

## Background

- Primary care physicians have many roles.
- Research into these roles has mainly focused on setting (office vs. hospital) or scope (e.g. does the physician do obstetrical deliveries?
- The comprehensiveness of primary care office practice has rarely been examined and there are few measures available.
- Primary care reform in Ontario is intended to support primary care physicians that provide comprehensive care.
- Anecdotal evidence seems to suggest a move to more “focused” practices for some family physicians.

## Objectives

- To distinguish between physicians in comprehensive, focused and other types of primary care practice.
- To determine the number physicians in each group and how this has changed over time.

## Methods

Using the Ontario Health Insurance Plan (OHIP) database of physician billings and information about physician affiliation with primary care models, a hierarchical, seven-step algorithm was developed that defines:

- the primary care 'pool' of physicians
- core primary care services
- focused practice
- primary care activity areas
- comprehensive practice

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## Identifying primary care practice type

## Step 1, 2 The Primary Care 'Pool'

- The first steps were to identify primary care physicians
- Defined as any physician whose self-reported or functional specialty was 'General Practitioner/Family Physician' (GP/FP) in ICES' physician database

### Step 3 Primary Care Model Affiliation

- The next step was to identify physicians with full-time affiliation with a primary care enrolment model. These were automatically comprehensive.

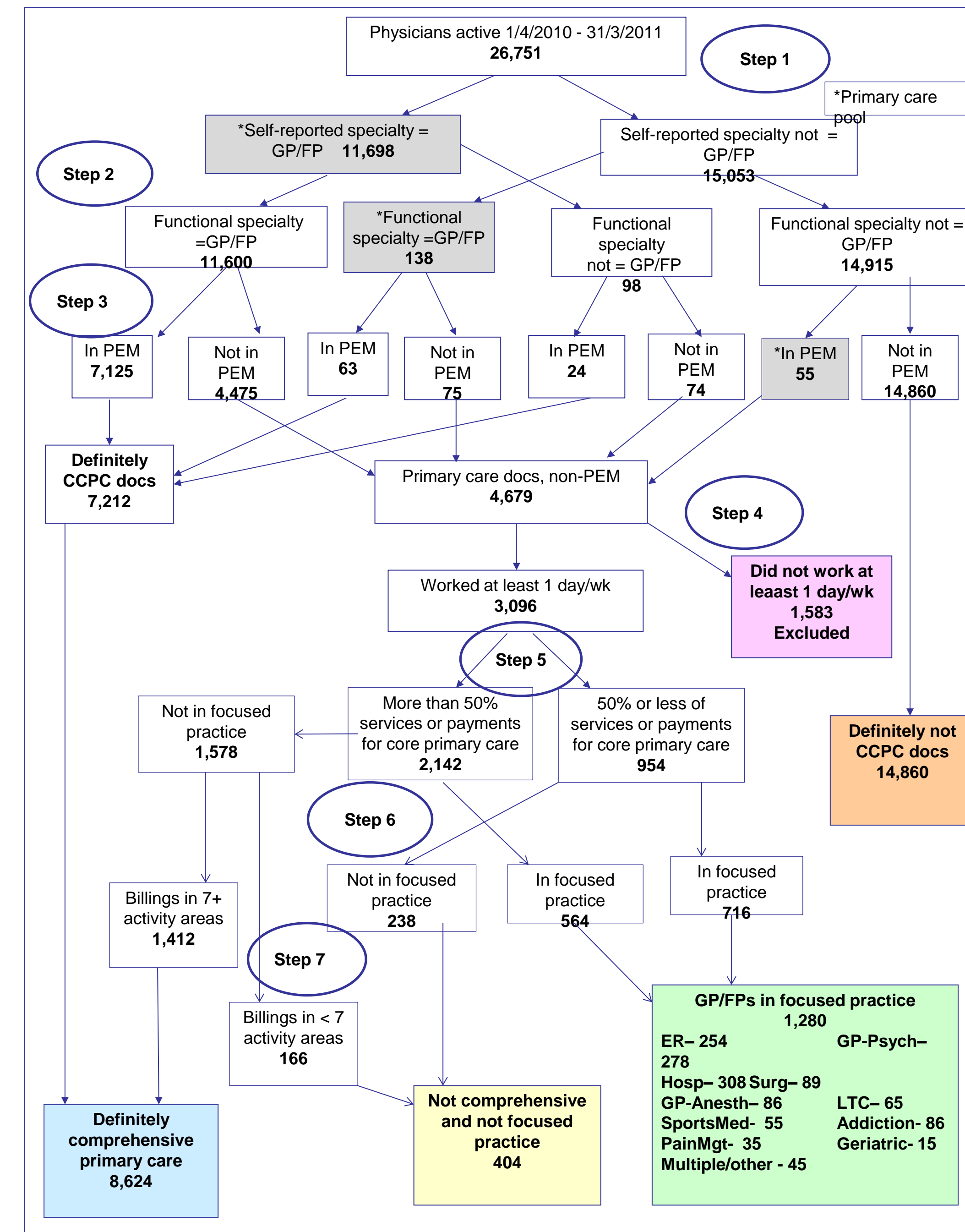
#### Step 4. Days Worked per Year

- In this step physicians who worked fewer than 50 days during the year were excluded. A day worked was defined as any day on which a physician billed for at least 5 patients.

### Step 5. Percent Core Primary Care

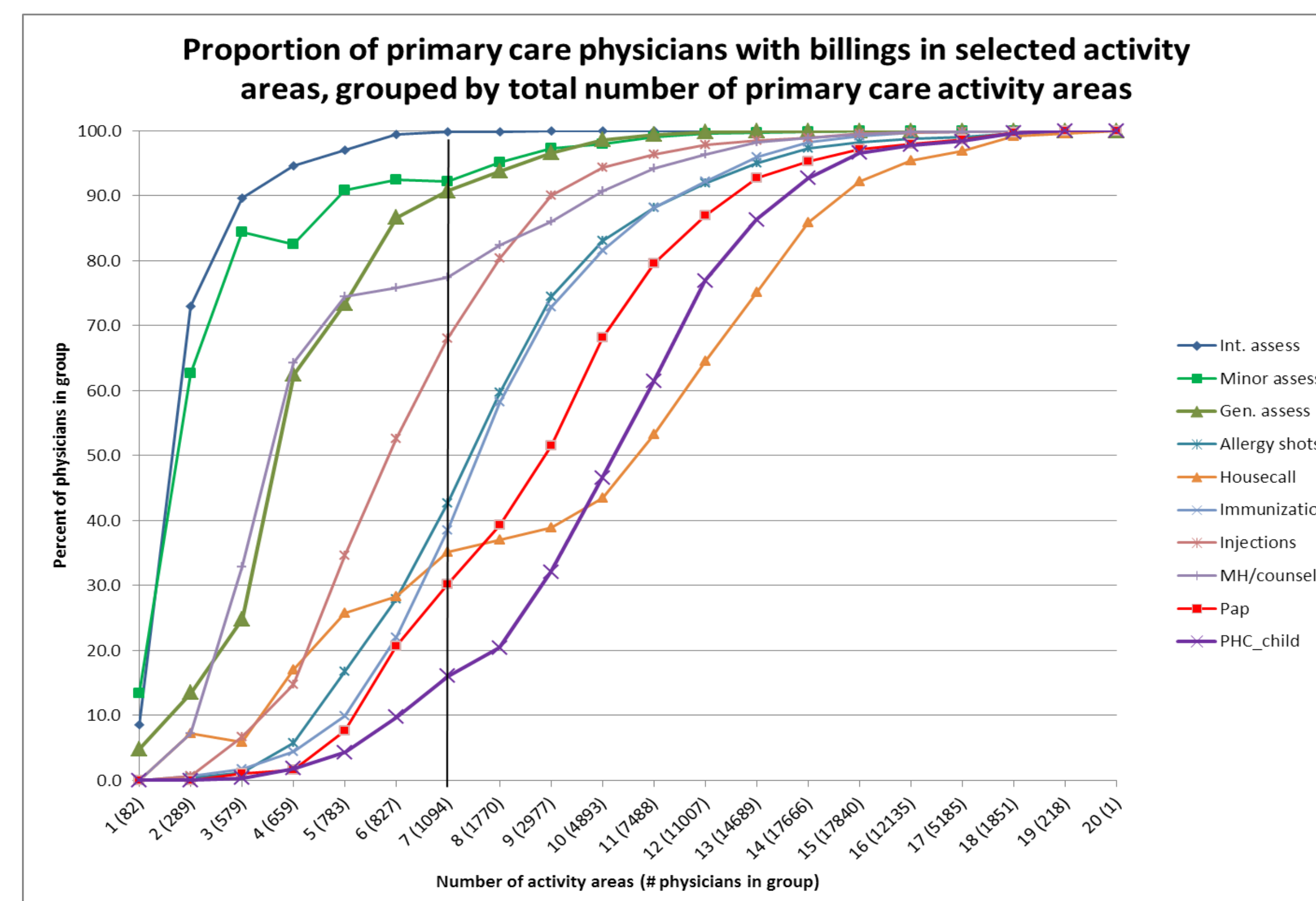
- Core primary care services were defined for each year as any fee service code where 80% of all billings were by physicians in the PC pool and the feecode comprised at least 0.1% of all PC billings. The codes for all years are listed below. These were then divided into 22 activity areas.

Core primary care services and activity areas		
Service Code	Description	Included in every year Activity Area
A001A	Minor assessment - GP/FP	* 1. Mini/ minor assessments
A008A	Mini assessment- GP/FP	* 1. Mini/ minor assessments
A003A	Gen. assessment/ Annual health exam – GP/FP	* 2. General assessment/ re-assessment
A004A	General re-assessment – GP/FP	* 2. General assessment/ re-assessment
A007A	Intermed. assessment/well baby care	* 3. Intermediate assessment
K017A	Annual health exam-child aft. 2 <sup>nd</sup> birthday	* 4. Annual health exam - child
E070A	Geriatric general assessment prem	* 5. Geriatric care
E071A	Geriatric intermediate assessment prem	* 5. Geriatric care
E075A	Geriatric general assessment prem	* 5. Geriatric care
K004A	Family psychotherapy-2 or more members	* 6. Primary mental health care
K005A	Primary mental health care – individual – per unit	* 6. Primary mental health care
K007A	Individual psychotherapy	* 6. Primary mental health care
K013A	Counselling-one or more people	* 6. Primary mental health care
K025A	GP psychotherapy – 6-12 people	* 6. Primary mental health care
K099A	GP psychotherapy premium	* 6. Primary mental health care
C002A	General visits To Swts-GP/FP	* 7. Hospital care
C004A	General re-assessment in hospital – GP/FP	* 7. Hospital care
C007A	Hospital visits 6ths-13th Week – GP/FP	* 7. Hospital care
C008A	Concurrent care in hospital – GP/FP	* 7. Hospital care
C010A	Supportive care in hospital – GP/FP	* 7. Hospital care
A901A	Housecall assessment – GP/FP	* 8. Housecalls
B990A	Special visit to patient's home, wk/daytime	* 8. Housecalls
B991A	Each additional patient./Same visit. Mini-assessment	* 8. Housecalls
B994A	Special visit to patient's home/non-elective	* 8. Housecalls
W001A	Chronic care/convallescent hospital visit – subseq	* 9. Chronic care/long-term care visits
W002A	Chronic care/convallescent hospital visit - First flt	* 9. Chronic care/long-term care visits
W003A	Nursing home visit - first two visits per month	* 9. Chronic care/long-term care visits
W008A	Nursing home visits – subsequent – GP/FP	* 9. Chronic care/long-term care visits
W010A	LTC Monthly management fee	* 9. Chronic care/long-term care visits
W121A	Add'l NH vis due to intercurrent illness	* 9. Chronic care/long-term care visits
A888A	Partial. assessment – ED equivalent	* 10. Emergency department or equivalent
E030A	1992-1994 Emergency Dept	* 10. Emergency department or equivalent
H151A	Phys on duty sat./sun	* 10. Emergency department or equivalent
K995A	Spec vis - ED, mon-fr	* 10. Emergency department or equivalent
A009A	Oculo-visual. assessment – GP/FP	* 11. Vision care
A111A	Periodic oculo-visual assessment	* 11. Vision care
G512A	Weekly palliative care case management	* 12. Palliative care
K023A	Palliative care support /per unit	* 12. Palliative care
G590A	Influenza agent with visit	* 13. Flu shots
G591A	Influenza agent sole reason for visit	* 13. Flu shots
G538A	Immunization with visit, excl flu	* 14. Other immunization
G539A	Immunization - sole reason – excl flu	* 14. Other immunization
G499A	Office adolescent/adult	* 15. Office Procedures
G202A	Allergy-hypersensitivity injection with visit	* 16. Allergy shots
G212A	Allergy-hypersensit inj – w/visit	* 16. Allergy shots
G372A	Injection – with visit	* 17. Other injections
G373A	Injection - sole reason for visit	* 17. Other injections
G387A	1992-1994 Injection/infusion	* 17. Other injections
G388A	1992-1995 Injection/infusion	* 17. Other injections
E430A	Pap smear performed outside hosp	* 18. Pap smears
G365A	Pap smear – with visit	* 18. Pap smears
G271A	Anticoagulant supervision	* 19. Anticoagulant therapy
A030A	Anticoagulant assessment – GP/FP	* 20. Pre-operative assessment
K030A	Diabetic management fee	* 21. Diabetes management
E079A	Smoking cessation – Initial discussion	* 22. Smoking cessation



### Step 6,7. Focused Practice/Primary Care Activity Areas

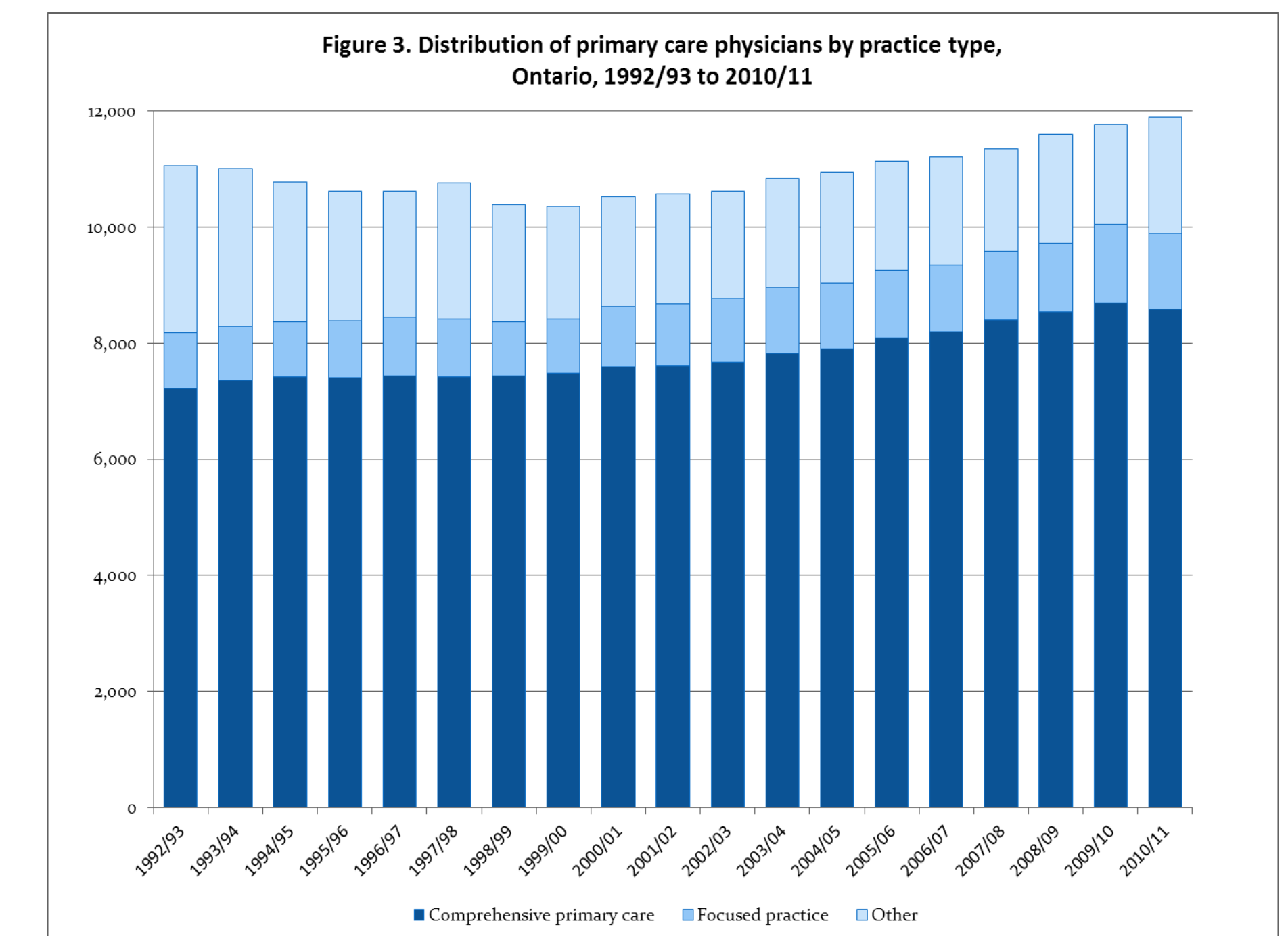
- Physicians were defined as in focused practice if 50% of their services were in a narrowly defined field of practice.
- Those not in focused practice needed to have core services in at least 7 of 22 activity areas to be defined as comprehensive.
- Seven was chosen using the distributional graph below. It appears to strike the right balance between including physicians who are truly comprehensive (sensitivity) and excluding those who are not (specificity).



## Results

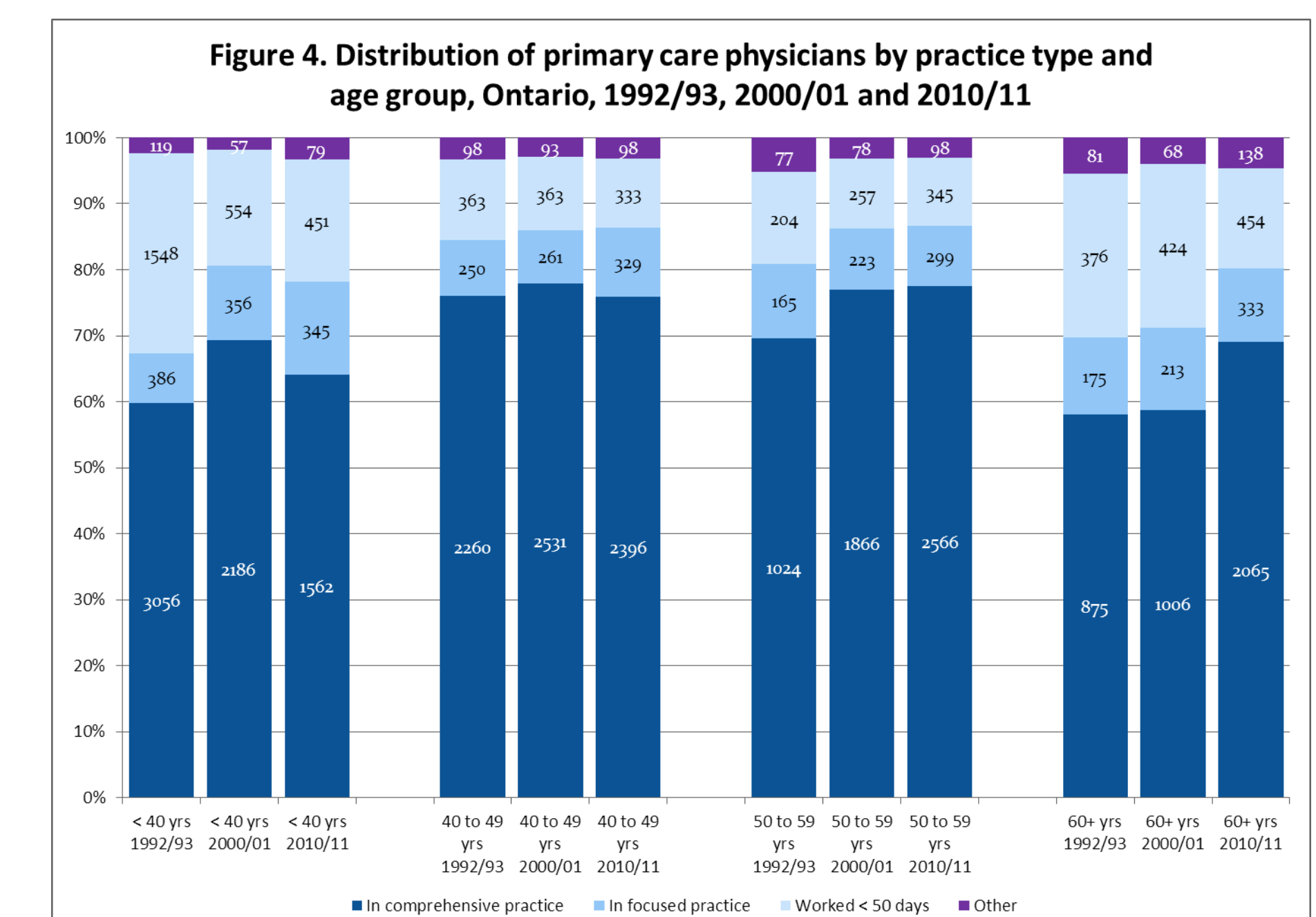
### Practice type over time

- The number of comprehensive primary care physicians rose by 19% between 1992/93 and 2010/11 and increased from 65% of the primary care pool to 72%.
- During the same period those in focused practice increased from 9% to 11% of the primary care pool.
- The decline in primary care physicians that occurred in the 1990s affected mainly those in the 'Other' category.



### Practice type and age group

- Physicians in the oldest and youngest age groups were less likely to be in comprehensive practice.
- Younger physicians often spend a few years in 'mixed' practice – working in the ED, doing locums etc.
- Older physicians may be working part-time as they transition towards retirement.



## Discussion and conclusions

- Limitations
  - Administrative data do not capture the details or nuances of clinical practice.
  - This is one of many feasible approaches to measuring the comprehensiveness of primary care office practice.
  - Physicians in patient enrolment models were assumed to be providing comprehensive care.
- Discussion
  - This method makes use of physician designation, model of care, days worked per year, percent primary care, and number of activity areas to determine comprehensiveness of primary care office practice.
  - This approach is feasible in other jurisdictions, although the details of physician designation and billing codes will vary.
- Conclusions
  - This is one of the first attempts to measure the comprehensiveness of primary care office practice.
  - It demonstrates that comprehensiveness is increasing in Ontario.