



## HA Convention Masterclass 2

# Integrated Mental Health Programme for Common Mental Disorder patients in GOPCs

On behalf of COC (Family Medicine)

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# Why do we need a program like IMHP (Integrated Mental Health Program)?

- **Increasing no. of patient suffering from Mood and Anxiety Disorder**
  - Rapid Urbanization
  - Isolation between people
  - Breaking down of social support
  - Achievement orientated society
  - Under-valued of “non-productive” leisure time
  - WHO : 21 Century is the Century of Depression

| Year    |        | All types of mental disorder | Mood disorder | Anxiety disorder |
|---------|--------|------------------------------|---------------|------------------|
| 2010-11 | Male   | 305,625                      | 57,166        | 50,045           |
|         | Female | 433,561                      | 147,905       | 99,888           |
|         | Total  | 739,186                      | 205,071       | 149,933          |
| 2011-12 | Male   | 312,151                      | 58,574        | 51,517           |
|         | Female | 443,594                      | 152,845       | 105,817          |
|         | Total  | 755,745                      | 211,419       | 157,334          |
| 2012-13 | Male   | 318,811                      | 60,252        | 52,773           |
|         | Female | 456,298                      | 158,217       | 111,931          |
|         | Total  | 775,109                      | 218,469       | 164,704          |

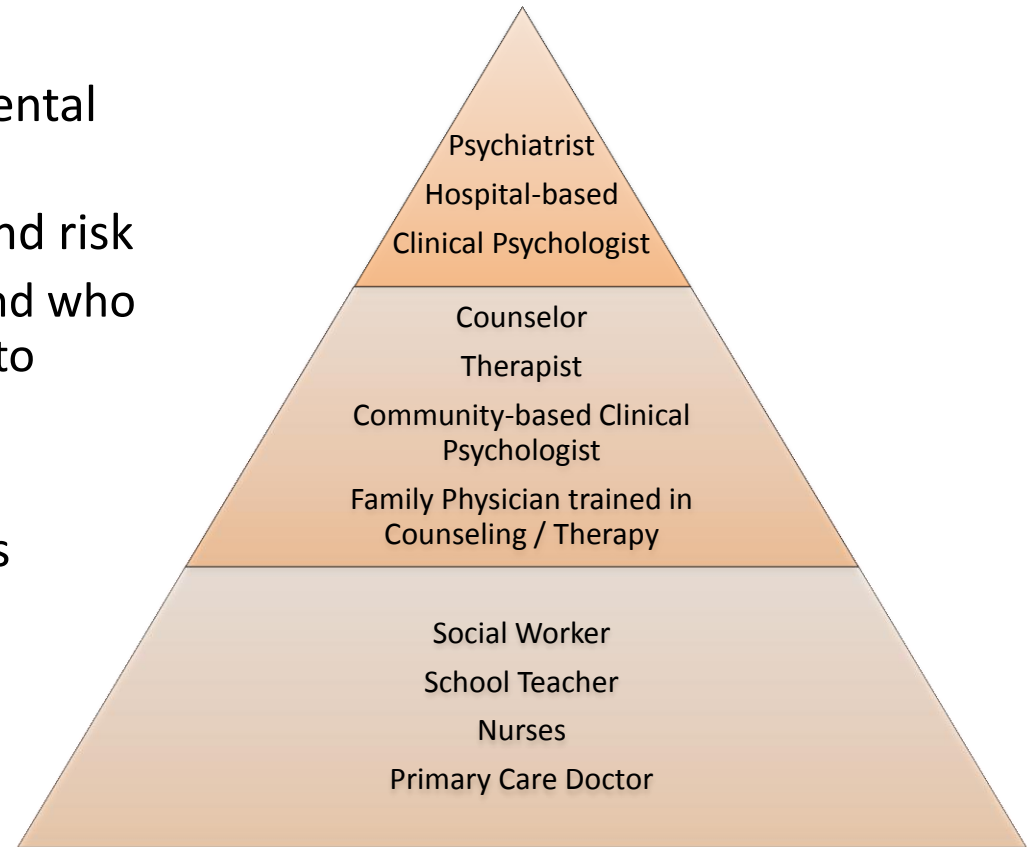
Hospital Psychiatric SOPC Attendance -  
Breakdown by year and gender

# What is the benefit of a primary care-based program?

- **Patient benefit**
  - Cared in own living environment
  - Cared in less stigmatizing environment
  - Early diagnosis and management
  - Early detection to prevent suicide
- **Secondary care benefit**
  - ↓Referrals
  - ↓Waiting time for needed clients
  - Capacity to manage severe cases

# Concern of a primary care-based program

- **Ability to handle mental disorders**
  - Only focus on common mental disorders
  - Stratification of severity and risk
    - Assessment for need and who will be in best position to deliver care
  - Protocol based
  - Regular review of progress
- **Time**
  - Multi-disciplinary team
- **Overseas trend and experience**



# Wagner Model

## The Chronic Care Model



# The IMHP model

- **Time-specific, encounter specific**
- **Key workers (nurse / social worker / OT)**
- **Risk stratification & monitoring by standardized tool : PHQ-9 & GAD-7**
- **Step-wise care:**
  - Low risk → key worker
  - Medium risk → key worker + primary care doctors
  - High risk → FM +/- Psychiatrist
- **Objective measurement of outcomes using PHQ-9 & GAD-7**

# Patient Health Questionnaire-9 (PHQ-9)

## PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered  
by any of the following problems?  
(Use "✓" to indicate your answer)

|   | Not at all | Several<br>days | More<br>than half<br>the days | Nearly<br>every day |
|---|------------|-----------------|-------------------------------|---------------------|
| 1. Little interest or pleasure in doing things  | 0          | 1               | 2                             | 3                   |
| 2. Feeling down, depressed, or hopeless   | 0          | 1               | 2                             | 3                   |
| 3. Trouble falling or staying asleep, or sleeping too much  | 0          | 1               | 2                             | 3                   |
| 4. Feeling tired or having little energy  | 0          | 1               | 2                             | 3                   |
| 5. Poor appetite or overeating  | 0          | 1               | 2                             | 3                   |
| 6. Feeling bad about yourself — or that you are a failure or<br>have let yourself or your family down   | 0          | 1               | 2                             | 3                   |
| 7. Trouble concentrating on things, such as reading the<br>newspaper or watching television   | 0          | 1               | 2                             | 3                   |
| 8. Moving or speaking so slowly that other people could have<br>noticed? Or the opposite — being so fidgety or restless<br>that you have been moving around a lot more than usual | 0          | 1               | 2                             | 3                   |
| 9. Thoughts that you would be better off dead or of hurting<br>yourself in some way   | 0          | 1               | 2                             | 3                   |

FOR OFFICE CODING 0 + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_  
=Total Score: \_\_\_\_\_

## 病人健康狀況問卷 — 9 (PHQ-9)

在過去兩個星期，你有多經常受以下問題困擾？  
(請用「✓」勾選你的答案)

|  | 完全沒有 | 幾天 | 一半<br>以上的<br>天數 | 近乎<br>每天 |
|--|------|----|-----------------|----------|
| 1. 做任何事都覺得沉悶或者根本不想做任何事                         | 0    | 1  | 2               | 3        |
| 2. 情緒低落、抑鬱或絕望                                  | 0    | 1  | 2               | 3        |
| 3. 難於入睡；半夜會醒或相反地睡覺時間過多                         | 0    | 1  | 2               | 3        |
| 4. 覺得疲倦或活力不足                                   | 0    | 1  | 2               | 3        |
| 5. 胃口極差或進食過量                                   | 0    | 1  | 2               | 3        |
| 6. 不喜歡自己——覺得自己做得不好、對自己失望或有負家人<br>期望            | 0    | 1  | 2               | 3        |
| 7. 難於集中精神做事，例如看報紙或看電視                          | 0    | 1  | 2               | 3        |
| 8. 其他人反映你行動或說話遲緩；或者相反地，你比平常活動<br>更多——坐立不安、停不下來 | 0    | 1  | 2               | 3        |
| 9. 想到自己最好去死或者自殘                                | 0    | 1  | 2               | 3        |

FOR OFFICE CODING 0 + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_  
=Total Score: \_\_\_\_\_

# Generalized Anxiety Disorder Assessment (GAD-7)

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems?

(Use "✓" to indicate your answer)

Not at all      Several days      More than half the days      Nearly every day

|  |   |   |   |   |
|--|---|---|---|---|
| 1. Feeling nervous, anxious or on edge               | 0 | 1 | 2 | 3 |
| 2. Not being able to stop or control worrying        | 0 | 1 | 2 | 3 |
| 3. Worrying too much about different things          | 0 | 1 | 2 | 3 |
| 4. Trouble relaxing                                  | 0 | 1 | 2 | 3 |
| 5. Being so restless that it is hard to sit still    | 0 | 1 | 2 | 3 |
| 6. Becoming easily annoyed or irritable              | 0 | 1 | 2 | 3 |
| 7. Feeling afraid as if something awful might happen | 0 | 1 | 2 | 3 |

(For office coding: Total Score T\_\_\_\_ = \_\_\_\_ + \_\_\_\_ + \_\_\_\_ )

GAD-7

在過去兩個星期，你有多經常受以下問題困擾？

(請用「✓」勾選你的答案)

完全沒有      幾天      超過一半或以上的天數      近乎每天

|                    |   |   |   |   |
|--------------------|---|---|---|---|
| 1. 感到緊張、不安或煩躁      | 0 | 1 | 2 | 3 |
| 2. 無法停止或控制憂慮       | 0 | 1 | 2 | 3 |
| 3. 過份憂慮不同的事情       | 0 | 1 | 2 | 3 |
| 4. 難以放鬆            | 0 | 1 | 2 | 3 |
| 5. 心緒不寧以至坐立不安      | 0 | 1 | 2 | 3 |
| 6. 容易心煩或易怒         | 0 | 1 | 2 | 3 |
| 7. 感到害怕，就像要發生可怕的事情 | 0 | 1 | 2 | 3 |

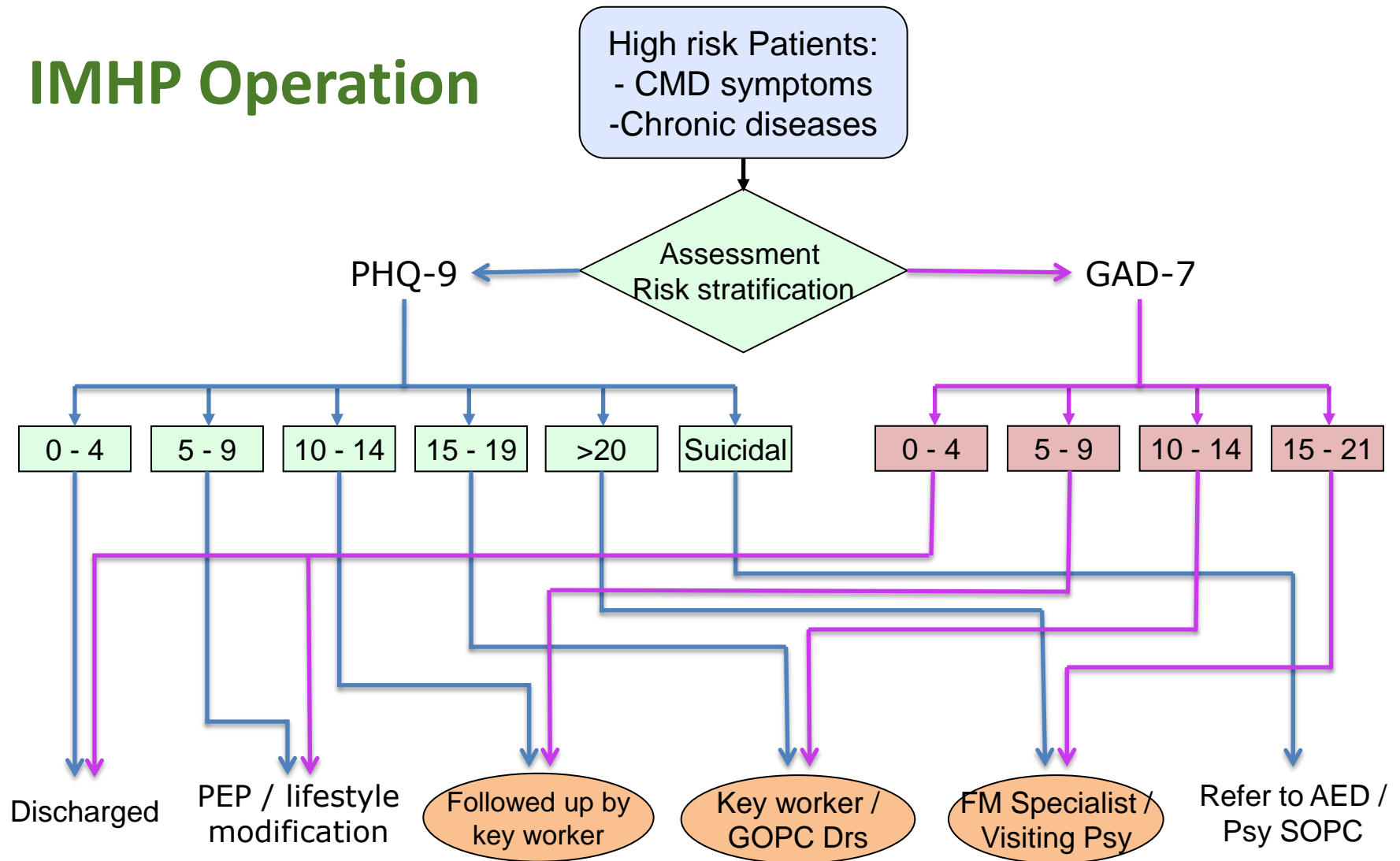
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# Roles & responsibilities of key workers

- **Nurse / social worker / occupational therapist (can be from NGO)**
- **Roles / functions:**
  - Initial assessment
  - Patient education & self management support
  - Care coordination
  - Follow up & symptom monitoring
  - Brief psychotherapy e.g. behavioural activation, problem solving therapy
  - Relapse prevention

# IMHP Operation



GOPC : General Out-patient Clinic  
 FMSC : Family Medicine Specialist Clinic  
 SOPC : Specialist Out-patient Clinic  
 AED : Accident & Emergency Department

# Intervention at IMHP

- **Education / self management skills**
- **Counseling**
  - (e.g. problem solving therapy, behavioural activation)
- **Pharmaceutical Intervention**
- **Relapse prevention plan for patients in remission**

# Implementation Plan

- **2010-11: 5 clusters**
- **2011-12: roll-out to 7 clusters**
- **Manpower used ~17**
- **Target patients:**
  - Chronic disease patients
  - Patients with CMD symptoms
- **Deliverables:**
  - 1 key worker : 600 patients / year

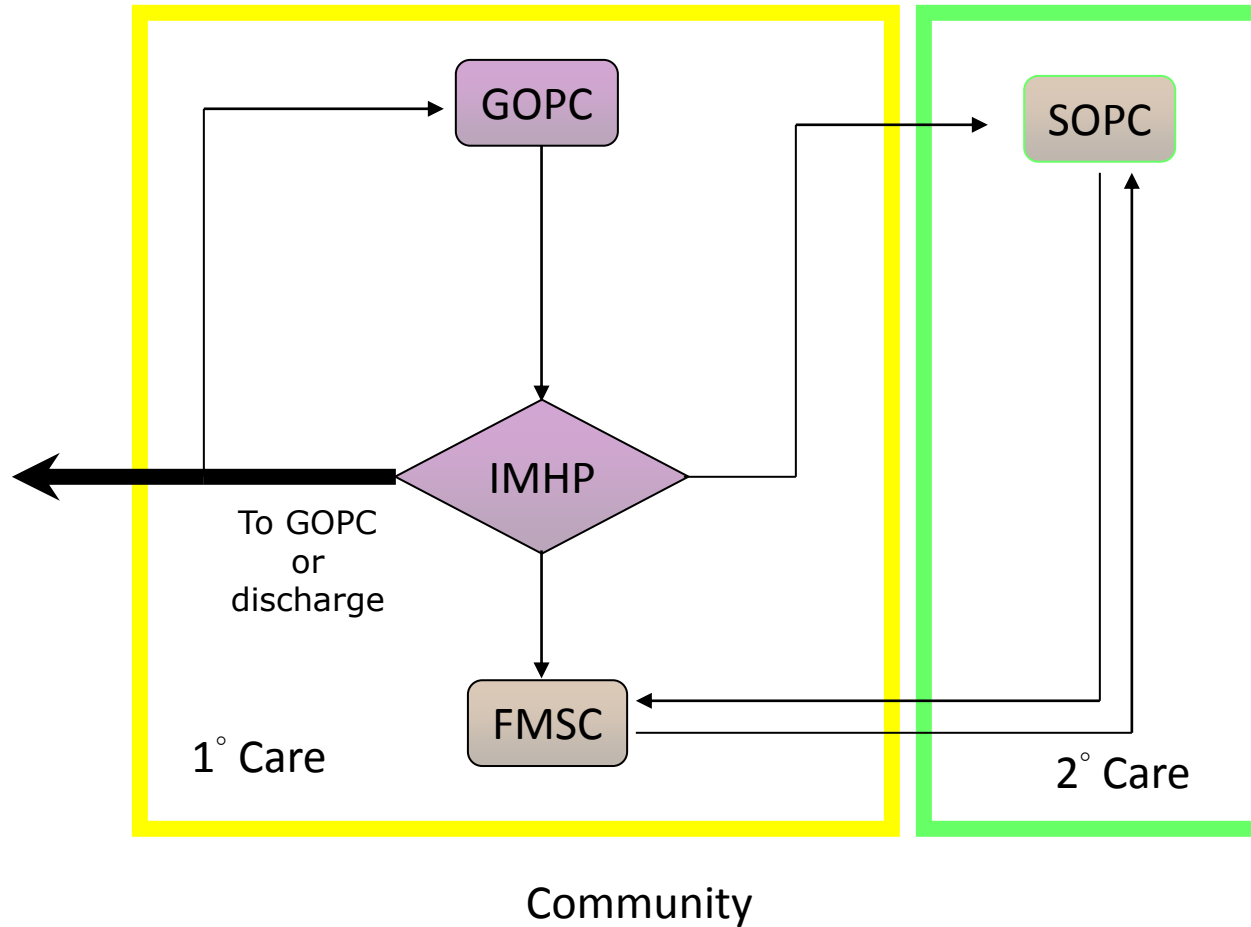
|           | 2010/11 | 2011/12 | 2012/13 | 2013/14 | Overall |
|-----------|---------|---------|---------|---------|---------|
| Doctor    | 2,261   | 8,926   | 12,179  | 11,368  | 34,734  |
| Keyworker | 4,353   | 16,556  | 26,198  | 25,250  | 72,357  |

**IMHP Attendance**

| Completed Case | Active Case |
|----------------|-------------|
| 8,579          | 3,153       |

**IMHP Case**

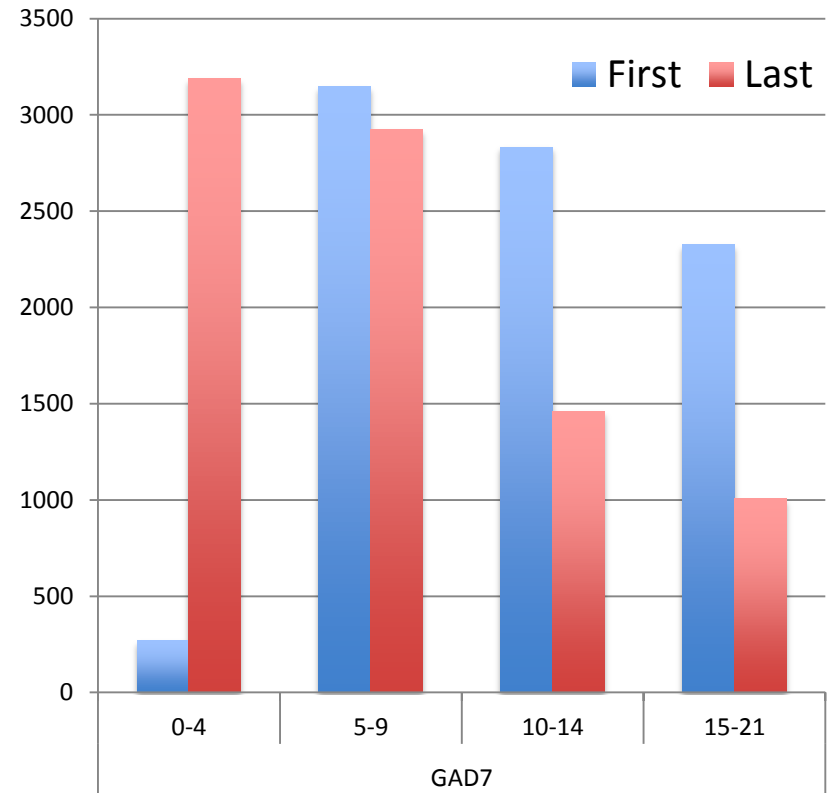
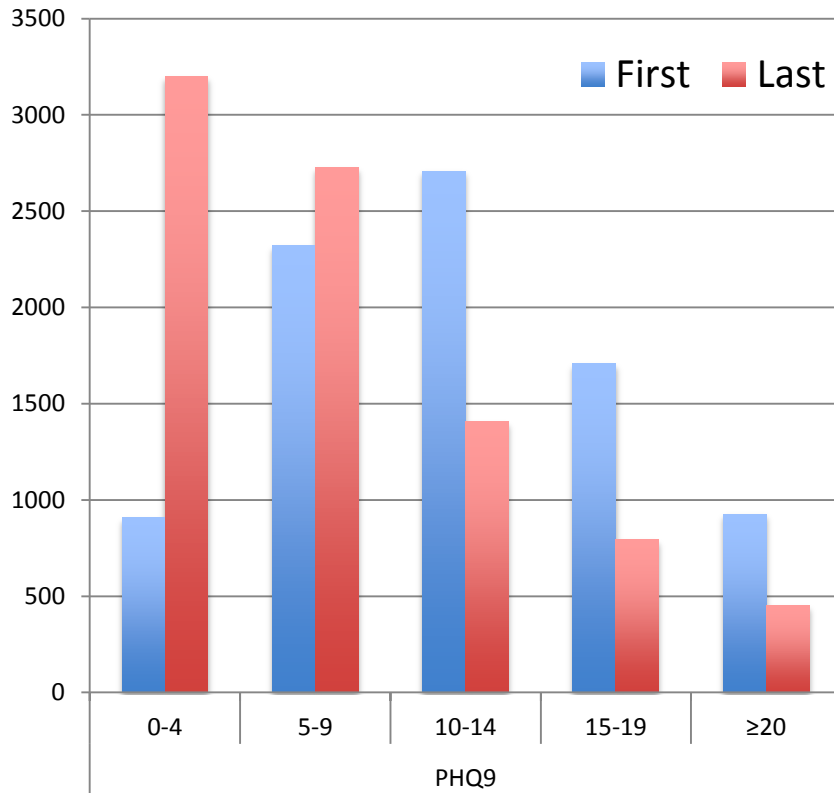
# 1° & 2° Care Integration



GOPC : General Out-patient Clinic  
FMSC : Family Medicine Specialist Clinic  
SOPC : Specialist Out-patient Clinic

# REVIEW OF RESULTS

# Change in PHQ-9 and GAD-7



Total Closed Case : 8,579

# Change in PHQ-9 by Gender

| PHQ-9 First Visit | Sex | PHQ-9 Last Visit |        |                  |        |                  |        |             |        |             |        | Sub-total |        | Total            |
|-------------------|-----|------------------|--------|------------------|--------|------------------|--------|-------------|--------|-------------|--------|-----------|--------|------------------|
|                   |     | 0-4              |        | 5-9              |        | 10-14            |        | 15-19       |        | ≥20         |        |           |        |                  |
| 0-4               | F   | 552              | 86.66% | 67               | 10.52% | 12               | 1.88%  | 4           | 0.63%  | 2           | 0.31%  | 637       | 7.43%  | 910<br>(10.61%)  |
|                   | M   | 241              | 88.28% | 29               | 10.62% | 2                | 0.73%  | 1           | 0.37%  | 0           | 0.00%  | 273       | 3.18%  |                  |
| 5-9               | F   | 733              | 44.78% | 792              | 48.38% | 78               | 4.76%  | 29          | 1.77%  | 5           | 0.31%  | 1637      | 19.08% | 2323<br>(27.08%) |
|                   | M   | 306              | 44.61% | 347              | 50.58% | 28               | 4.08%  | 5           | 0.73%  | 0           | 0.00%  | 686       | 8.00%  |                  |
| 10-14             | F   | 601              | 31.42% | 641              | 33.51% | 585              | 30.58% | 65          | 3.40%  | 21          | 1.10%  | 1913      | 22.30% | 2709<br>(31.58%) |
|                   | M   | 247              | 31.03% | 227              | 28.52% | 288              | 36.18% | 32          | 4.02%  | 2           | 0.25%  | 796       | 9.28%  |                  |
| 15-19             | F   | 256              | 21.39% | 321              | 26.82% | 209              | 17.46% | 357         | 29.82% | 54          | 4.51%  | 1197      | 13.95% | 1710<br>(19.93%) |
|                   | M   | 118              | 23.00% | 128              | 24.95% | 85               | 16.57% | 160         | 31.19% | 22          | 4.29%  | 513       | 5.98%  |                  |
| ≥20               | F   | 105              | 15.72% | 125              | 18.71% | 91               | 13.62% | 98          | 14.67% | 249         | 37.28% | 668       | 7.79%  | 927<br>(10.81%)  |
|                   | M   | 39               | 15.06% | 49               | 18.92% | 29               | 11.20% | 43          | 16.60% | 99          | 38.22% | 259       | 3.02%  |                  |
| Total             |     | 3198<br>(37.28%) |        | 2726<br>(31.80%) |        | 1407<br>(16.40%) |        | 794 (9.26%) |        | 454 (5.29%) |        | 8579      |        |                  |

## Overall

Improved : 4,451 (51.88%)  
 No Change : 3,670 (42.43%)  
 Worsen : 458 (5.34%)

## Significant (5,346)

Improved : 3,412 (63.82%)  
 No Change : 1,738 (32.51%)  
 Worsen : 196 (3.67%)



# Change in GAD-7 by Gender

| GAD-7<br>First Visit | Sex | GAD-7 Last Visit |        |                  |        |                  |        |               |        | Sub-total |        | Total            |
|----------------------|-----|------------------|--------|------------------|--------|------------------|--------|---------------|--------|-----------|--------|------------------|
|                      |     | 0-4              |        | 5-9              |        | 10-14            |        | 15-21         |        |           |        |                  |
| 0-4                  | F   | 129              | 74.57% | 30               | 17.34% | 8                | 4.62%  | 6             | 3.47%  | 173       | 2.02%  | 269<br>(3.14%)   |
|                      | M   | 84               | 87.50% | 8                | 8.33%  | 4                | 4.17%  | 0             | 0.00%  | 96        | 1.12%  |                  |
| 5-9                  | F   | 1035             | 48.05% | 1002             | 46.52% | 88               | 4.09%  | 29            | 1.35%  | 2154      | 25.11% | 3149<br>(36.71%) |
|                      | M   | 446              | 44.82% | 497              | 49.95% | 42               | 4.22%  | 10            | 1.01%  | 995       | 11.60% |                  |
| 10-14                | F   | 697              | 34.05% | 607              | 29.65% | 641              | 31.31% | 102           | 4.98%  | 2047      | 23.86% | 2833<br>(33.02%) |
|                      | M   | 270              | 34.35% | 212              | 26.97% | 266              | 33.84% | 38            | 4.83%  | 786       | 9.16%  |                  |
| 15-21                | F   | 383              | 22.82% | 395              | 23.54% | 295              | 17.58% | 605           | 36.05% | 1678      | 19.56% | 2328<br>(27.14%) |
|                      | M   | 146              | 22.46% | 174              | 26.77% | 114              | 17.54% | 216           | 33.23% | 650       | 7.58%  |                  |
| Total                |     | 3190<br>(37.18%) |        | 2925<br>(34.09%) |        | 1458<br>(16.99%) |        | 1006 (11.73%) |        | 8579      |        |                  |

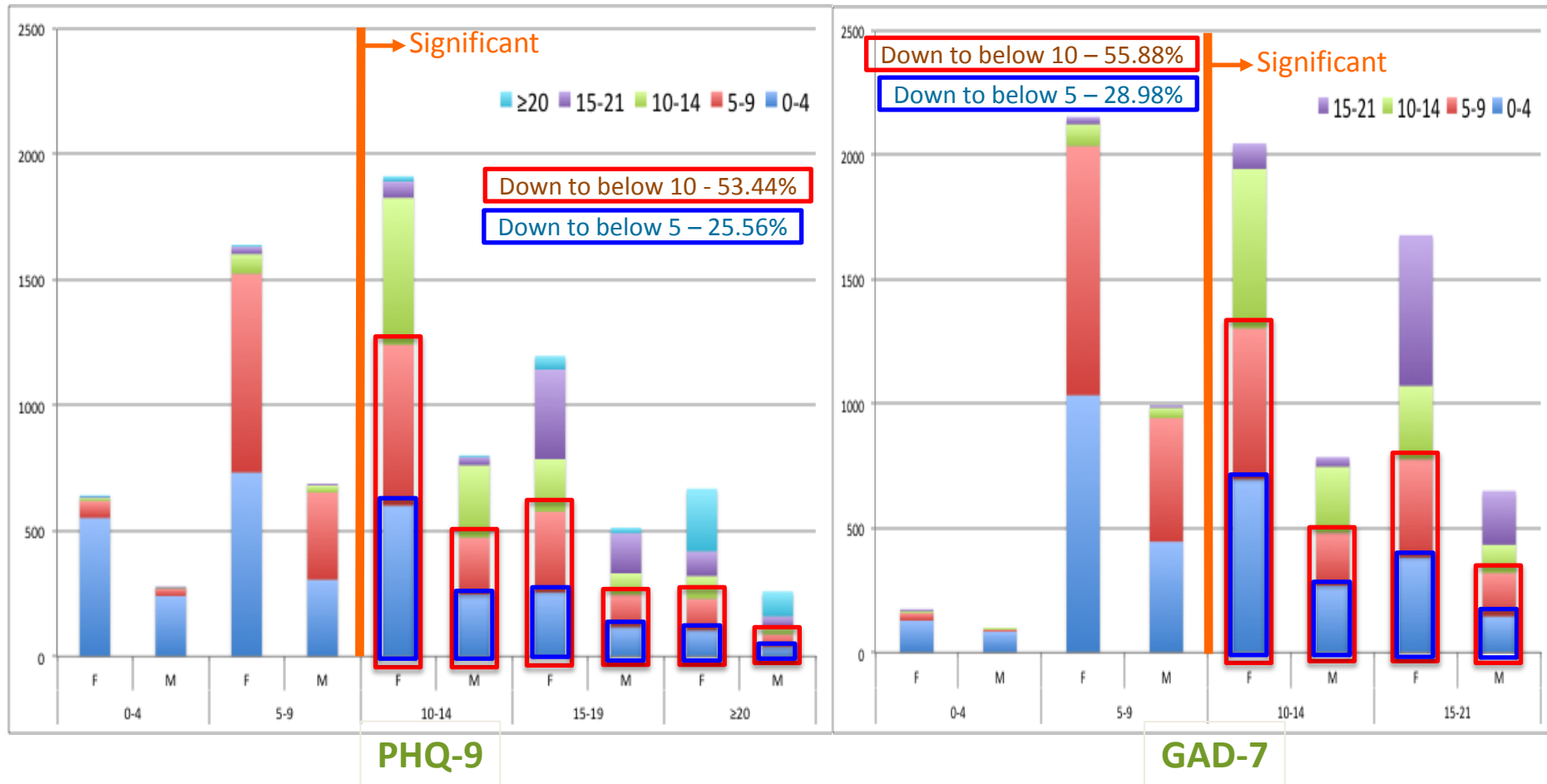
## Overall

Improved : 4,774 (55.65%)  
 No Change : 3,440 (40.10%)  
 Worsen : 365 (4.25%)

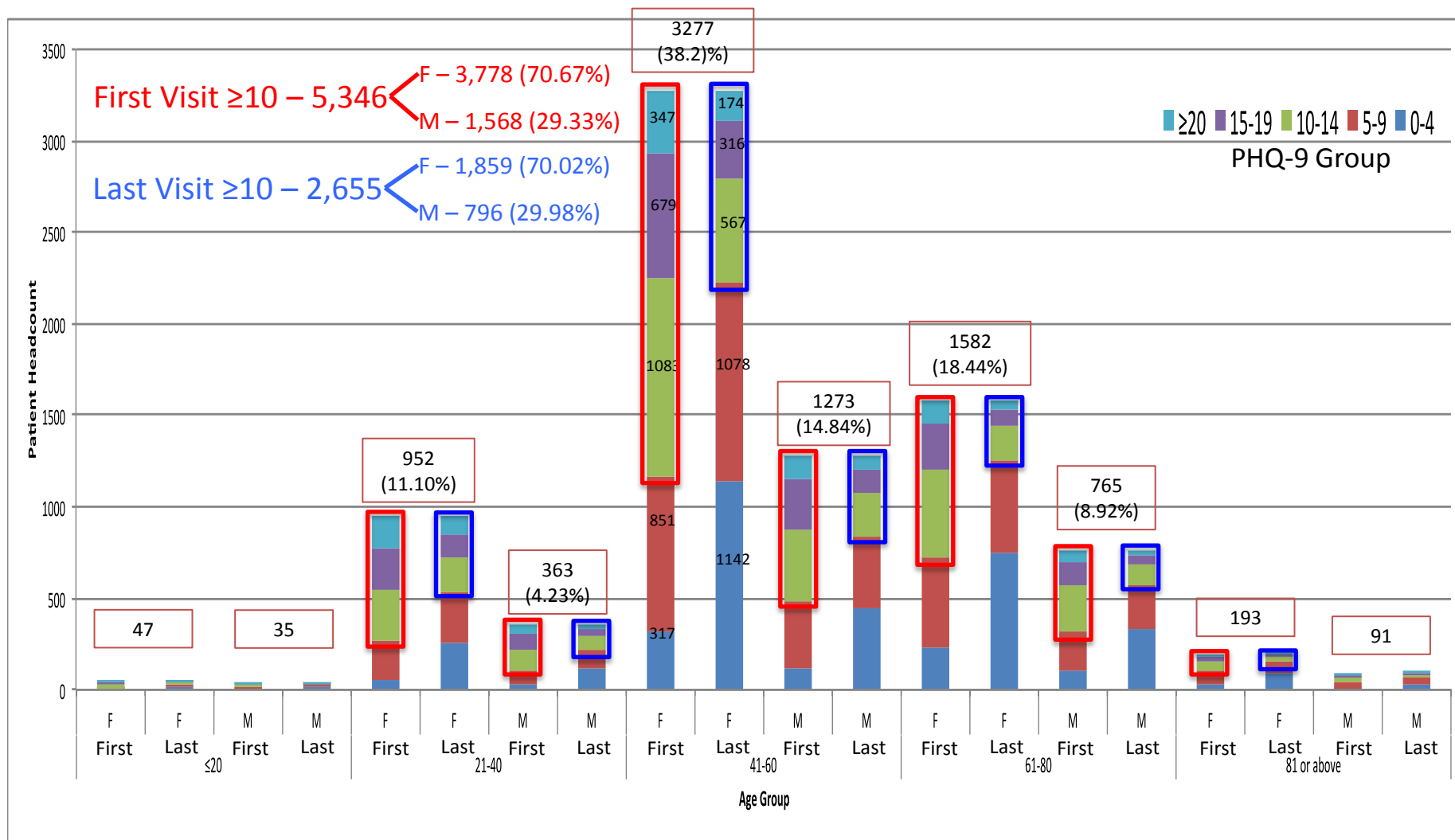
## Significant (5,161)

Improved : 3,293 (63.81%)  
 No Change : 1,728 (33.48%)  
 Worsen : 140 (2.71%)

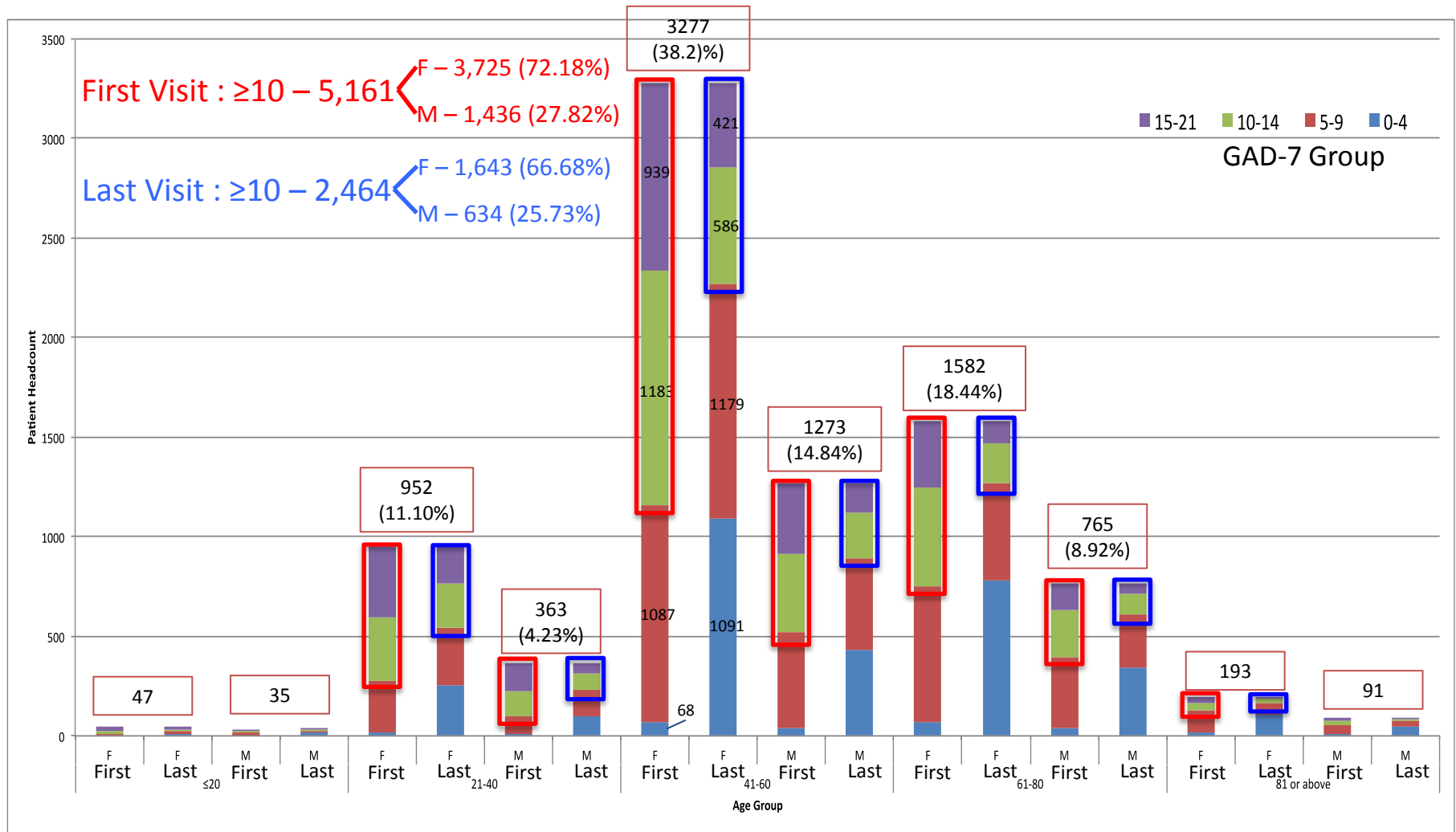
# Change in PHQ-9 & GAD-7 by Gender



# Change in PHQ-9 by Gender & Age



# Change in GAD-7 by Gender & Age



# Problems emerged among IMHP Patients

- **Immigrant problems (Females)**
  - Marital
  - Children raising
  - Housing
- **Bereavement**
- **Elderly Depression**
- **Carer**
  - Dementia
  - Chronic Disease / Terminal Illness

# Areas to be explored

- More sophistication in treatment modality balance with limitation in setting
- More effective way to help patient with anxiety
- ?Community-based Clinical Psychologist +/- Psychology Assistant
- The same model can be applied in private sector?

# Success Factors

- **Close collaboration among team members**
  - Monthly case conference
  - Constant learning of teams
    - Social Worker
      - Medical knowledge, chronic diseases, drugs effects and side-effects
      - How the medical system works
    - Medical staff
      - Ability of social worker, how to utilize the support of them
      - Basic psychological skill
    - Nursing staff
      - Coordination
      - Patients' psychological reaction
  - Willingness to “knock on the door”

# Summary

- **Primary care-based program** for Common Mental Disorders – Depression and Anxiety
- **Protocol-based stratification and monitoring** using a standard assessment tool
- **“Keyworker” as case manager** to follow and coordinate the care of patients
- Primary care-based **simple psychological intervention +/- medication** as per protocol
- 8,579 completed case and 3,153 active cases since program started from 4Q 2010 with 107,091 attendance (Doctor : Keyworker ~ 1 : 2)
- **2/3 Improved, 1/2 back to functional level and 1/4 to normal level**



**Thanks to IMHP Teams of Clusters in providing data for analysis**

**Special thanks to**

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**in production of the introductory video**