Teaching multimorbidity is important, do-able and effective, and requires a multi-pronged approach.

GPTEC, Hobart, August 2015

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Dr Chris Starling, Senior Medical Educator
What we have done so far

- Explored the literature
- Looked at what registrars experience
- Asked about their confidence in this area
- Asked them what is helpful
- Trialled a way of presenting the topic (flipped classroom approach)
- Provided resources, integrated into workshops
- Uploaded a learning module for practice teaching
- Produced an EPA for assessment
- Workshopped how supervisors might teach it
Why is it important?

• Increasing
• Costs
• Concern to policy makers
• Requires particular skills
• Appropriate for GP care – before other “systems” put in place
Multimorbidity is about...

- A patient with multiple problems (diagnoses / symptoms)
- Multiple treatments
- The multiple ways these may interact with each other
- How it impacts on the patient
- Why this affects effective management
- How this is different from “chronic disease”
Challenge of multimorbidity in GP

- The literature agrees
- Not addressed (eg in guidelines, studies)
- Becoming more common

Challenge of teaching the topic

(eg Sinnott C et al doi: 10.1136/bmjopen-2013-003610 GPs’ perspectives on the management of patients with multimorbidity: systematic review and synthesis of qualitative research)
Particularly challenging for registrars

- Complex
- Not as much exposure as established GPs
- Continuity issues
- Ownership
Registrar survey – prior to sessions last year

“This survey is looking at how confident you feel managing different sorts of patients and clinical problems. It is really asking, not whether you can solve all the problems without any help but whether you feel at ease seeing these patients (knowing you have resources and help at your disposal).”
Please rate how confident you feel managing the following patients or problems on a scale of 1-5 from not at all confident to very confident

<table>
<thead>
<tr>
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<th>T1 N=32</th>
<th>T2 N=12</th>
<th>T3 N=32</th>
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<td>Young children with acute presentations</td>
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<td>2.8</td>
<td>3.3</td>
<td>3.7</td>
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</tbody>
</table>
In literature and the media

- Much catastrophising and doomsaying
- Increasing
- Costs and complexity
- Various definitions
- Not yet a curriculum chapter
- Multimorbidity and general practice
The literature suggests
To manage multimorbidity well

• You need TIME
• You need continuity
• You need patient-centredness

• You might also need teamwork, systems etc
How is teaching multimorbidity do-able and effective?

- It has been addressed in our workshop program
- This was evaluated very positively
- There was increased awareness and confidence in this area
- Registrars have clinical exposure in practice
- The education methods they find helpful are available
Our approach - optimism
(content: online + session)

https://pilotcathy.weebly.com

- History and numbers
- Not as daunting as stats imply
- Possible to do it well in Australian general practice (Time available, issue of guidelines, use of existing “item numbers”)
- Comorbidities covered well – build on these
- A matrix incorporating patient vs doctor agenda

http://www.bcregan.com/MM
Resources

• http://www.bcregan.com/MM/ (matrix)

• http://pilotcathy.weebly.com/m-morbidity.html

(pre & post workshop multimorbidity resources)
Framework in workshops

- Patient centred* and asking the right questions
- Content for common triads / approach for the rest / recognise the tricky ones
- What is the doctor’s agenda? (any extra info needed?)
- What are the patient’s concerns? (do you need to ask?)
- Do they understand each other? (otherwise pointless)
- Guidelines a resource to clinical judgment only
Multimorbidity matrix

- Conceptual framework for thinking and learning rather than a clinical tool
- Transferring multitasking, multidimensional thinking into 2D
- A reminder of the interactions
- An assumption that the doctor may know some of the background knowledge and guidelines
- A reminder to ask themselves about this
- A specific reminder to ask about the patient perspective
- Allow the patient perspective to consciously influence Mx decisions
Quickly!

- We will just go through the matrix idea presented in workshops........
- Next seven slides
Most common matrices

- eg hypertension + diabetes + hyperlipidemia
- You know the guidelines
- The guidelines even mention comorbidities
- May need to add CKD over time
- May need to add more uncommon conditions requiring individualised thinking
A bit daunting but.....

<table>
<thead>
<tr>
<th></th>
<th>NIDDM + meds, lifestyle</th>
<th>BP + meds</th>
<th>OA</th>
<th>IHD + meds</th>
<th>CKD</th>
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<tbody>
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<td>NIDD Meds</td>
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<tr>
<td>BP med</td>
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<td>OA-OTC</td>
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<td>IHD-med</td>
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<td>X</td>
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<tr>
<td>CKD</td>
<td>X</td>
<td>X</td>
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Some patients are like this

<table>
<thead>
<tr>
<th></th>
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<th>REFUX</th>
<th>TINNIT US</th>
<th>GLAUC</th>
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<td>GLAUC</td>
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Choose from drop down list and save – to populate problem boxes

**MULTIMORBIDITY MATRIX**

Enter the three problems of a sample patient from the lists below and press the 'Save Problems' button.

**Patient Problem 1:**

- Hypertension
- Hyperlipidaemia
- Diabetes
- IHD
- CHF
- AF
- CKD
- Arthritis-Backpain
- Osteoporosis
- Depression
- COPD
- Asthma
- Incontinence
- Dementia
- GORD
- Neuro-other
- Resp-other
- Vascular-other
- GIT-other
- GUT-other
- MSK-other
- Psych-other
- Derm
- Other

**Patient Problem 2:**

**Patient Problem 3:**

Save the Problem Labels

In the "Doctor’s Perspective" a link is provided for useful information to help inform your clinical decisions. If there are relevant guidelines these are available. If not, some alternative resources have been provided, e.g. Australian Family Physician articles. It is always worth checking Therapeutic Guidelines or management. Occasionally there are only overseas guidelines which may have limited relevance. Up-to-date may be useful. NB There are many more on your website or on the ELF.

"Patient’s Perspective" a link is provided to some patient information resources (these are just examples and not specifically recommended). These of the doctor’s perspective. You may know of others.

In guidelines and patient information on the most common conditions and keep it to hand to assist your management.

Rx in the boxes and note, in the relevant cell, if there are any concerning interactions between problems, between treatments or between problems and management.
Click on blue conditions – resources if needed

**Legend:**
- Doctor’s Perspective:
- Patient’s Perspective:
- Intersection:
- Treatment:

### COPD - Doctor Links


<table>
<thead>
<tr>
<th>PROBLEMS</th>
<th>COPD</th>
<th>Osteoporosis</th>
<th>Hypertension</th>
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<tbody>
<tr>
<td><strong>COPD</strong></td>
<td>Rx?</td>
<td></td>
<td></td>
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<tr>
<td><strong>Osteoporosis</strong></td>
<td></td>
<td>Issues?</td>
<td></td>
</tr>
<tr>
<td><strong>Hypertension</strong></td>
<td></td>
<td></td>
<td>Issues?</td>
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<tr>
<td><strong>Treatments / meds. Add for each Dx</strong></td>
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</table>
Click yellow conditions for patient info.

### Legend:
- **Doctor's Perspective**: □
- **Patient's Perspective**: ■
- **Intersection**: □
- **Treatment**: ■

<table>
<thead>
<tr>
<th>PROBLEMS</th>
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<td>Hypertension</td>
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</table>

**Treatments / meds. Add for each Dx**

**COPD - Patient Links**

From matrix to linear recording

### Multimorbidity problem list and management

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
<th>TREATMENTS</th>
<th>PATIENT D/x, symptoms</th>
<th>DOCTOR D/x, meds, OTC</th>
<th>RANKED IMPORTANT DR</th>
<th>INTERACTIONS COMPLEXITIES</th>
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</table>

**OTHER HEALTH PROFESSIONALS INVOLVED**

<table>
<thead>
<tr>
<th>WHO</th>
<th>WHY INVOLVED - COMMENTS</th>
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**Any specific issues relating to multimorbidity?**

**Any issues with medications in this patient**

- **Potential interactions**
  - Serotonergic drugs; ACE+diuretic+NNSAID; warfarin +
- **Medications to consider stopping**
  - Harms outweigh benefits in this patient
- **Medications to consider starting**
  - Will be of benefit
- **Anticholinergic burden**
  - Antihistamines; some antidepressants; oxybutynin
- **High risk drugs for side effects in older patients**
  - Warfarin; Benzodiazepines; psychotropics (if not needed); NSAIDs; hypoglycemics; diuretics; anticholinergics; opiates

**Any problems with polypharmacy?**

See links for useful information on polypharmacy and prescribing


**RELEVANT PREVENTIVE HEALTH** (eg immunisations, screening)


<table>
<thead>
<tr>
<th>TASK</th>
<th>PATIENT PERSPECTIVE</th>
<th>WHO</th>
<th>TIME FRAMES</th>
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<tr>
<td></td>
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</tbody>
</table>

**MANAGEMENT PLANNING**

<table>
<thead>
<tr>
<th>AGREED GOALS (OR SURROGATE MARKERS) FOR ABOVE MORBIDITIES</th>
<th>HOW (TASKS TO ACHIEVE GOALS)</th>
<th>WHO (PATIENT, HEALTH PROVIDERS ETC)</th>
<th>ARRANGEMENT / TIMEFRAME/REVIEW (APPOINTMENTS)</th>
</tr>
</thead>
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**Significant modifications to current management plans?**

**DATE DISCUSSED**

**Are Team Care Arrangements required?**

Y  N

**WHO IS IN THE TEAM?**

**WHO NEEDS EPC REFERRAL?**

A concise, patient friendly, summary of the current assessment and plan

**DATE FOR NEXT REVIEW**

**ISSUES TO FOLLOW UP IF NEEDED**

**NOTES ADDED DURING NEXT TWELVE MONTHS**

<table>
<thead>
<tr>
<th>DATE</th>
<th>PROBLEM / ACTION</th>
<th>ADDED BY</th>
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<tbody>
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Template features

• Take ownership of the patient
• Create a Problem list
• Review the medication list
• Patient vs Doctor perspective
• Who is part of the treating team?
• Preventative health
• Goal planning
• Medicare/DVA
• Follow up/Anticipatory care
• Use of digital technology
Case discussions in groups

- If there are interactions between diagnoses or medications then take a note of this
- Do you think there are any gaps in your knowledge that may require looking up information?

- Having asked yourself about possible relevant interactions in these conditions
- And possible perspectives in this particular patient
- Ask yourself “Are there any interactions I haven’t thought of?”

- Do the patient and I understand each other’s agenda?
- Then your management will be meaningful
Conclusions for the registrars

- Don’t be scared by the numbers
- It’s not as daunting as depicted
- You know a lot already
- Take a patient-centred approach
- Aim for continuity as far as possible

Outcomes

- Session and online was evaluated highly (particularly by T3)
- Modest increase in confidence in short term
- **BUT needs to be integrated with practices**
<table>
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<tr>
<td><strong>Average</strong></td>
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<td><strong>3.6</strong></td>
<td><strong>3.97</strong></td>
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<tr>
<td>Patients with multiple morbidities PLUS polypharmacy or psychosocial problems (new question)</td>
<td></td>
<td></td>
<td><strong>3.3</strong></td>
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Unexpected results

Subsequent Learning Plans handed in included several which (unusually) listed managing multimorbidity as a priority 😊
Still a way to go

• Some increased confidence but could we do better?

• Requires a multi-pronged approach – given what registrars find helpful

• Workshops + Practice + Resources

• Didactic + small groups + cases + assessment
What we found

- Registrars potentially see patients with multimorbidity
- Initially they find them more challenging than other patients
- They have reflected on what teaching and which experiences are helpful in developing their skills
- There is often agreement about these
- Some supervisors have great ideas and teaching methods

Resources for supervisors could enhance the practice experience
What do registrars see? the evidence

1. ReCEnT figures and
2. End-of-Term Feedback

Registrar Clinical Encounters in Training:
• 30% of what registrars see is chronic disease (hypertension, depression, lipids....)
• Only 16.5% are 65+ (cf 30% BEACH)
• Maybe 8% are 75+
But

- Wide variation
- Are they sometimes skating over the surface?
- The possibilities are there to learn in practice
What do they report seeing?
End-of-term patient variety (n=145)

1. never..... 2. ........... 3. ............ 4. ....... 5. often
By contrast

Men's health

Palliative Care

Nursing Home Visits

Scripts

Follow up consults
Every registrar is different – need to customise

Eg

- Enough older patients (> average)
- More chronic disease but
- Surprisingly short consults
- Low continuity and complexity
- etc
- Basically in and out

- How might the supervisor utilise this potential in teaching?
Term 3 focus group - exposure

- Exposure related to patient demographic and time in practice, how much supervisors own their own patients
- Initially more of the repeat script appointment now taking more ownership
- More with practice continuity > 6 months
- Most felt they had had “sufficient” exposure
Focus group: gaps and challenges

- polypharmacy, services in rural areas, no useful template, specific mx issues
- Polypharmacy, difficult to adjust if you didn’t start them, time, therapeutic inertia (X2)
- getting focussed on one problem for months
- patient compliance
- difficult to apply multidisciplinary care in GP ++,
Note

• We still don’t manage chronic MSK pain well
• Add mental health problems and the challenge increases
• Make an extra effort if in low SES area
• “complex multimorbidity” is where the focus needs to be in the future
What is helpful – registrars’ ideas

• Top 3 useful were:
  o case discussion with supervisor,
  o prior hospital experience (gen med, aged care, pall care, ED)
  o workshop sessions

• Helpful:
  o NPS modules,
  o community geris contact,
  o practice teaching

• Recommend:
  o Patient-based in practice,
  o Case-based in WS,
  o common combinations,
  o NB supervisor variability,
  o co-ownership of patients,
Term 3 would recommend to Term 1 & 2

- needs to be patient-based in the practice
- medication review discussion
- read guidelines early, read up on care when not confident
- case review with supervisor, insist supervisor comes in
- case discussion with supervisors
- encourage in-practice teaching
- co-ownership of a chronic disease patient with supervisor
- encourage involvement in NH care.
- variability in supervisor recommendations – need standardised recommendations
- local geographic resource list
Groupwork with MEs

- We workshoped some ideas for multimorbidity teaching with MEs at AMEN
- Useful exercise with some interesting ideas for planning teaching progressively across a term with mid and end of term review
- Outline for a supervisor workshop
Supporting teaching in practice

- Structured teaching modules
- Sharing suggestions by peers
- Sharing feedback from registrars
- Structured assessment tool
  - Entrustable Professional Activity (EPA)
Learning objectives:
• Recognise complex multimorbidity in patients
• Consult any relevant guidelines for the appropriate morbidities
• Take a patient-centred approach
• Utilise appropriate item numbers for consultations
• Consult with other appropriate health and other professionals
Practice learning module

• Pre session activity
• Case discussion
• Direct observation of a consultation with use of the multimorbidity template
• Follow-up: Random case analysis and review identified learning goals
Supervisor suggestions
(email responses)

- Time is the key! +++
- Plan for the next visit
- Use it as an opportunity for a GPMP/TCA. in collaboration with the patient can reveal the patient goals and agendas (often different to the registrars)
- Consider HMR
- Break it down into smaller chunks
- Check up on social factors
- Tidy computer file on pt - meds, Dx list. Also use action / reminders
- Encourage reg to speak up - they are smart and viewing pts with new eyes.
- Review results. Opportunity to discuss conflicting priorities eg CCF vs CRF
- Discuss poly pharmacy. Advise changing meds is common in this group
- Don't forget to give basic preventive advice
- Don't get angry with non-compliant pts!
- Bill appropriately
- Demonstrate own GPMPs
ITC - Entrustable Professional Activity
EPA 11 The registrar is able to manage, in the GP context, the ongoing care of an older person with multiple morbidities and multiple medications.
Before making a decision consider whether your registrar.....

- Recognises multimorbidity (and complex multimorbidity) in patients
- Consults any relevant guidelines for the appropriate morbidities
- Takes a patient-centred approach (acknowledges the patient’s agenda, negotiates a management plan, acknowledges the burden of treatment)
- Takes into account carers when relevant

- Is able to recognise and manage medication issues in patients with multimorbidity and polypharmacy
- Negotiates appropriate goals and longer term follow up and management
- Utilises appropriate item numbers for consultations
- Consults with appropriate health and other professionals
- Can work as part of a multidisciplinary team
Teaching multimorbidity is important, do-able & effective and requires a multi-pronged approach

- A conceptual framework can be helpful
- Should be overtly linked to patient-centredness
- Learning needs to be reinforced in different contexts
- Ideally should utilise variety of methods, including assessment
- Provide resources for supervisors to support practice teaching
- Link to GPMPs etc in a useful way
- Take advice as to what is useful and what works
- Engage, reassure and challenge registrars
- Research and evaluate what we do

There’s only going to be more of it......😊