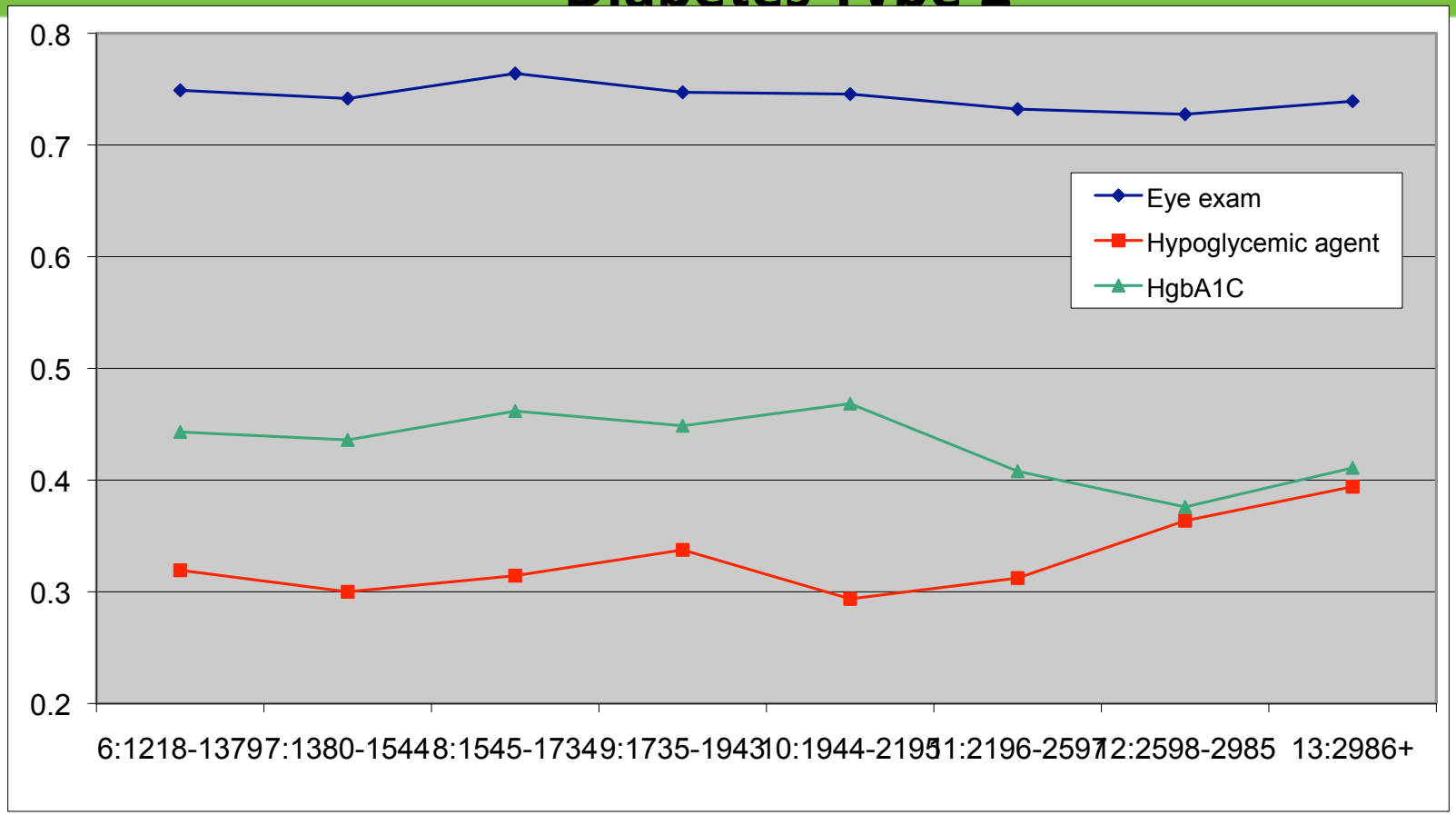
*Percentage of primary care visits to own provider in previous 2 years (≥ 3 visits)

Comprehensiveness (unadjusted)



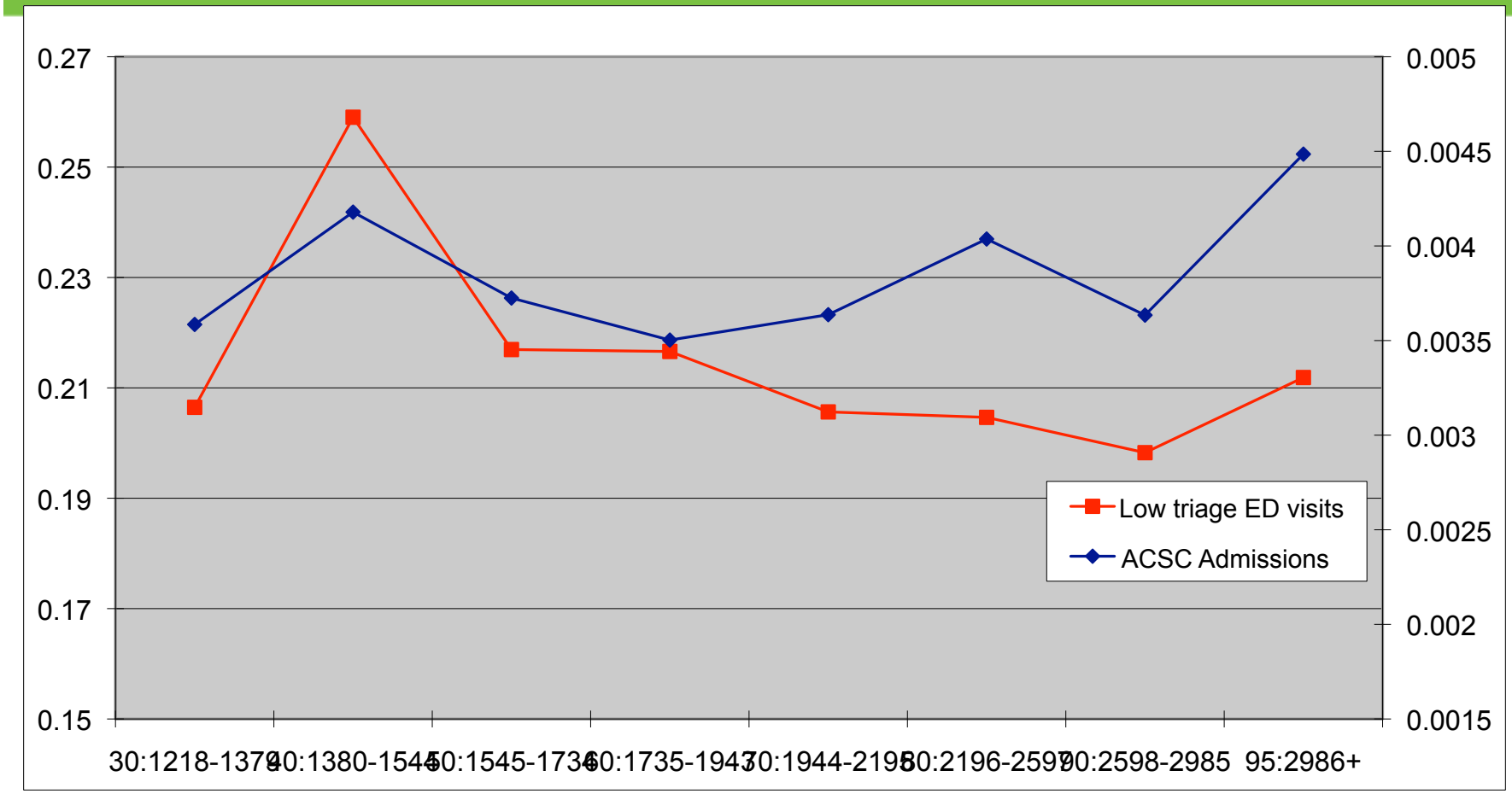
* The proportion of 20 primary care services rendered by provider or practice

Chronic Disease Management (unadjusted)
Diabetes Type 2



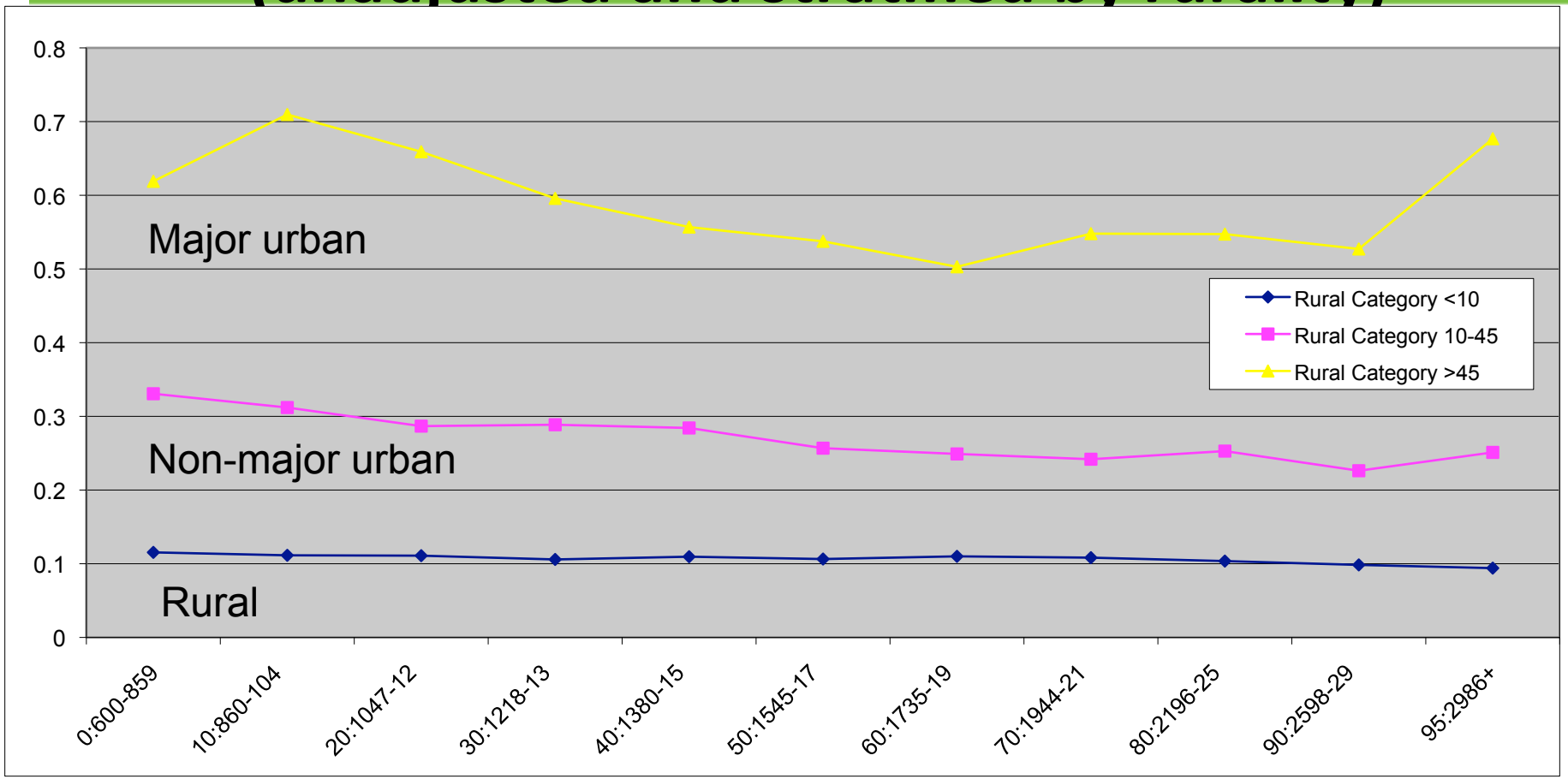
*% DM with ≥ 1 eye exam in 2 yr period, % Incident DM who received hypoglycemic agent within 1 year of diagnosis (age ≥ 65), % DM with ≥ 4 HgbA1C tests in 2 yr period

Accessibility (unadjusted)



Number of low triage ED visits and hospital admissions for Ambulatory Care Sensitive Conditions (ACSC) over the two year period

Accessibility all models – low triage ED (unadjusted and stratified by rurality)



* Rate of low triage ED visits across three rurality categories (RIO: < 10: major urban, 10-45 non-major urban, <10 rural)

Conclusions

1. Modest impact of panel size on prevention

2. For continuity optimal panel size may lie in the middle range.

3. Unadjusted results should be interpreted with caution and show no consistent relationship with increasing panel size.

Next steps

1. Complete adjusted analyses

2. Establish the influence of contextual factors (patient, provider, practice) on the panel size-quality of care relationship

3. Integrate the results across the different dimensions of quality of care

Thank you

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