

A Process for Performing Medication Assessments

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Objectives

1. Learn an overview of a medication assessment process (with a focus on key messages/tips and providing access to resources for more in-depth learning)
2. Apply this process to a sample patient case with diabetes (focus on process **NOT** therapeutics)

Mavis

- 77yo, lives alone and independently
- Referred by family doc for medication assessment
- MD question: Do I need to adjust gliclazide dose for renal function (stable slowly declining chronic kidney disease, CrCl = 50 ml/min)



Mavis

Medication list (from dispensing system):

1. Gliclazide MR 30 mg daily
2. Metformin 500 mg BID
3. Omeprazole 20 mg daily
4. Citalopram 20 mg daily
5. Ramipril 5 mg HS
6. Amlodipine 2.5 mg daily
7. Hydrochlorothiazide 12.5 mg daily
8. Salbutamol MDI prn

What is a Medication Assessment?

“A structured, critical examination of a patient’s medications with the objectives of reaching an agreement with the patient about their treatment and optimising the impact of medications on the patient’s health”

Who will benefit from a medication assessment with a pharmacist?

No clear guidelines or evidence...

- Multiple medications
- Recent hospitalization/new diagnosis
- High risk medications (insulin, sulfonylureas, anticoagulants...esp soon after initiation)
- All people with diabetes??
- Can use a screening tool available at:

www.usask.ca/pharmacy-nutrition/primarycare

Medication Assessment Process: THREE STEPS

1. **Interview the patient** (collect info from the patient and their profile/chart)
2. **Systematically identify drug therapy problems (DTPs)**
3. **Create a care plan** to resolve problems (now) and follow up / monitor (in the future)

Step 1: The Patient Interview

PURPOSE:

Collect the relevant information that you will need to complete your assessment

- Are Mavis' drug therapy needs being met?
- Are there any drug therapy problems?
 - Does her gliclazide dose need to be adjusted?

Mavis

What additional information did you decide you needed from Mavis during your small group discussion?



Mavis

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Step 1: The Patient Interview

KEY MESSAGE:

Use a structured and logical approach to the patient interview to ensure an efficient and comprehensive data collection

Organizing an interview

A structured and logical approach:

1. Introduction and setting the stage
2. Determine pts' main concern
3. Gathering information
4. Conclude the interview

Be flexible...while maintaining control

A structured & logical approach

1. Introduction and setting the stage

- Who are you and what is your role?
- Purpose of the interview
- Process of the medication assessment
- Estimate of time required
- Ensure privacy understood

A structured & logical approach

2. Determine patient's main concerns (if any)

“What is your biggest concern about the medications that you are currently taking?”



A structured & logical approach

3. Information gathering

- Start with getting a good medication history
 - What are they taking and what are the indications

- Next go through each condition one at a time...
 - ask questions to get a detailed history of the management / control of each condition

Use 'lines of questioning'

- Tell me about...
- Where is the symptom?
- What is it like?
- How severe is it? (e.g. use a 1-10 scale)
- How long or how often has it been present?
- How did it happen?
- What makes it worse?
- What makes it better?

Lots of examples available at:

www.usask.ca/pharmacy-nutrition/primarycare

A structured & logical approach

Gather any other relevant info (*depending on case*)

- allergies and intolerances
- other medical conditions or symptoms
 - Consider ‘head to toe’ approach/review of systems
- family/social history
- caffeine/alcohol/smoking/other drug use
- immunizations
- compliance aids and devices
- Cognitive and functional status

A structured & logical approach

4. Conclude the interview

- Summarize any issues identified or actions that pt needs to take
- Next steps for the pharmacist and the patient
- Ask pt if they have any additional questions or concerns

Patient Interviewing: Extra tips

- Takes time to get good at this
- 95% of DTPs can be ID' d from the pt interview
- Video on pt interview process in more detail:
www.youtube.com/watch?v=Ec2bFjCsR0g
- For more information, tips, suggestions:
www.usask.ca/pharmacy-nutrition/primarycare

Mavis – Key info that needed to be collected

- Very adherent overall
- Pt main concern –on “too many meds”
- Meds: Also on ASA 81 mg daily, Vit D 1000 IU daily, Valerian 150 mg HS
- Diabetes:
 - Diagnosed 10 yrs ago, never tried other meds
 - Home glucose AM fasting 3.8 – 7.0 mmol/L
 - No hypoglycemia episodes (she knows Sx to watch for)
 - Does not know her A1c, urine albumin/creatinine ratio
 - No complications (other than CrCl=50ml/min)

Mavis – Key info that needed to be collected

Indication for omeprazole?

- She doesn't remember, but has no GERD / dyspepsia symptoms.
- Reports having a bleeding ulcer ~15 years ago
- Taking omeprazole every day for 5-6 years
- No side effects, covered by drug plan



Mavis – Key info that needed to be collected

Indication for citalopram?

- Depression x 5 years ago (when husband died)
- Working great – no concerns with mood or tearfulness in last few years
- No history of suicidal ideation
- No side effects, taking every day

Mavis – Key info that needed to be collected

Indication for ramipril, hydrochlorothiazide, amlodipine?

- Hypertension for many years
- No history of vascular disease
- Does not remember any recent med changes
- Home BP: 120/80 mmHg
- BP in your pharmacy: 115/78 mmHg
- Some light-headedness every AM but no falls
- Taking all of them regularly, no side side effects



Mavis – Key info that needed to be collected

Indication for salbutamol?

- Asthma x decades
- Uses salbutamol 1-2 times week during allergy season, but no inhaled corticosteroid
- No severe exacerbations, no ER visits
- Has detailed asthma action plan
- Inhaler technique excellent



Mavis – Key info that needed to be collected

Indication for ASA and herbals?

- ASA – her son told her to take it for her heart
- Vit D – doc told her to take it for “health”
- Valerian – her son told her to take it for her depression years ago

Medication Assessment Process:

Three Steps

1. Interview the patient (and collect info from the patient profile/chart)
2. Systematically identify drug therapy problems
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Mavis

What are Mavis'
drug therapy
problems (DTPs)?



Mavis

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6. Amlodipine 2.5 mg daily
7. Hydrochlorothiazide 12.5 mg daily
8. Salbutamol MDI prn
9. ASA 81mg QD
10. Vit D 1000 IU QD
11. Valerian HS


Step 2: Identifying drug therapy problems

KEY MESSAGE:

- If you don't use a systematic (thought) process to identify DTPs in complex patients you WILL make mistakes, you WILL miss problems and you WILL NOT optimally care for your pts

How to identify DTPs...

1. Pattern recognition
2. Therapeutic thought process
3. Pharmacotherapy work-up



Therapeutic thought process

FOUR questions to ask yourself regarding
the pt data you collected

1. Are the pts' undesirable signs/symptoms/
conditions being caused by drug therapy?
2. Is drug therapy needed?
3. Is the patient taking the best drug(s)?
4. Why is/are the drug(s) not working?

Pharmacotherapy Workup: FOUR STEPS

1. Evaluate appropriateness of indication
2. Determine drug effectiveness
3. Establish safety of the drug regimen
4. Ensure patient adherence/compliance

For more information...

www.usask.ca/pharmacy-nutrition/primarycare

BOTTOM LINE: Do not rely on pattern recognition alone...use a systematic thought process when dealing with complex pts.

Mavis' DTPs

Medication Assessment Process:

Three Steps

1. Interview the patient (and collect info from the patient profile/chart)
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Step 3: Create a care plan

- What is the purpose of a care plan?
- Can be formal (using standard forms) or not

What is in a care plan?

1. Need to define goals of therapy
2. Need to make solution focused interventions
(if DTPs were identified)
3. Need a monitoring plan

1. Sample goals of therapy

Purpose of goals of therapy?

Short term goal example:

- Reduce fasting glucose to 5-7mmol/L within 1 month

Long term goals:

- Reduce A1c to <7% within 6 months
- Prevent long term diabetes complications

2. Solution focused recommendations

- For when you find DTPs...
- If you cannot make the change independently, it is vital to provide specific recommendations (to physician, NP and the patient) re: **WHAT needs to be done, by WHOM and WHEN**

Example: General

- “Suggest that the family doctor writes a new prescription today to stop the gliclazide and continue with metformin 500mg BID”
- NOT:
 - “Suggest physician start metformin today”
 - “Suggest physician switch glyburide to alternate diabetes medication”

Some examples: Mavis

- Suggest reducing omeprazole for 20mg every other day for 2 weeks then stop
- Stop ASA today
- Many others for Mavis...
- Also need to consider how you would prioritize implementing multiple changes (since Mavis has **MANY** recommendations)

3. Monitoring plans

- “If you don’t follow up – you don’t care”
- Key is to define WHAT needs to be monitored, by WHOM and WHEN
- Be specific
- Consider effectiveness, safety, adherence

Sample Diabetes Monitoring Plan: Mavis

What	Who	When
Home glucose	Mavis	Once daily variable times
Hg A1c	Family doc	Every 3 months
Complications (feet, vascular, eyes)	Family doc	Every 3 months
Urine albumin creatinine ratio	Family doc	Annual
Serum creatinine	Family doc	Every 3 months
Hypoglycemic events	Pharmacist	To ask at Rx refills
Metformin side effects	Pharmacist	To ask at Rx refills
Serum electrolytes (K, Mg, Na)	Family doc	Every 3 months
Medication adherence	Pharmacist	To ask at Rx refills

Step 3: Care Plans

KEY MESSAGES:

- Importance of clear, specific goals of therapy
- Importance of specific, solution focused recommendations
- Importance of good monitoring & follow up plan

Sample standardized forms available at:

www.usask.ca/pharmacy-nutrition/primarycare

Additional Resources

Medication Assessment Video Mini-Series

Brought to you by the Medication Assessment Centre



www.youtube.com/user/MrPharmacistderek

More LIVE Sessions...

Day-long workshops:

- o CPhA Conference May 31/14
- o Can be specially organized for your staff

Want even more??



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QUESTIONS

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