Does IMPACT Model work well in our locality? Experience sharing from the POH IMPACT Program(悅滿計劃)

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HA Convention 2011
7 June 2011

新界西·醫院聯網
New Territories West Cluster

POH IMPACT Program (悅滿計劃)-

Mental Health Program for Management of Depression for community dwelling Elderly

(Improving Mood Promoting Access to Collaboration Treatment)

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New Territories West Cluster

Depression-
A Worldwide and Local Problem

- 10% in primary care
- Higher percentage in patients with chronic illnesses
- Increasing number of new cases per year
- Top 2 cause of disability (WHO) by 2030
- 50-100% higher health care cost

Elderly Suicidal Rate in Hong Kong is the Highest amongst Many Developed Countries

Comparison of suicide rates (per 100,000) by gender, age amongst selected Western countries

Country	Year	Gender	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	All Ages
Hong Kong	*2001*	*M*	*0.4*	*11.2*	*25.8*	*22.5*	*25.1*	*23.0*	*29.9*	*50.3*	*19.5*
		F	*0.4*	*6.8*	*12.8*	*13.0*	*10.6*	*11.5*	*17.0*	*31.4*	*10.9*
Australia	1999	M	0.7	22.1	35.4	29.6	24.3	21.3	21.7	30.0	21.2
		F	0.5	5.3	8.1	7.3	7.5	5.5	4.1	3.4	5.1
Canada	1997	M	1.9	22.4	22.7	27.0	27.4	22.7	20.6	27.0	*19.6*
		F	0.6	4.5	5.9	7.2	8.7	6.0	4.7	4.3	*5.1*
New Zealand	1998	M	3.0	38.1	39.2	28.9	20.1	17.5	22.5	28.0	*23.7*
		F	1.4	13.3	8.5	9.7	6.8	4.4	7.7	5.1	*6.9*
UK	1999	M	0.1	10.6	18.1	17.3	15.3	12.3	9.8	15.5	*11.8*
		F	0.0	2.5	3.9	4.7	4.3	4.0	4.2	5.1	*3.3*
US	1998	M	1.2	18.5	22.9	24.0	23.1	21.3	26.2	45.2	*18.6*
		F	0.4	3.3	4.9	6.9	7.0	5.5	4.3	5.2	*4.4*

Source: HKJC Centre for Suicide Research & Prevention

Elderly having the Highest Suicidal Rate

In Reality:

- Few elderly get effective treatment

In Reality:
few elderly get effective treatment

- **Less than 10% seek help from a mental health specialist**
  - Stigmatizing
  - Most prefer their primary care physician
- **50 % being recognized or started treatment or referred**
- **Limited access to evidence-based psychological treatments (psychotherapy)**
- **Increasing use of antidepressants but treatment is often not effective**
  - Only 20 – 40 % improve substantially over 12 months

Barriers to Effective Depression Care

- Challenges in Primary Care
  - **Limited consultation time**
  - **Early treatment dropout and high defaulted rate**
  - **Staying on ineffective treatments for too long**

    "I thought this was as good as I was going to get"
  - **Limited access to mental health service**

    Long waiting time for SOPD new case appointments

Current Issues of Depression Management in Our Locality

- ***Under diagnosed***
- ***Under treatment***
- ***Under collaboration***
- ***Primary care practitioners in community are under support***

What is IMPACT**?**

- **Adopted from U.S. IMPACT model**
- **Evidence based management program for late life depression**
- **To date, over 170 clinics implemented the core components of IMPACT program and over 3000 clinicians trained.**
- **Participants have**

  -better antidepressant compliance,
  -improved depressive symptoms,
  -less suicidal thoughts,
  -higher remission of depression,
  -higher physical functioning,
  -better quality of life,
  -greater satisfactory and more cost effectiveness than those with usual care

POH IMPACT Program(悅滿計劃) began in June 2009

- Applying US IMPACT model in our locality
- Piloted at POH Family Medicine Specialist Clinic (FMSC) to serve the elderly population in Yuen Long area.
- Under the collaboration from the Department of Family Medicine and Well Elderly Clinic
- Funded by the Wai Hung Donation
- Since 2010, we have another community partner joined in – the Community Rehabilitation Network(CRN)
- It involves screening, assessment, management, patient empowerment, and monitoring and relapse prevention under a multidisciplinary TEAM work approach.

Objective

- To enhance psychological well being of elderly in our community
- To support primary care doctors in managing depression *(improving diagnosis, improving treatment effectiveness, improving support and collaboration)*
- To promote evidence based practice for depression management
- To improve outcomes and cost effectiveness of depression management
- To improve satisfaction of both patients and health care providers

Core Team Members

- **Primary Care Practitioner** (FM trainees from POH FMSC)
- **Depression Care Manager** (Social Worker from Well Elderly Clinic)
- **FM Specialist** (Department of Family Medicine, NTWC)
- (Department of Psychiatry, Castle Peak Hospital) ***+/-*** **Psychiatrist**

IMPACT Program (Modified)

TWO STEPS

1. Systematic diagnosis and outcomes tracking

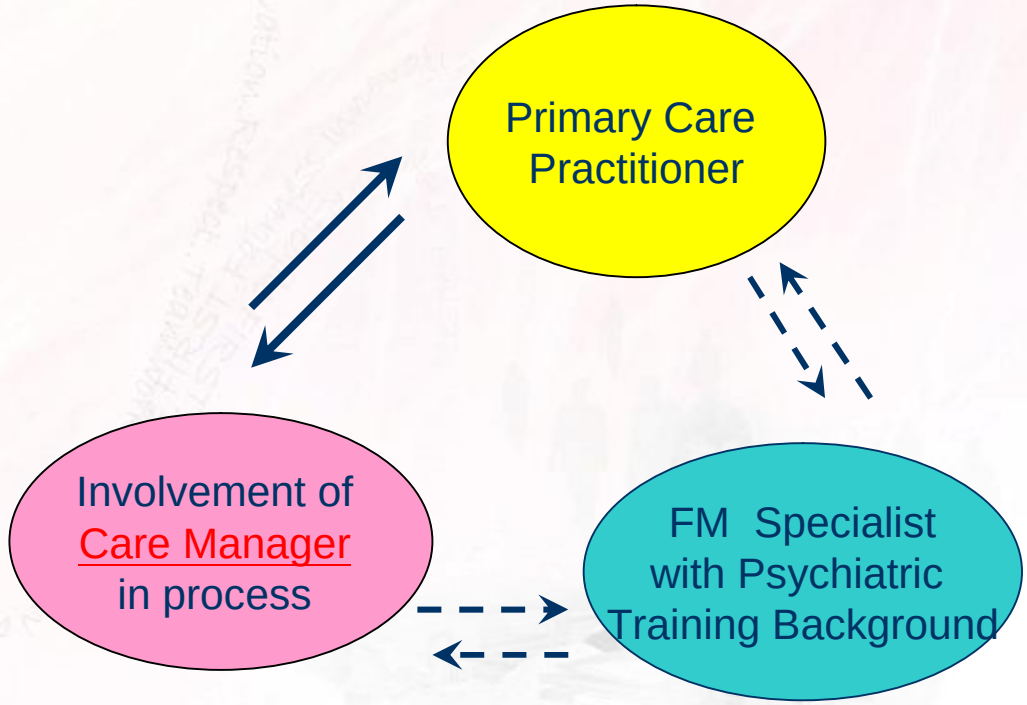
   e.g., PHQ-9 to facilitate diagnosis and track depression outcomes

2. Stepped Care

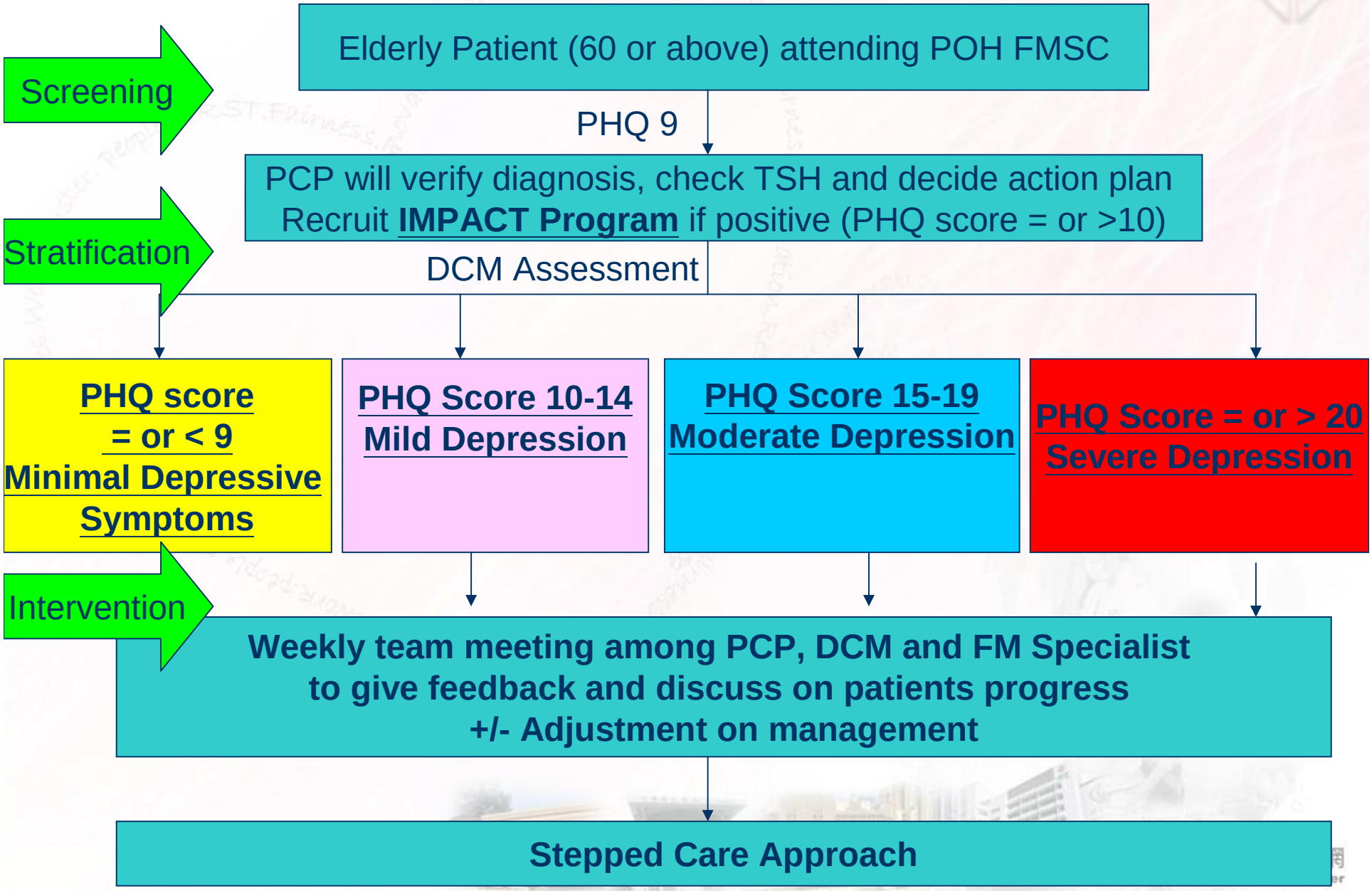
a) Change treatment according to evidence-based algorithm if patient is not improving

b) Relapse prevention once patient is improved

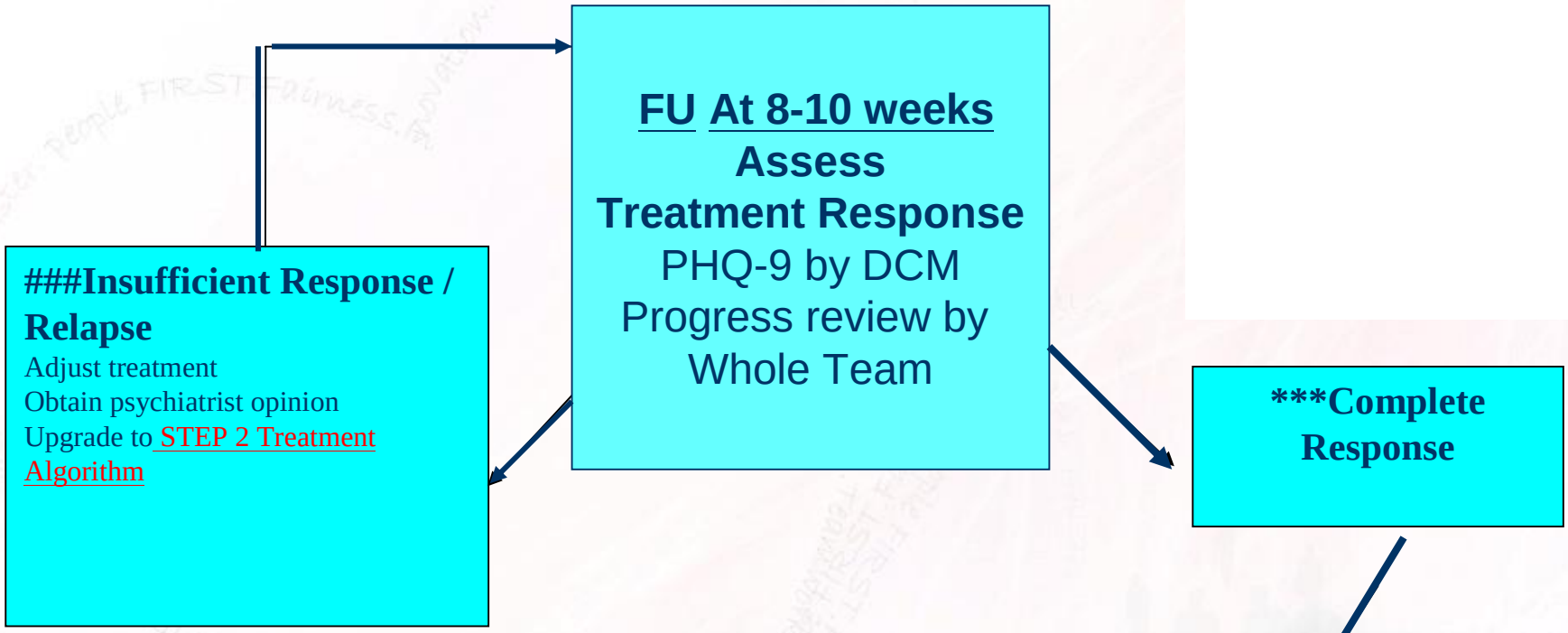
THREE TEAM MEMBERS



POH IMPACT FLOW CHART



Stepped Care Approach



Maintenance & Relapse Prevention

- Maintenance of drug therapy at least 6 months after depression in remission. -----
Advise drug maintenance for 2 years for high risks cases.
Telephone follow-up by DCM for 6-12 months
-DCM will inform PCP or FM Specialist if relapse occurred

Integrate Care + Team Approach

Depression	PHQ 9-Score	Treatment	Team Members
Mild	< 10	1. Patient education / self-management support	1. Depression Care Manager (DCM) 2. Primary care providers (PCP)
Moderate depressive	10-14	1. Patient education / self-management support 2. Antidepressant or 3. brief Psychotherapy	1. Depression Care Manager (DCM) 2. Primary care providers (PCP) 3. FM specialist
Moderately Severe	15-19	1. Patient education / self-management support 2. Antidepressant or 3. Psychotherapy	1. Depression Care Manager (DCM) 2. Primary care providers (PCP) 3. FM specialist
Severe	>/= 20	1. Patient education / self-management support 2. Antidepressant or/and 3. Psychotherapy	1. Depression Care Manager (DCM) 2. Primary care providers (PCP) 3. FM specialist 4. Psychiatrist

Core Component of IMPACT program

- **Screening / case finding**
  - using PHQ 9 questionnaire (Chinese version), cut off equal or > 10
  - validated to be highly sensitive (80-90%) and specific (70-85%) 10
  - recommended by US Task Force11, Canadian Task Force on preventive care for depression screening12 and Guidelines for preventive activities by RACGP
  - benefits of screening outweighs potential harm
- **Patient education / self-management support**
- **Support medication treatment prescribed in primary care doctor**
  - Monitor adherence, side effects, effectiveness
  - Function as the 'eyes and ears of the doctor
- **Proactive outcome measurement / tracking**
  - monitoring progress by PHQ-9 symptoms score at regular interval
- **Brief counseling** (e.g. Behavioral Activation, PST-PC, IPT, CBT)
- **Stepped care** (Failed to respond to initial treatment)
  - increase treatment intensity as needed
  - FM Specialist consultation to provide care for patients not responding as expected
- **Team Meeting at weekly basis to review cases load and management plan**
  - FM Specialist review management plan and provide support for primary care doctors
  - Feedbacks and discussion among team members on individual patient progress
- **Relapse Prevention**
  - Telephone FU by DCM

Patient Empowerment Activity

- Jointly organized with CRN
  - a patient empowerment project
  - “活得自在--身心健康課程“
  - showed preliminary satisfactory results

Group sessions in the Group


「社區復康網絡」
身心
健
課

Evaluation through:

1. Pre & Post Evaluation:
   - PHQ 9,
   - Knowledge base on depression/problem solving
   - Self Happiness Score
   - Self Efficacy Score
   - Life Satisfaction Score
   - Quality Of Life (SF-12 version 1)

Our Findings

- Preliminary data of POH IMPACT
  - Empowered patients
  - Significant diagnosed those in need
  - Significant improvement for these diagnosed patients

https://impact.ucla.edu - Clinical Information System 3 - Microsoft Internet Explorer

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Study or Prescreen ID : 61-508 **Clinic Notes Caseload Recruitment Logout**

Project Impact Initial Assessment

To *(Primary care clinician)* : Dr. _____ **Today's date:** 03/29/2000

Mr./Ms.: _____ *MR#:* _____

has been identified by the **Impact** study team to have symptoms of depression. S/he attended an initial educational session on 03/29/2000 and has received the video tape and educational brochure on depression treatment.

Depression Symptoms **(bold face** *indicates the symptom that bothers the patient the most)*

Major Depression (5/9 symptoms for > 2 weeks)	Dysthymia (3/7 symptoms for > 2 years)
☑ * Depressed mood *	☑ * Depressed mood *
☑ * Loss of interest or pleasure *	☑ Diminished ability to think or concentrate
☑ Diminished ability to think or concentrate	☑ Fatigue / Loss of energy
☑ Fatigue / Loss of energy	☑ Sleep disturbance
☑ Worthless / Guilty	☑ Poor appetite or overeating
☑ Thoughts of death or suicide	☑ Low self-esteem
☑ **Sleep disturbance** (Sleeps __ hrs/nite)	☑ Feelings of hopelessness
☑ Appetite / Weight change (___ ____ lbs.)	PHQ depression score: **23 / 27** (severe)
☑ Physical agitation or slowness	

a. Activities affected: ☑ social ☑ personal ☑ family ☑ work

b. # bed days last month: 4 **c.** # restricted days last month: 26

d. Family history of depression? ☐ **e.** Patient last felt good 1 mos ago

Other Symptoms : Anxiety , Pain (Score: 10 / 10) , no active SI, one attempt age 40

Current Medical Problems : Fibromalgia,Angina, Migraines, occasional intestional blockage.

Current Medications *(Bold print indicates medications which may contribute to depression)*

Trazodone 50mgs hs, Clonazapine, Effexor- 2 years on this, Atalact, Vicodin, Vitamins, Inhaler

Allergies : Sulfa, ASA. Motrin, Morphine,Myfoxin

Stressors : In '96 lost their business- their retirement money was lost with the business. Neither of them can find a job now.

Strengths and Resources : Daughter. Son. Husband

Pleasant activities : Kiwainas

Prior treatments : Antidepressant(s) (Helpful), Psychotherapy

Patient is **now** interested in: Antidepressant, Psychotherapy

Last TSH : 2.26 µU/ml Date: 11/09/1999

Provisional Diagnostic Impression : Major Depression, Dysthymia

Other Comments : Patient attended anxiety and depression classes in Psychiatry without sucess in controlling symptoms.She was on Prozac 6 years ago for a brief time. She thinks it may not have been a complete trial on this med. She has been depressed at times in her life and it is worse now. Effexor helped her in the beginning but not as much recently. She also feels ill on it.

Patient question(s) for the primary care provider :

Assessed by: Rita Haverkamp, MSN, RN, CNS *Phone Number:* 619-589-3313

Primary Care Provider: Dr. _____ *Phone Number:* _____

Mental Status: tearful, oriented, poor eye contact at first

Current Medical Problems: non-insulin dependent diabetes,urinary incontinence, osteoarthritis in both hips, foot pain , hypothyroidism, hypertension

Current Medications: Lisinopril 20mgs, Levothroid, Calcium, Glucosamine/ Chondrotin, Glucophage, Vitamins

Allergies: nka

Stressors: urinary incontinence, fear of urinary accidents, husbands death- 6 years ago, difficulty managing blood sugar

Strengths and Resources: family, several girl friends.

Pleasant activities: used to teach swimmingand go on outings with friends, reads

Treatment History: None recorded. Patient is **now** interestedin: Psychotherapy

Assessment: depression secondary to medical problems and decreased pleasant activities

Provisional Diagnostic Impression: Major Depression

Treatment Plan

Medication Schedule

Name of Medication: Trazodone
Take 1/2 tablet of 50 mg every evening

PST-PC: ☑ **Depression Class:** ☐

Other Treatments: take tylenol for pain

Next Follow-up with DCS 2: Date: 7 / 28 / 2004 Time: 10 : 00 AM At the clinic

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Assessed by: DCS 2 **Phone Number:**
Primary Care Clinician: PCP 3 **Phone Number:**

Impact
Continued Care Plan

Name: Green, Sandra Jo **MRN**: 12345678 **Date of Contact:** 8 / 18 / 2005 (by telephone)

Contact / Appointment Information

Primary Care Clinician: PCP 3 **Tel. No.:**

Depression Clinical Specialist: DCS 2 **Tel. No.:**

Next appointment: Date: 9 / 15 / 2005 Time: 9 : 15 AM By telephone

Personal Warning Signs

1. tearful
2. don't want to go out
3.
4.

Maintenance Antidepressant Medications

1. Take Venlafaxine XR: 1 tablet of 75 mg at least until 11/15/2005
2. Take Trazodone: 1 tablet of 50 mg every evening

Other

1. will walk 15 min/ day 5 days a week
2. go to farmers market and buy fresh fruit
3.
4.

Assessed by: DCS 2 **Phone Number:**

Primary Care Clinician: PCP 3 **Phone Number:**

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Study or Prescreen ID : 61-508 Clinic Notes Caseload Recruitment Logout

Project Impact
Relapse Prevention Plan

Patient Name: _____ **MR#:** _____ **Today's date:** 08/03/2000

Contact / Appointment Information

Primary Care Clinician: _____ **Tel. No.:** _____

Next appointment: *Date:* _____ *Time:* _____

Depression Clinical Specialist: Rita Haverkamp, MSN, RN, CNS **Tel. No.:** 619-589-3313

Next appointment: *Date:* _____ *Time:* ____

Maintenance Antidepressant Medications

1. Fluoxetine : 3 tablet(s) of 10 mg every morning. Take medication at least until 08/02/2002
2. Trazodone : 1 tablet(s) of 50 mg every evening. Take medication at least until 08/02/2002

Call your primary care provider or your depression clinical specialist with any questions (See contact information above)

How to Minimize Stress from Depression

1. Keep house clean and in order-"Do it now"
2. Problem solving
3. Keep active

Personal Warning Signs

1. Not wanting to do anything
2. Having the old feelings regarding the past

If symptoms return, contact Rita Haverkamp, MSN, RN, CNS

Two New 'TEAM MEMBERS'

Role of Depression Care Manager

1. Patient education
2. Self management support
3. Close follow-up
4. Support the Rx
5. Offer Psychotherapy
6. Facilitate treatment change
7. Relapse prevention

Two New 'TEAM MEMBERS'

Role of Family Medicine Specialist

1. **Caseload consultation for**
   - -care manager
   - -PCP
2. **Diagnostic consultation on difficult cases**
3. **Consultation focused on patients not improving**
4. **Recommendations for:**
   - -Treatment plan
   - -Consult with / referral according to the guidelines to Psychiatrist

Role of PCP

Assessment:

- -Review PHQ-9 results, confirm and verify diagnosis, decide action plan
- -R/O hypothyroid(check TSH if not available within 6 months) for those with depressive symptoms

Treatment:

- -supportive counseling, antidepressant as indicated
- -FU interval according to clinical needs
- -Step up treatment algorithm according to treatment response
- -Maintenance drug treatment at FMSC FU

Collaborate with DCM on Management Plan & Relapse Prevention

Role of Depression Care Manager

- Educates patients and their significant others
- Engages patients in treatment
- Provides proactive follow-up, tracks clinical responses with PHQ-9
- Provides behavioral activation (e.g. physical activity planning) and pleasant events scheduling
- Facilitates adherence to antidepressant treatment
- Facilitates changes in antidepressant medications or other treatment if patients is not improving
- Offers a brief course of counseling for depression (e.g., Problem Solving Treatment in Primary Care (PST-PC) or facilitates access to counseling/psychotherapy as needed
- Works closely with the primary care provider and a consulting psychiatrist to revise the treatment plan when patients are not improving,

Role of FM Specialist with psychiatric training background

- responsible for supporting depression treatment provided by the primary care provider and a depression care manager to patients in the IMPACT program
- provides regularly scheduled caseload supervision, suggests changes in treatment
- provides telephone or in-person consultation to depression care managers and primary care providers
- when clinically indicated, sees patients who are not responding to initial treatment in primary care in consultation
- Psychiatric support/opinion can be accessed at regular interval for refractory cases

1.5 Years Result of POH IMPACT Program 悅滿計劃

(Jun 2009 to Dec 2010)

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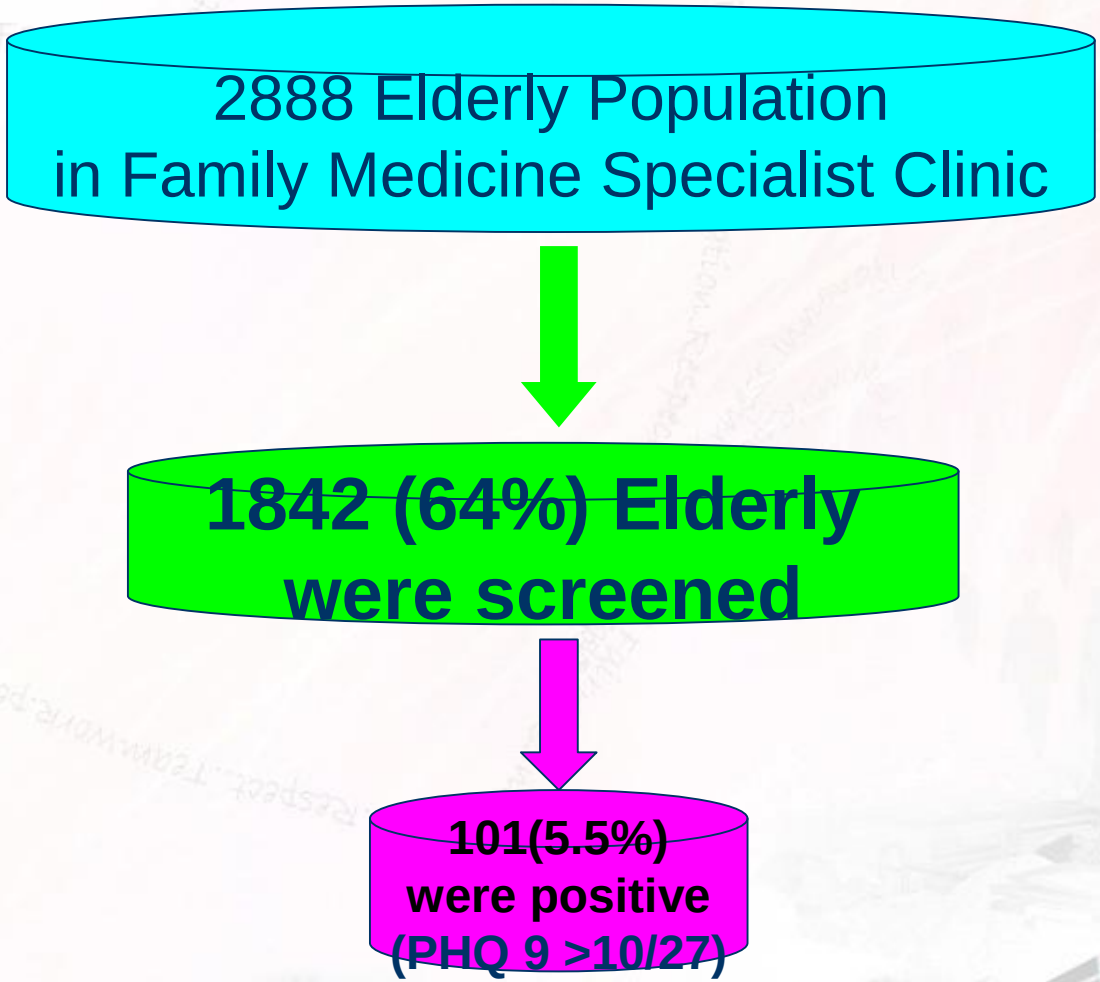
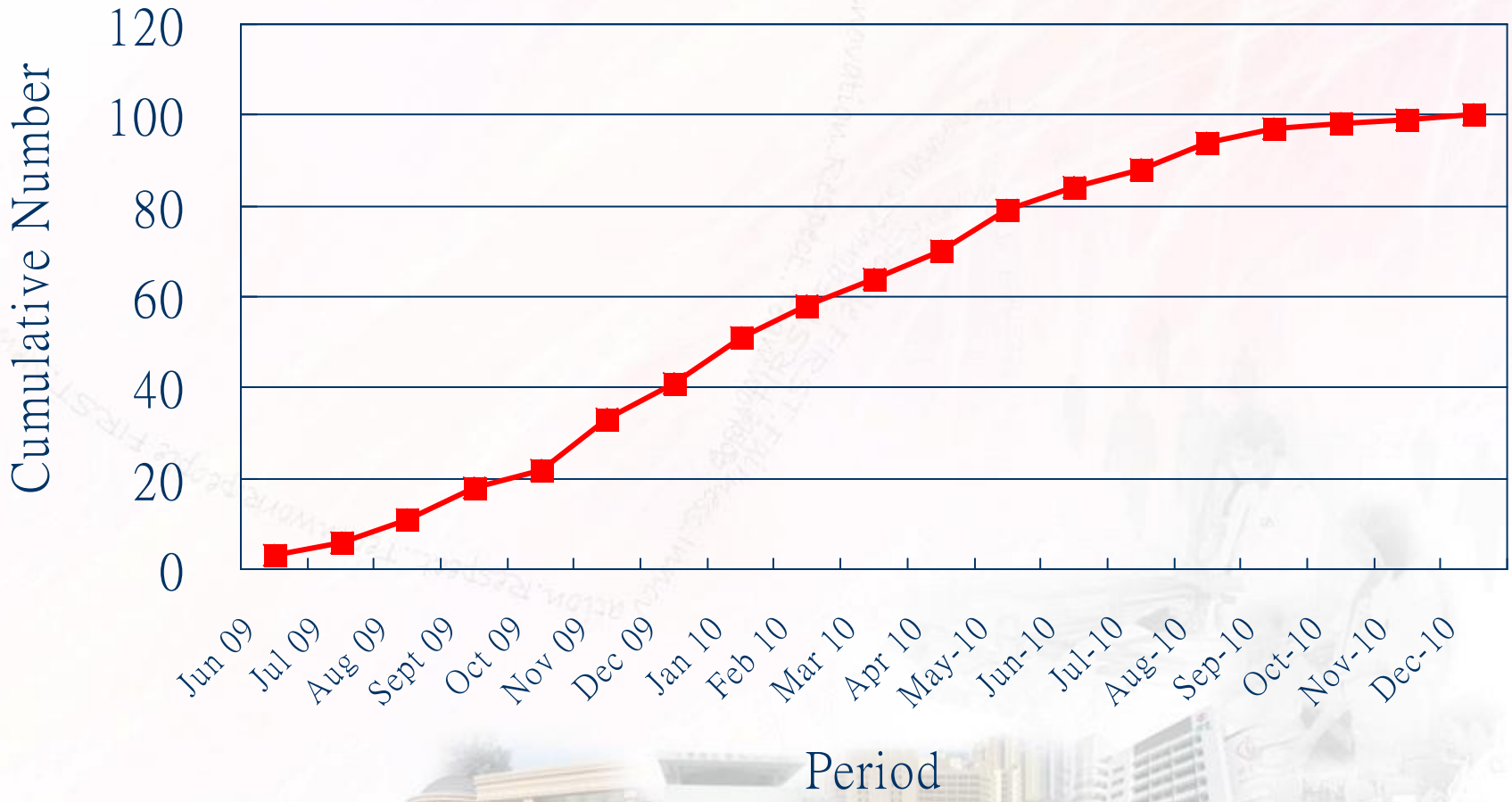
Service Outcomes

- **Total Elderly Screened by PHQ9: 1394**
- **Positive Cases Recruited: 81**
- **Positive Depressive Symptoms by PHQ 9:**
  81 / 1394 = 5.8%
- **Number of Cases Closed:**
  12 out of 81 cases(15%)

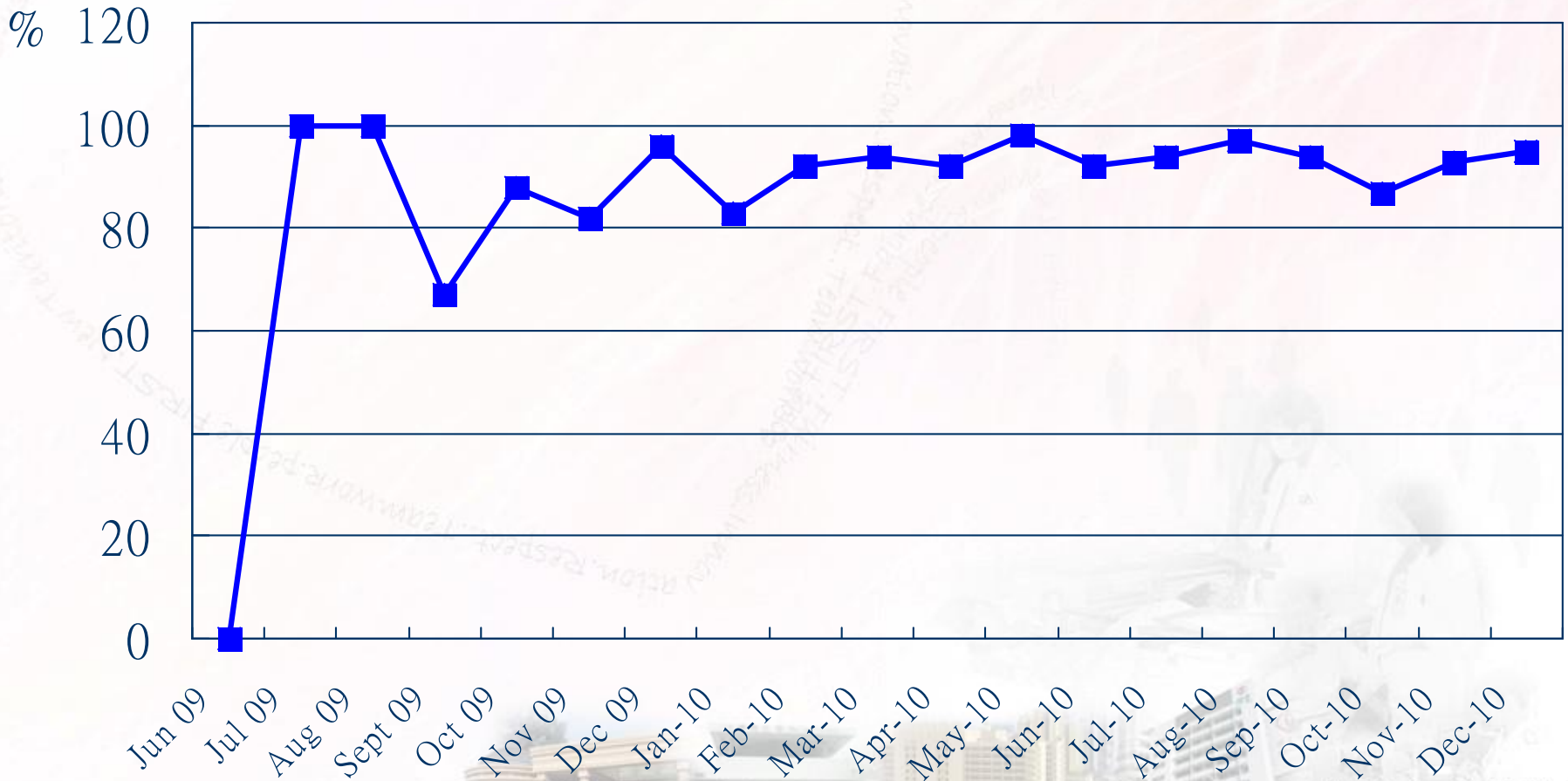
From Jun 2009 to Dec 2010



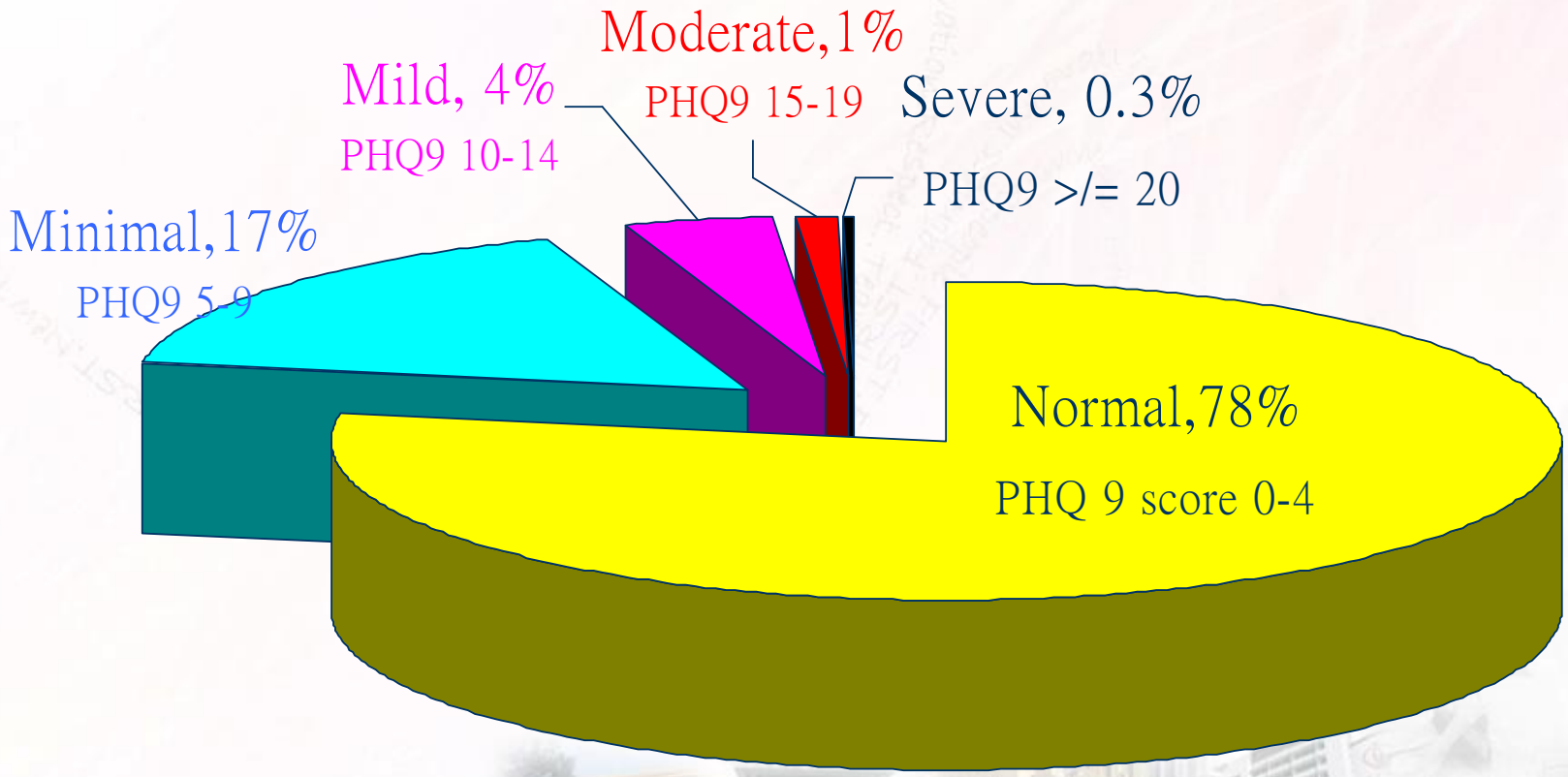
Cumulative Number of Positive Case (**Jun 2009 to Dec 2010**)



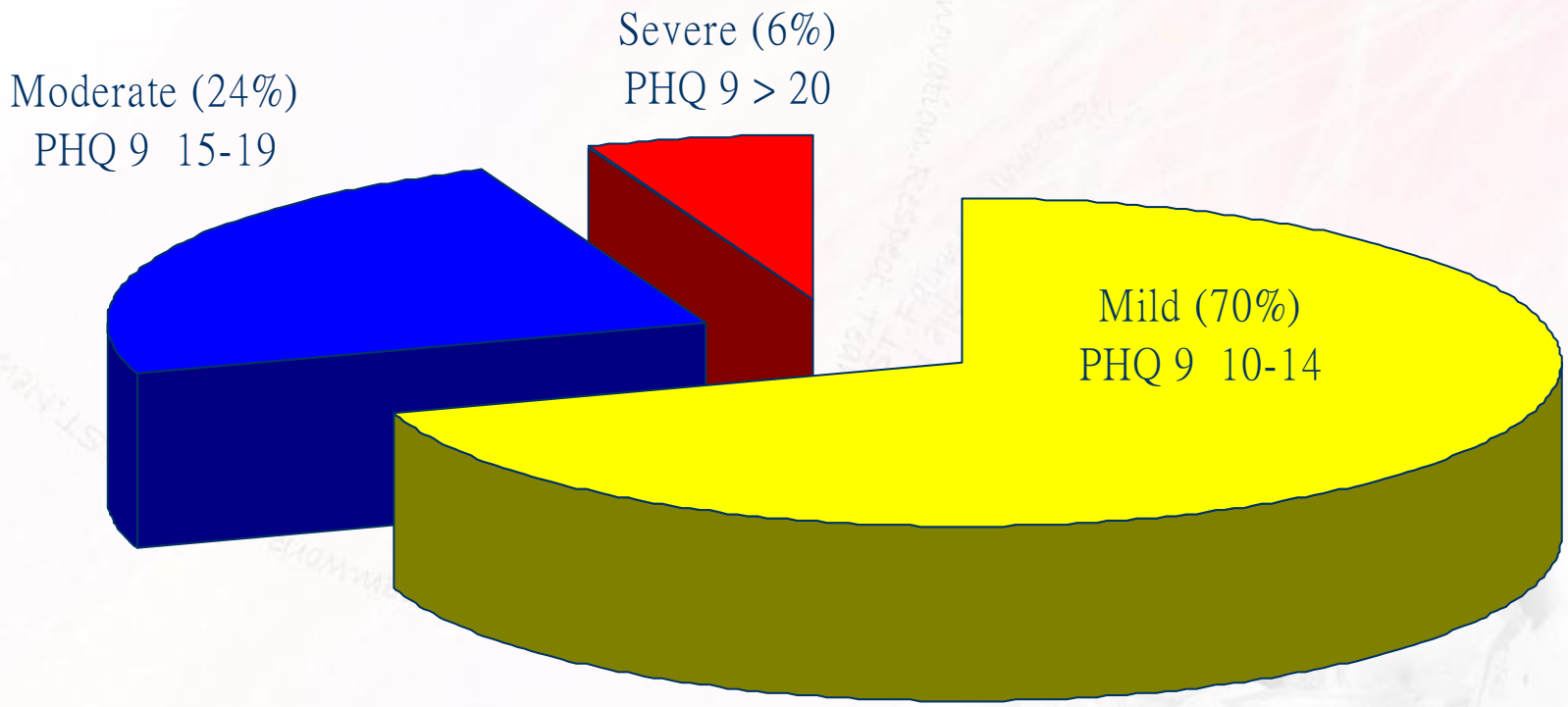
Attendance Rate



PHQ9 Score
(1842 Screened Elderly)



PHQ 9 Score
(Positive Cases, PHQ 9 > 10/27)



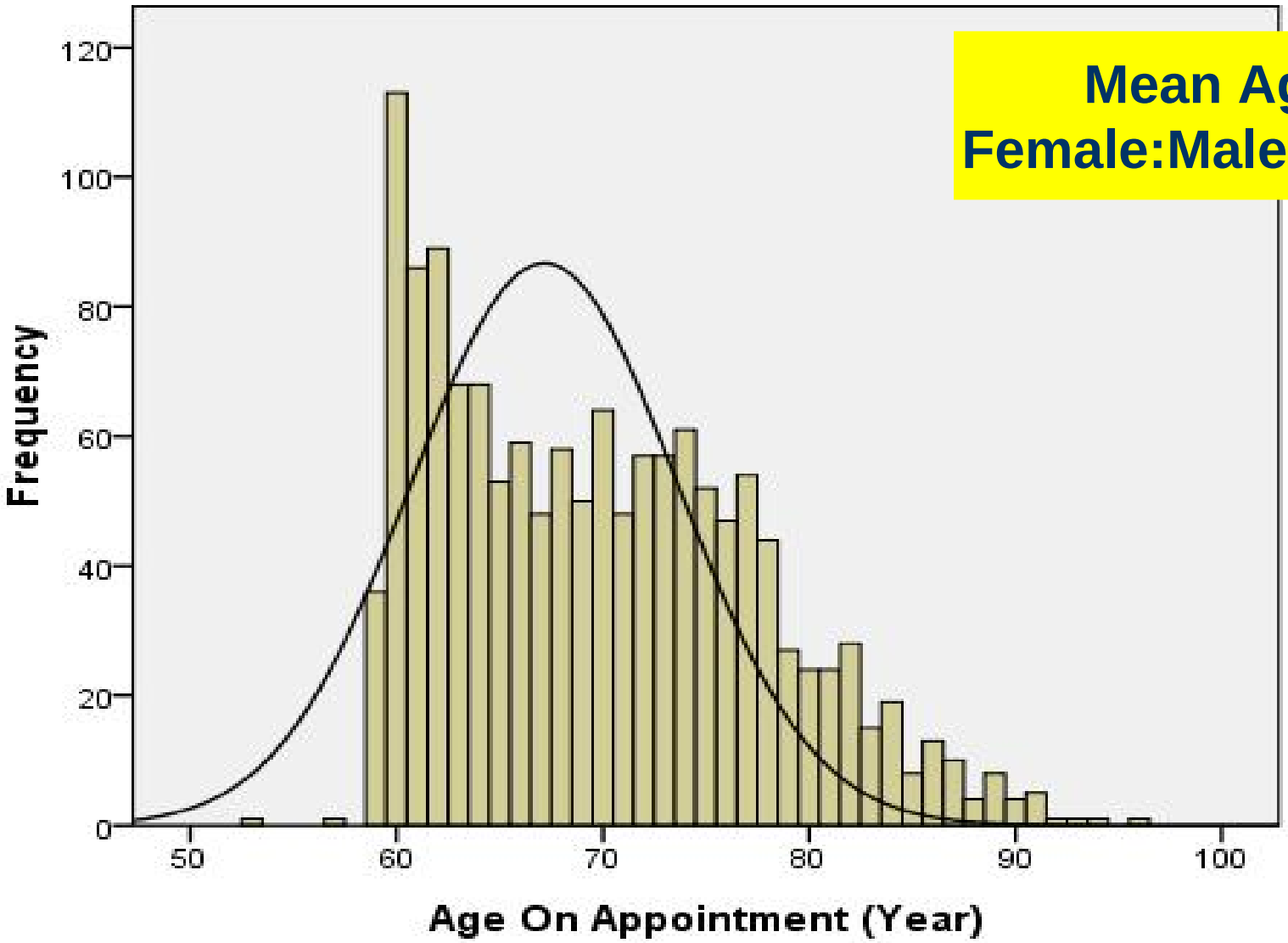
Patient Demographics(1)

	Screening Group (N=1842)	Positive Case Gp (N=101)
Age Range	59 - 97	59 - 91
Mean Age	70	71
Median	69	70
Mode	60	68

Patient Demographics(2)

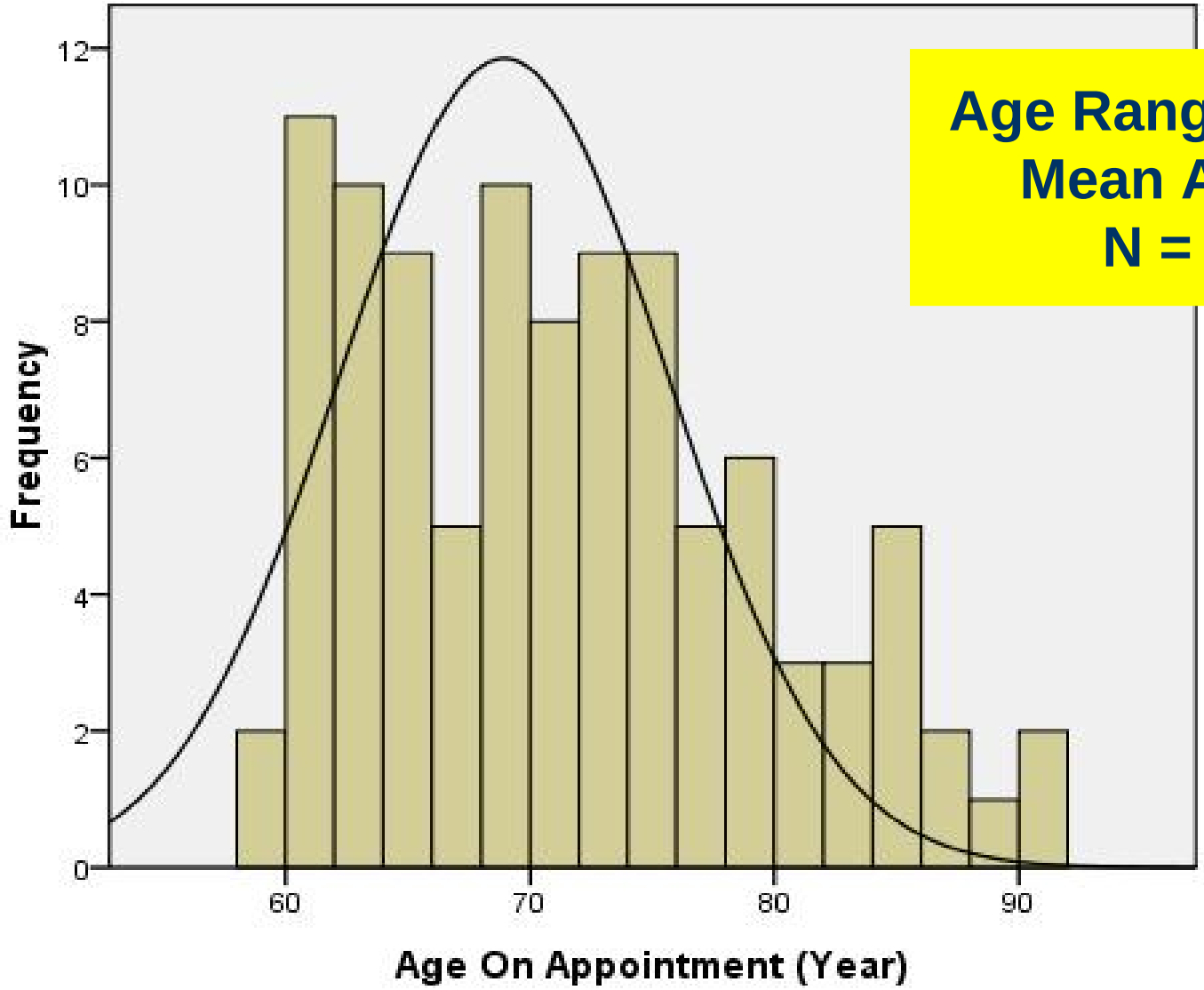
	Screening Group (N=1842)	Positive Case Gp (N=101)
Sex		
Male	**51%**	**36%**
Female	**49%**	**64%**
Payment Method		
Eligible Patients	**97%**	**60%**
Public Assistance	**2.4%**	**33%**
Dependents of GS	**0.1%**	**1%**
HA	**0.1%**	**2%**
Pension	**0.5%**	**4%**
Total	**100%**	**100%**

Age Distribution for All Screened



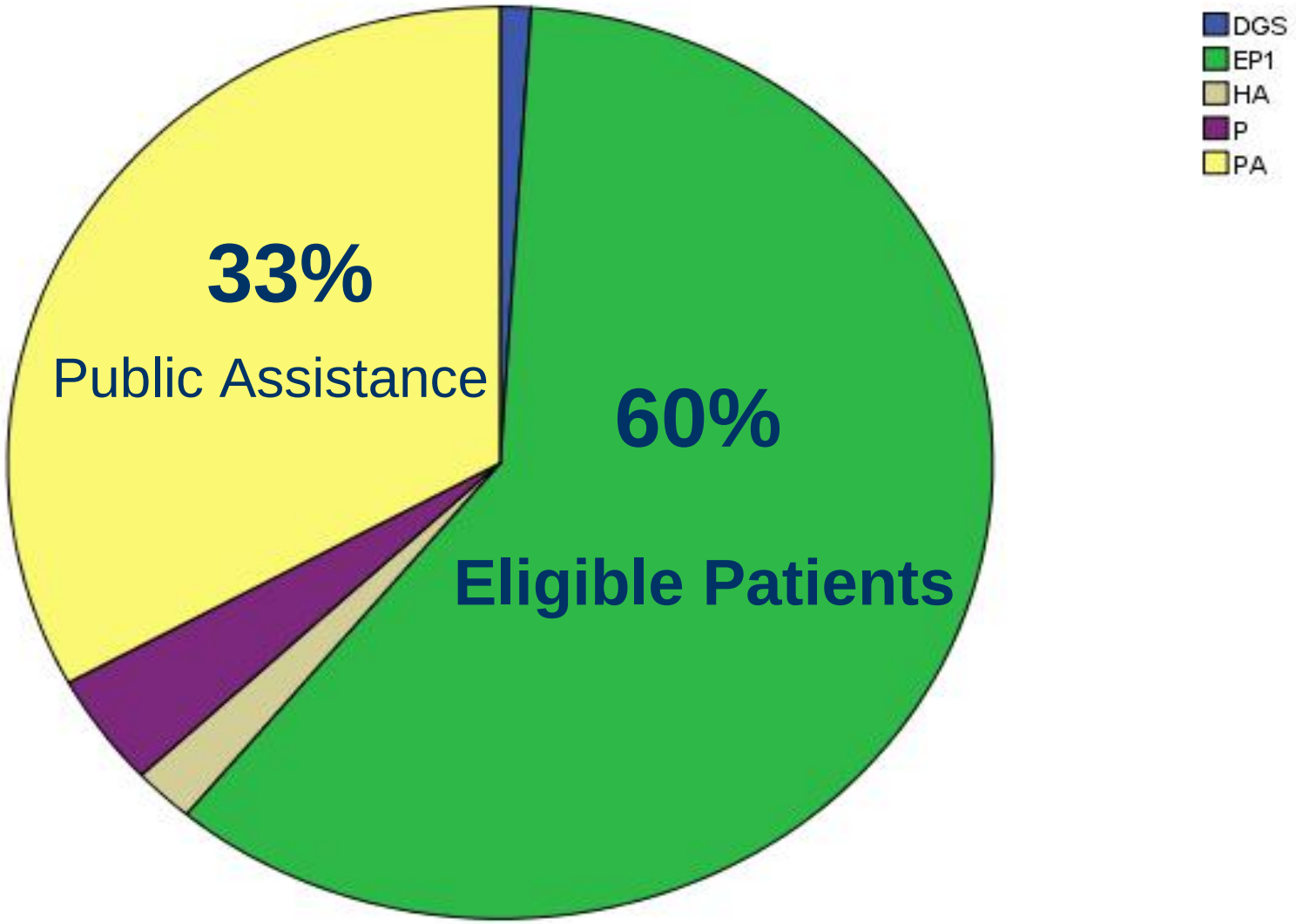
Mean Age: 69.8
Female:Male: 51% : 49

Age Profile for Positive Cases

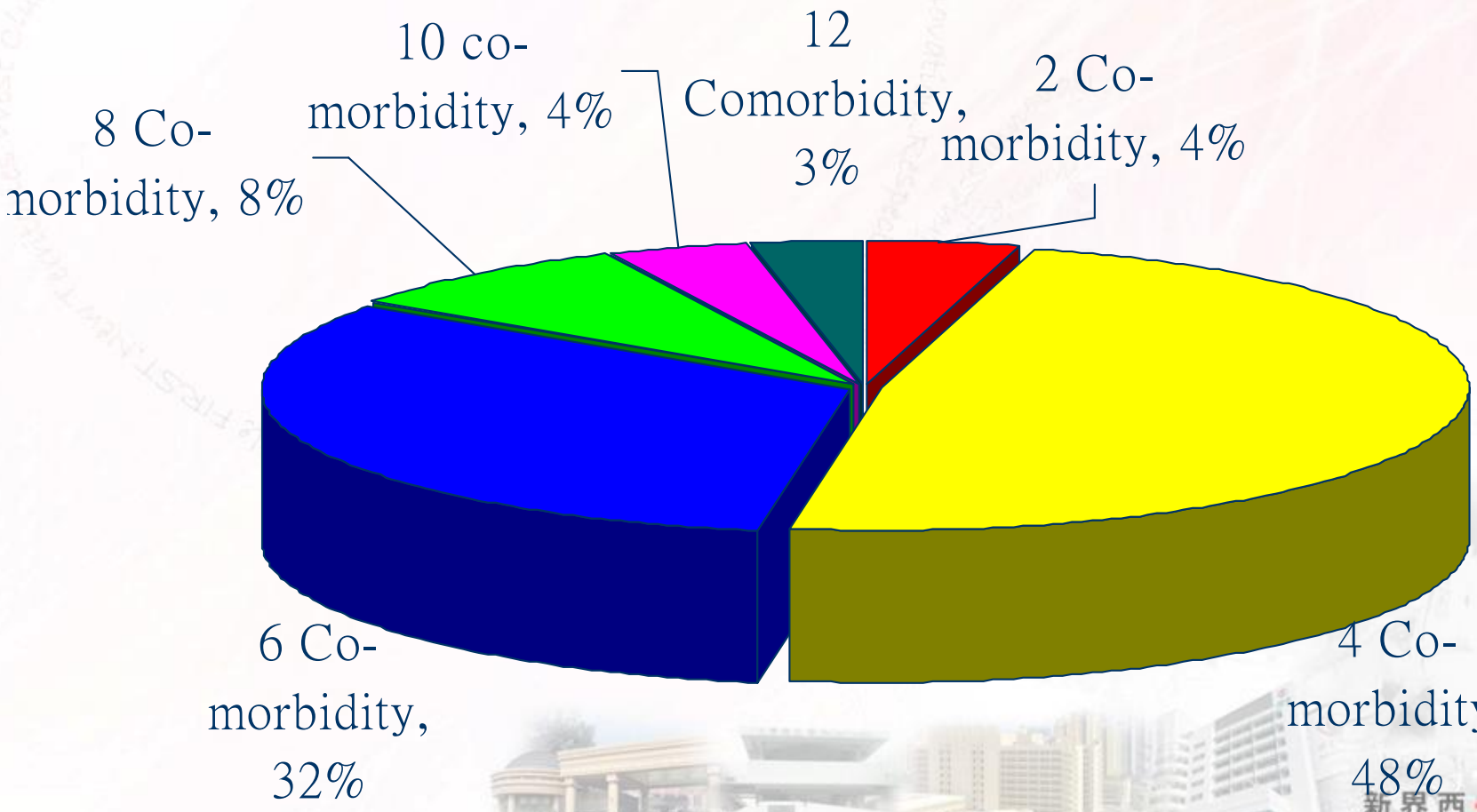


Age Range: 59 - 91
Mean Age: 71
N = 100

Payment Type



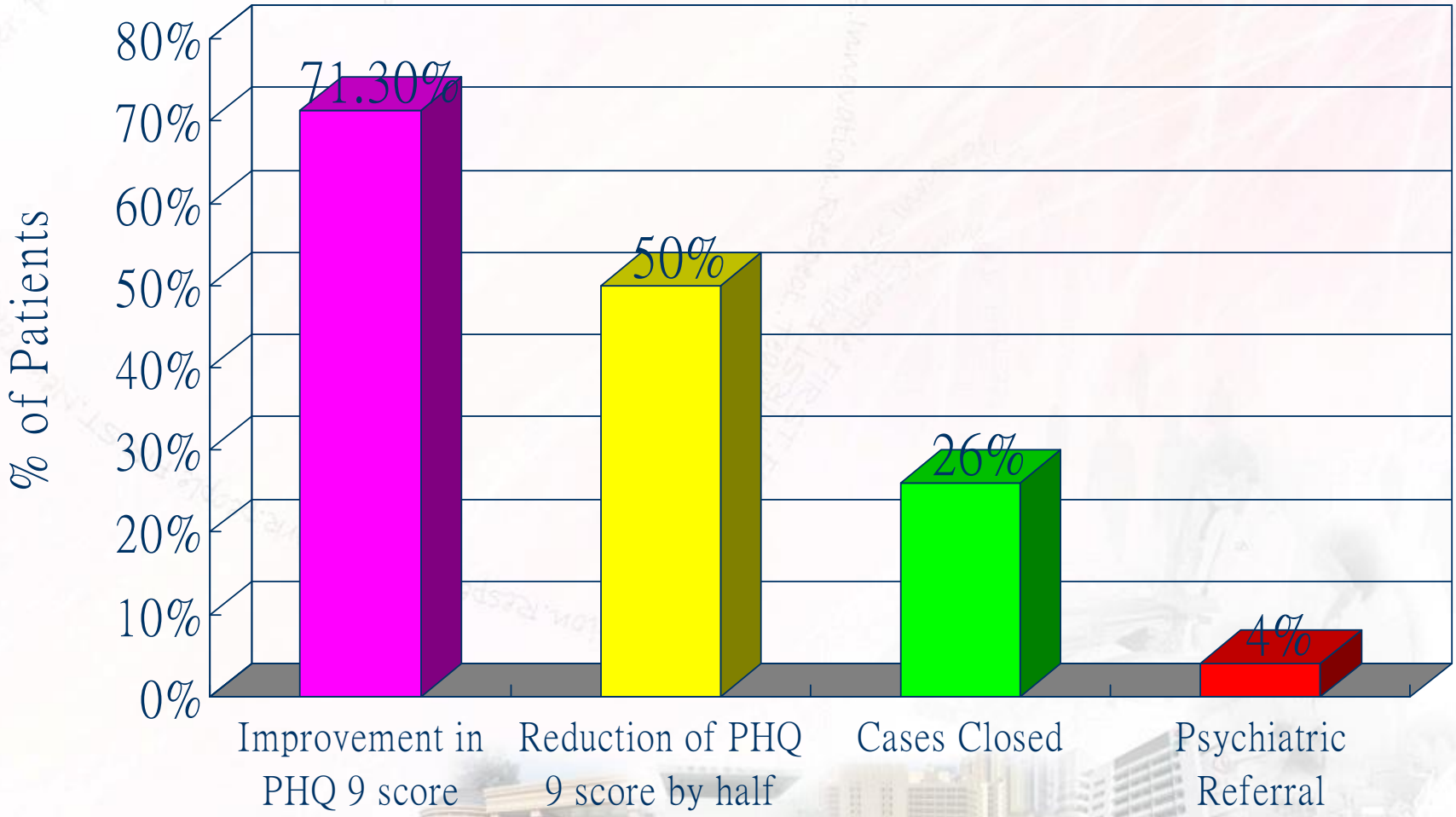
Number of Co-morbidities Among those Positive Cases



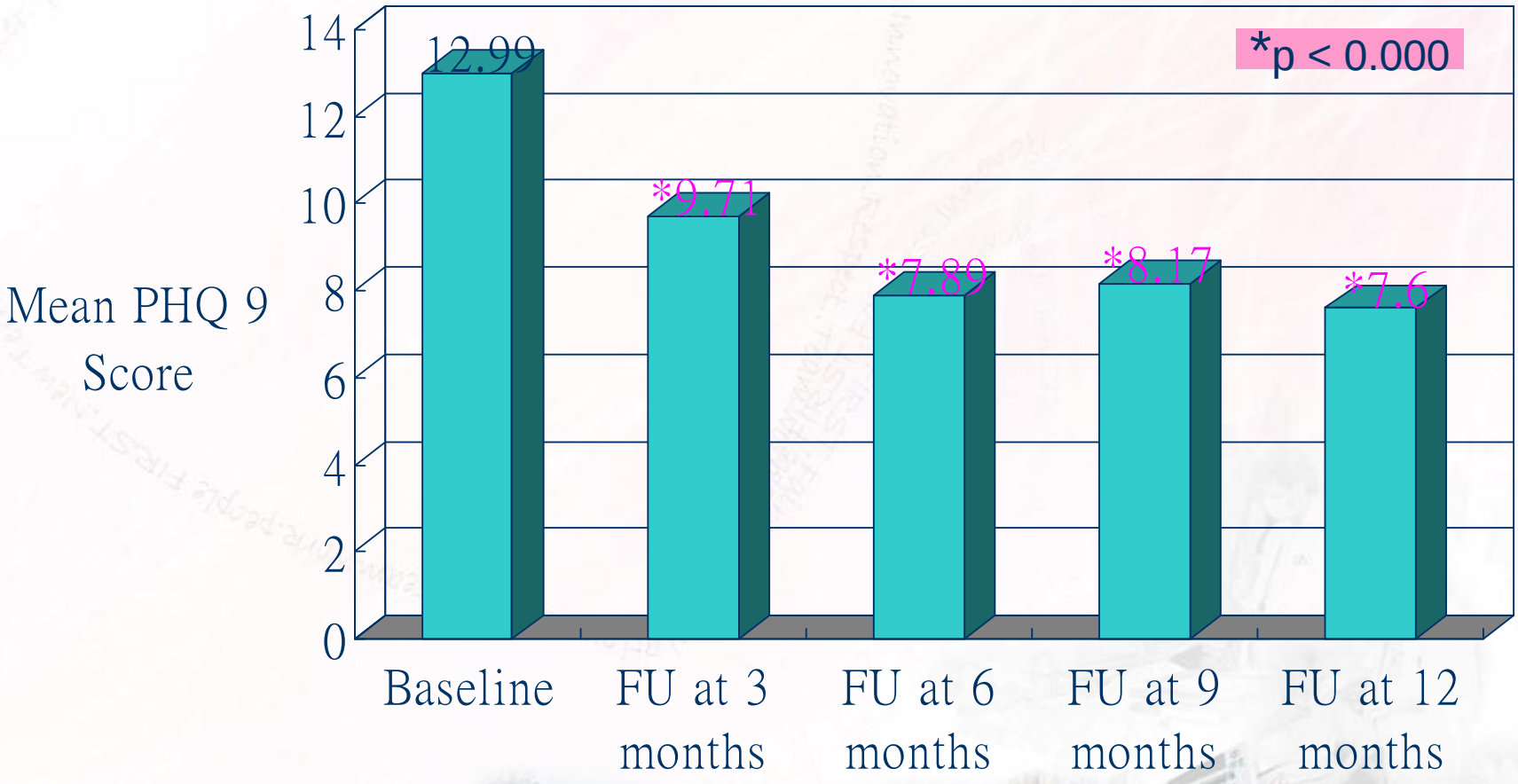
PHQ 9 at 6 Months FU
(Total 42 cases)

- Mean PHQ 9 score at Baseline 11.2 Vs
  Mean PHQ 9 score at 6 months 4
- 67% (28 cases) showed improved compared with baseline PHQ 9 score
- 29% (12 cases) showed improvement in PHQ 9 score by 50%

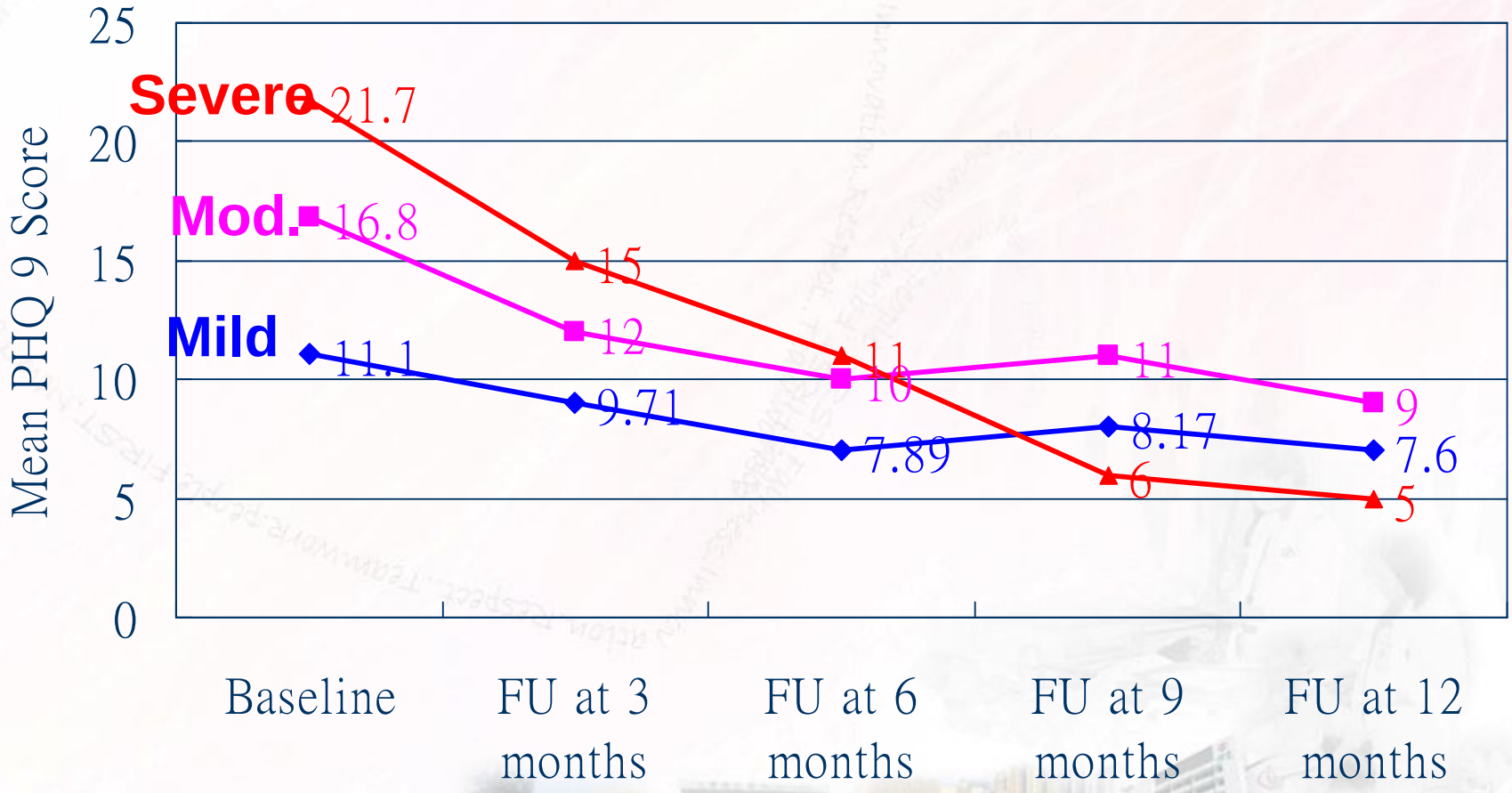
Patient Outcome after IMPACT Program



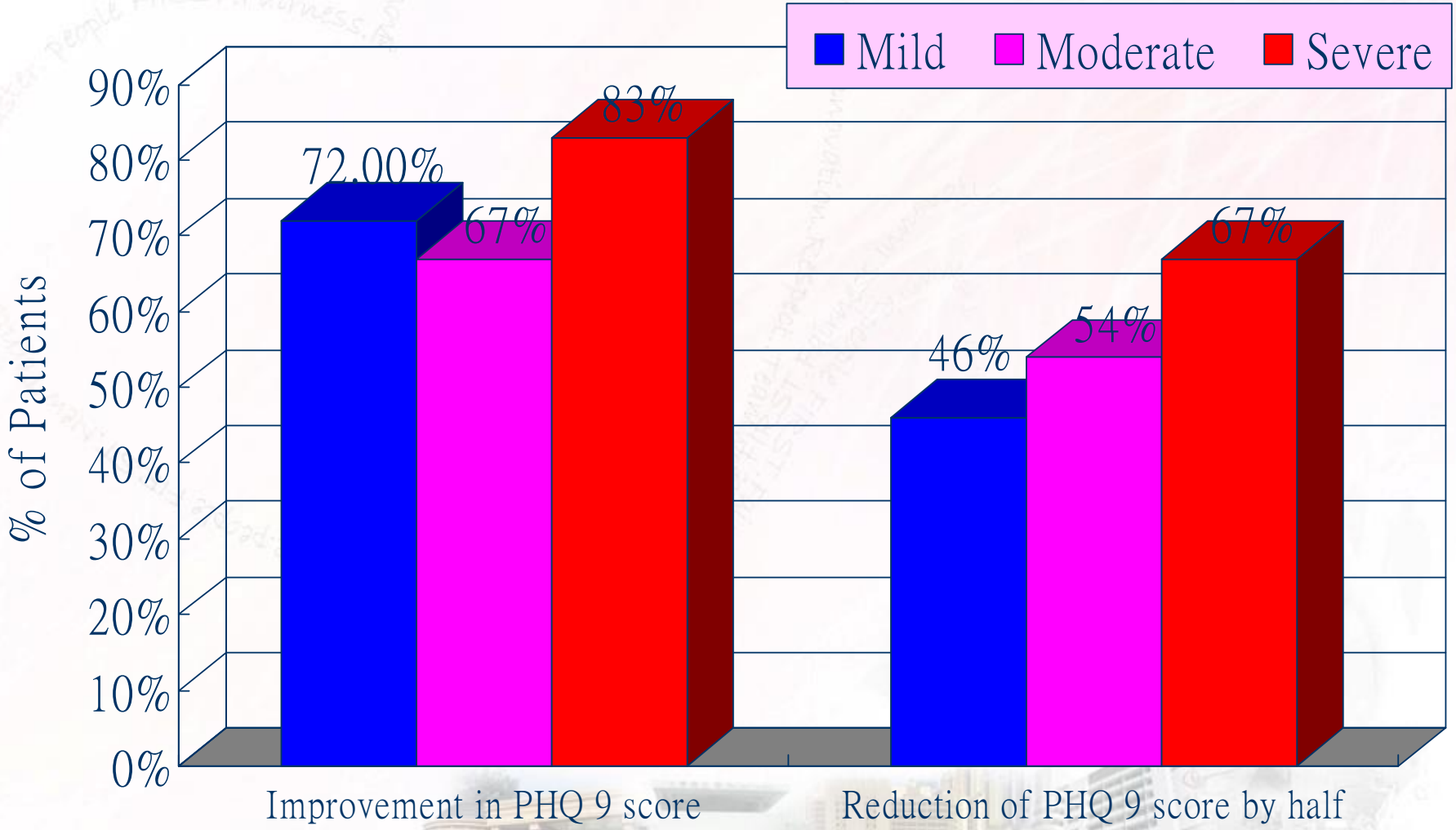
PHQ 9 Score after IMPACT Program



Subgroup Analysis of PHQ 9 Score



Subgroup analysis-
Patient Outcome after IMPACT Program



Our Findings

- Preliminary data of POH IMPACT
  - Empowered patients
  - Significant diagnosed those in need
  - Significant improvement for these diagnosed patients

Summary of 1.5 Years Result

Patients Outcomes:

- Total **1842** elderly screened
- **101 positive cases (5.5%)** recruited
- Female have higher prevalence than Male:
  - **64% : 36%**
- **80% of cases have 6 - 8 Co-morbidities**
- **71%** showed improvement on PHQ 9
- **50%** have PHQ 9 reduced by 50% on FU
- **26%** cases closed according to protocol

Summary of 1 Year Review

- Trial jointly project with CRN on patient empowerment project
  - “活得自在--身心健康課程“
  - showed preliminary satisfactory preliminary results
- Further review and more reliable data is needed

Conclusion

- Evidenced based, primary care setting, multidisciplinary approach
- **Empowering** primary care physician on management of depression, **Assert** evidence based management in clinical practice**, Integrate** service gaps among healthcare professionals**, Enhance** treatment effectiveness and patients outcomes
- Able to achieve early detection, early intervention, better collaboration and better support to primary care doctors for depression management through IMPACT program

Acknowledgement to IMPACT Implementation Team of POH

- Wai Hung Wellness Elderly Clinic
- Wei Hung Foundation
- CRN
- POH FMSC Colleague
- Department Head & HCE