

**PROTOCOL DRIVEN  
ASSESSMENT PROGRAMME  
EFFECTIVELY SHORTENS  
NEW CASE WAITING TIME**

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# BACKGROUND

Increasing number of referrals to endocrine clinic

... was 12-14 weeks...



... now 26 weeks!



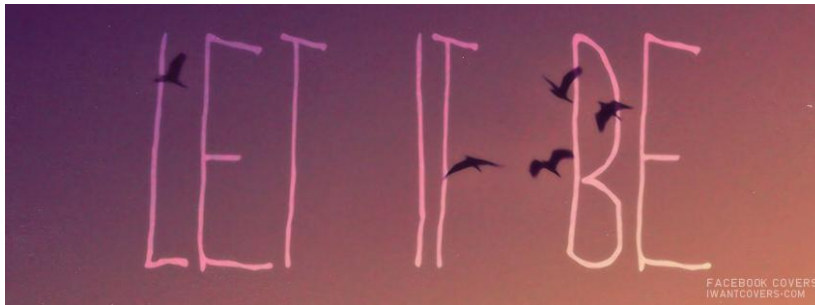
We just have too many incidentalomas and hypokalaemic hypertension to deal with!

# SOLUTIONS

1. See more, work hard, leave late...



2. ...



3. Ask for more...



4. ...



# WAY OUTS

**Designated person-in-charge**

**Avoid duplication of work**

**Categorize cases according to urgency as well as case complexity**

**Maximize input from specialist nurse**

**Streamline logistics of patient flow in clinic**

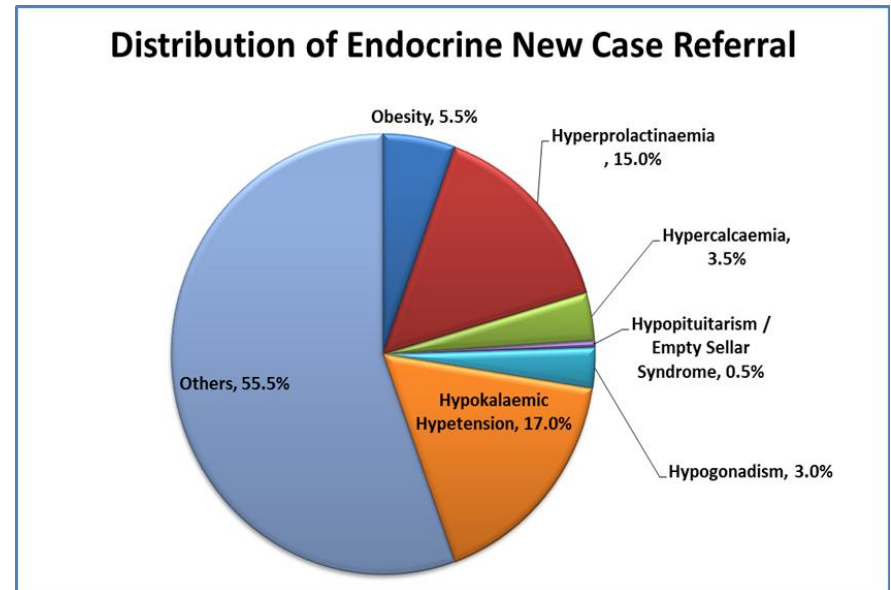


**Protocol driven  
assessment programme**

# PROTOCOL DRIVEN ASSESSMENT PROGRAMME

Urgent endocrine referrals will be deal with through urgent pathway

Analyze the case mix of referrals



May 2012 – Dec 2012

Design assessment protocols for selected disease categories

# THE PILOT PROTOCOLS

Hyperprolactinaemia

Hypercalcemia

Hypopituitarism

Hypogonadism

Obesity

## Evaluation of hyperprolactinemia

Serum prolactin (1) \_\_\_\_\_ mIU/L (Date: \_\_\_/\_\_\_/\_\_\_) (N<:500mIU/L)

(2) \_\_\_\_\_ mIU/L (Date: \_\_\_/\_\_\_/\_\_\_)

TSH \_\_\_\_\_ mIU/L (N 0.35-5.5mIU/L) FT4 \_\_\_\_\_ pmol/L (N 12-23pmol/L)

(Date: \_\_\_/\_\_\_/\_\_\_)

### Symptoms

*All*

- Headache
- Visual disturbances

*Women*

- LMP: \_\_\_\_\_
- Oligo-amenorrhea
- Galactorrhea
- Subfertility

*Men*

- Erectile dysfunction
- Decreased libido
- Subfertility

### Past medical history

- Psychiatric illness
- Renal failure
- Cirrhosis
- History of cranial irradiation
- Surgery (esp. hysterectomy, pituitary), please specify: \_\_\_\_\_

### Medications known to cause hyperprolactinemia (partial list)

- Typical anti-psychotics – haloperidol (haldol), chlorpromazine (thorazine), thioridazine
- Atypical anti-psychotics – risperidone (risperdal), olanzapine (zyprexa), amisulpiride
- Tricyclic anti-depressants – amitriptyline, clomipramine, imipramine, nortriptyline, doxepin
- SSRIs – sertraline (lustral), fluoxetine (prozac), paroxetine (seroxat)
- Anti-hypertensives – methyldopa (aldomet), verapamil (isoptin), reserpine
- Prokinetics – metoclopramide (maxolon), domperidone (motilium)
- H2 antagonist – cimetidine (tagamet), ranitidine (zantac)
- Opiates – codeine, morphine
- Oral contraceptives

(from \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_)

### Other medications :

- |          |          |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

### Initial workup

1. Blood x CBP, LRFT, CaPO4, TSH, non-stressed prolactin x (2)

# WE CAN WORK IT OUT



Triaging



- Nurse Pre-assessment**
- Follow the preset protocols
  - History taking
  - Baseline investigations

Report to physician in case of urgent issues



**Early interventions**



- **Seen in endocrine clinic**
- **Already clerked with work-up done**
- **Normal New case quota spared for non-programme patients**

# **OBJECTIVES**

**To shorten endocrine clinic new case waiting time**

**To enhance efficient flow of triage system**

**To improve patient care**

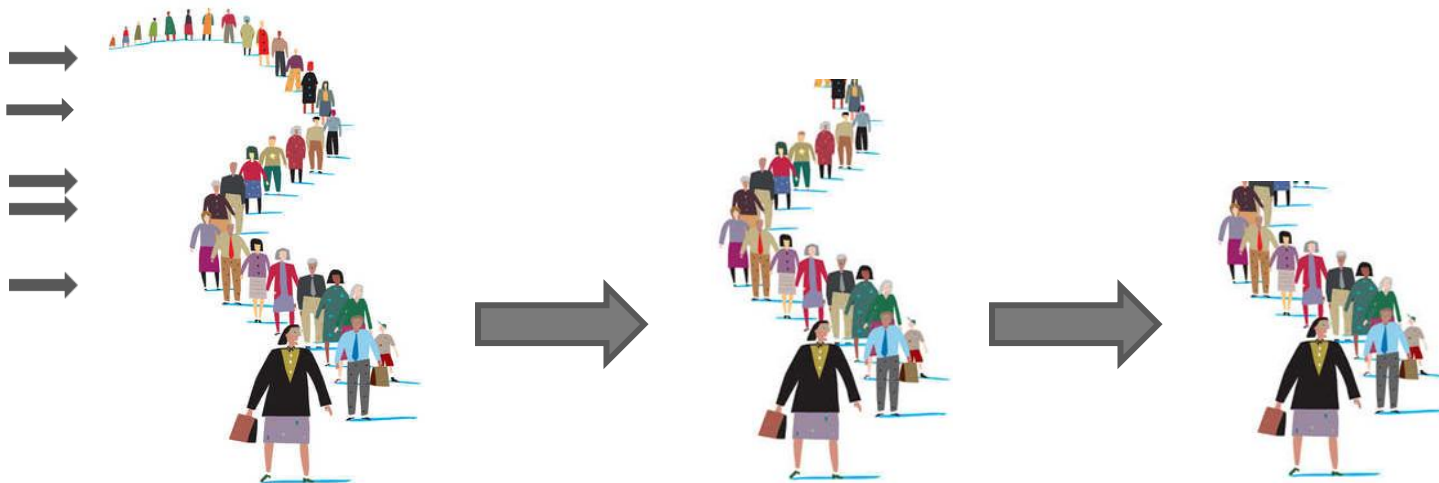


# RESULTS AND OUTCOMES

**Period: May 2012 to Dec 2012**

**Number of referrals: 225**

**Number of patients recruited into programme: 64**



# PATIENT WAITING TIME

## Programme patients

Time to see nurse:

$5.9 \pm 4.9$  weeks

Time to see physician:

$9.8 \pm 5.3$  weeks

## Non-programme patients

Time to see physicians:

$10.3 \pm 9.0$  weeks



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# EARLY INTERVENTION

## Early intervention initiated during assessment by nurse

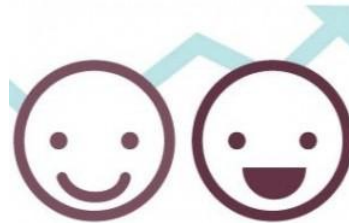
- Comprehensive education given
- Referral to relevant allied health disciplines
- Referral to smoking cessation programme

## Early detection of unexpected conditions

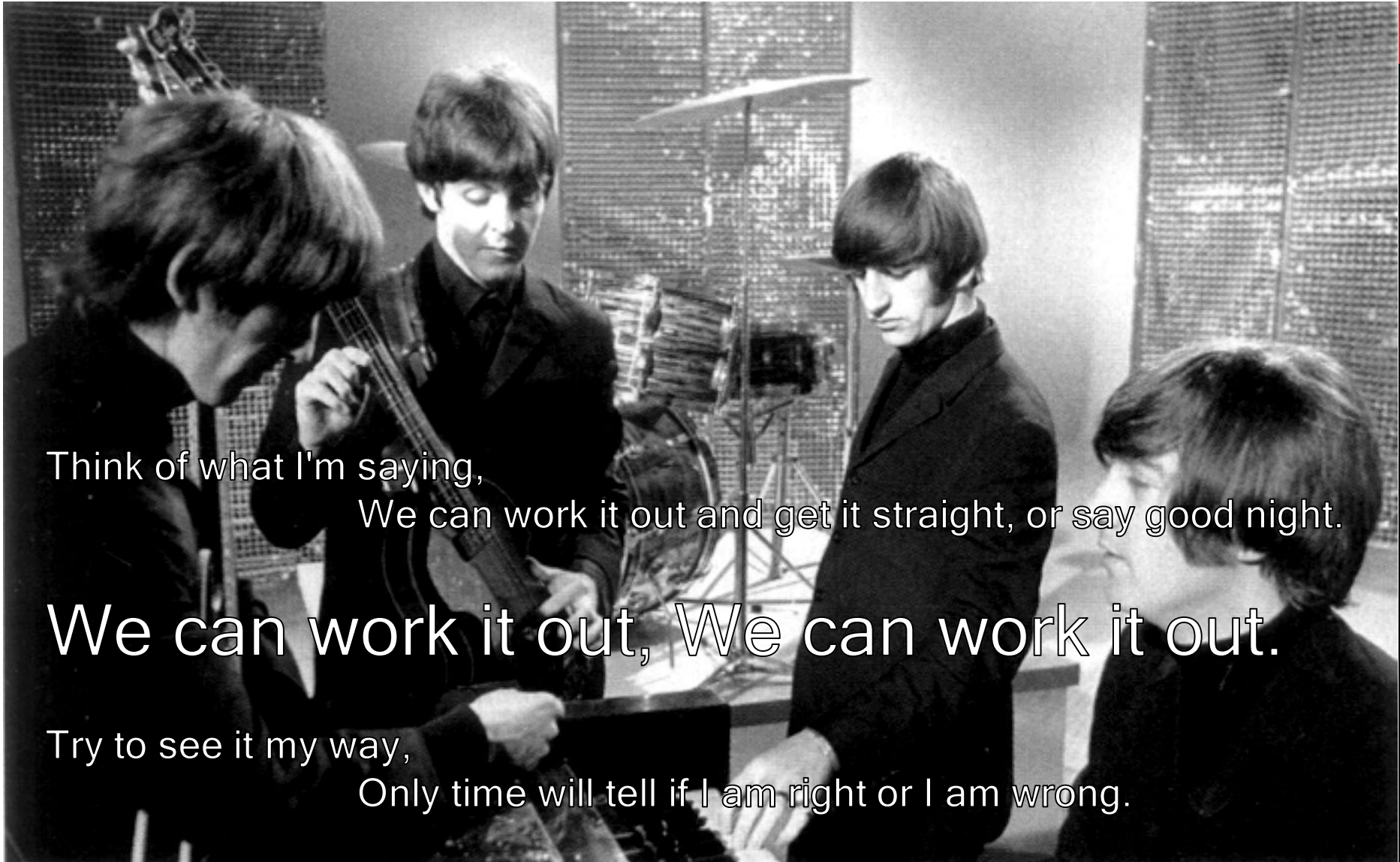
- Visual field defect
- Poorly controlled blood pressure
- Undiagnosed diabetes mellitus with poor glycaemic control

# CONCLUSION

1. **New streamlined triage system and nurse assessment program activate the potential of a busy well-established specialist clinic**
2. **It effectively shortens new case waiting time**
3. **Early pick-up of unexpected abnormalities by experienced nurses**
4. **Improve staffs morale**
5. **Development of protocols on other disease categories possible and practical**



# Only time will tell...



Think of what I'm saying,  
We can work it out and get it straight, or say good night.

We can work it out, We can work it out.

Try to see it my way,  
Only time will tell if I am right or I am wrong.

# THE TEAM

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