PROTOCOL DRIVEN ASSESSMENT PROGRAMME EFFECTIVELY SHORTENS NEW CASE WAITING TIME

DR. YC WOO
DEPARTMENT OF MEDICINE
QUEEN MARY HOSPITAL
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

Urgent endocrine referrals will be dealt with through urgent pathway

Analyze the case mix of referrals

Design assessment protocols for selected disease categories

May 2012 – Dec 2012

Distribution of Endocrine New Case Referral

- Obesity, 5.5%
- Hyperprolactinaemia, 15.0%
- Hypercalcaemia, 3.5%
- Hypopituitarism / Empty Sellar Syndrome, 0.5%
- Hypokalaemic Hypertension, 17.0%
- Hypogonadism, 3.0%

Others, 55.5%
THE PILOT PROTOCOLS

Hyperprolactinaemia
Hypercalcemia
Hypopituitarism
Hypogonadism
Obesity

Evaluation of hyperprolactinemia

Serum prolactin (1) ________mIU/L (Date: ___/___) (N: 500 mIU/L)
(2) ________mIU/L (Date: ___/___)
TSH ________mIU/L (N: 0.35-5.5 mIU/L)  fT4 ________pmol/L (N: 12-23 pmol/L)
(Date: ___/___)

Symptoms

<table>
<thead>
<tr>
<th>All</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>Headache</td>
<td>Erectile dysfunction</td>
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<tr>
<td>Visual disturbances</td>
<td>Oligo-menorrhoea</td>
<td>Decreased libido</td>
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Past medical history

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Psychiatric illness</td>
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<tr>
<td>Renal failure</td>
<td></td>
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<tr>
<td>Cirrhosis</td>
<td></td>
</tr>
<tr>
<td>History of cranial irradiation</td>
<td></td>
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<tr>
<td>Surgery (esp: hysterectomy, pituitary), please specify:</td>
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Medications known to cause hyperprolactinemia (partial list)

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<tr>
<td>Typical anti-psychotics – haloperidol (halolol), chlorpromazine (thorazine), thioridazine</td>
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<tr>
<td>Atypical anti-psychotics – risperdone (risperdal), olanzapine (zyprexa), amisulpiride</td>
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<tr>
<td>Tricyclic anti-depressants – amitriptyline, clompramine, imipramine, nortriptyline, doxepin</td>
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<tr>
<td>SSRI – sertraline (lustral), fluoxetine (prozac), paroxetine (seroxat)</td>
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<tr>
<td>Anti-hypertensives – methyldopa (aldomet), verapamil (isoptin), reserpine</td>
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<tr>
<td>Prokinetics – metoclopramide (maxolon), domperidone (motilium)</td>
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<tr>
<td>H2 antagonist – cimetidine (tagmet), ranitidine (zantac)</td>
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<tr>
<td>Opiates – codeine, morphine</td>
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<tr>
<td>Oral contraceptives</td>
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<tr>
<td>(from <em><strong>/</strong></em>/___ to <em><strong>/</strong></em>/___)</td>
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Other medications:

1. ___________________________________________________________
2. ___________________________________________________________
3. ___________________________________________________________
4. ___________________________________________________________
5. ___________________________________________________________
6. ___________________________________________________________
7. ___________________________________________________________
8. ___________________________________________________________

Initial workup

1. Blood x C3P, LFT, CaPO4, TSH, non-stressed prolactin x (2)
WE CAN WORK IT OUT

- 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

Triaging
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 ± 4.9 weeks
Time to see physician:  
9.8 ± 5.3 weeks

Non-programme patients
Time to see physicians:  
10.3 ± 9.0 weeks
PATIENT WAITING TIME

Programme patients
- Time to see nurse: 5.9 ± 4.9 weeks
- Time to see physician: 9.8 ± 5.3 weeks

Non-programme patients
- Time to see physicians: 10.3 ± 9.0 weeks
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

Prof. Karen Lam
Prof. Kathryn Tan
Dr. WS Chow
Dr. YC Woo
Dr. CY Yeung
Dr. Elaine Hui
Dr. Joanne Lam
Dr. Michele Yuen
Dr. Paul Lee
Dr. Alan Lee

Ms. Elaine Leung
Ms. Karen Wong
Ms. Carmen Leung
Ms. Tina Lau