Using telehealth to enable collaboration of pharmacists and geriatricians in residential medication management reviews

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Background

• Aged care residents, particularly those with dementia, are at risk of potentially inappropriate prescribing and adverse outcomes relating to medication use.
• Medication reviews are important interventions for optimising prescribing.

[Diagram:
  Residential Medication Management Reviews (RMMRs)
  Residential care
  Comprehensive geriatric assessment (CGA)]
Background

• Ideally, specialists’ input should be synchronised to ensure the best results

• Current situation:
  ➢ Lack of onsite expertise
  ➢ Professional groups that work separately

• **Telehealth** can offer a solution
Aim

To test a telehealth platform to enable collaboration of pharmacists and geriatricians in RMMR process

To assess the potential value-adding of a joint approach to the process
Proposed model

- Admission to RACF
- GP assessment
- Complex issues / polypharmacy
- Geriatrician & pharmacist review request
- Structured nurse assessment
- Online pharmacist medication review
- Geriatrician review by video-conference
- Recommendations to GP and RACF
Testing the model

• The study protocol

A refined version of RES-e-CARE
Methods

× 5

× 2

✓ Report
✓ For each medication:
  ➢ No change
  ➢ Stop
  ➢ Increase dose
  ➢ Decrease dose
  ➢ Decrease with view to stop
✓ Any new medications
Methods

- CGA assessment
- For each medication:
  - Confirm/change original medication decision?
  - ▶ No change
  - ▶ Stop
  - ▶ Increase dose
  - ▶ Decrease dose
  - ▶ Decrease with view to stop

- Any new medications
Outcome measures

• *From pharmacists’ reviews*
  - The level of agreement among pharmacists
  - Perceptions of online platform compared to usual practice

• *From geriatricians’ reviews*
  - The level of agreement among geriatricians
  - Whether they changed their original decisions after viewing the pharmacist review
  - Whether they found pharmacists’ reviews helpful
Results

• 297 medications
✓ Average 15 medications
Pharmacists’ and Geriatricians’ recommendations for medications

Pharmacists

- No change: 80%
- Decrease: 15%
- Increase: 1%
- Decrease with view to stop: 9%
- Stop: 9%
- Not reported: 1%

Total of 1485 recommendations

Geriatricians

- No change: 74%
- Decrease: 21%
- Increase: 1%
- Decrease with view to stop: 12%
- Stop: 1%
- Not reported: 1%
Agreement among pharmacists and among geriatricians

Two pharmacists

• Percent agreement: 78 %
• Chance agreement: 68 %
• kappa: 0.30

Two geriatricians

• Percent agreement: 74 %
• Chance agreement: 61 %
• kappa: 0.31
Geriatricians changing mind after viewing pharmacists’ reports

Baseline agreement between pharmacists’ and geriatricians’ recommendations for medications (from 1485 occasions)

Geriatricians changed their mind in 51 occasions
Qualitative feedback on process

<table>
<thead>
<tr>
<th>Geriatricians</th>
<th>Pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ in 72% of cases geriatricians felt the pharmacists report was helpful</td>
<td>✓ 4/5 pharmacists would be prepared to use this system as part of routine practice</td>
</tr>
<tr>
<td>✓ Helped confirm 1 or more original recommendations</td>
<td>✓ Access to more information</td>
</tr>
<tr>
<td>✓ Prompted more thought/change of original recommendations</td>
<td>✓ All information in one place</td>
</tr>
<tr>
<td>✓ Would be worthwhile to discuss together</td>
<td>✓ Saves time and expenses of travelling</td>
</tr>
<tr>
<td>X</td>
<td>X Not being able to talk with staff or observe resident</td>
</tr>
<tr>
<td>X</td>
<td>X Technical issues with learning to navigate the platform would be overcome with practice</td>
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Conclusion

✓ Among pharmacists and geriatricians, discrepancies in opinion exist

✓ Overall, geriatricians held a positive opinion toward having the pharmacist report available

✓ Pharmacists saw gains in efficiency in using telehealth platform
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