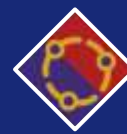




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Depression and Diabetes

The Effect of Anti-Depressant Use on Duration of Newly Initiated Diabetes Medicines

Gillian Caughey, Adrian Preiss, Agnes Vitry, Andrew Gilbert, Philip Ryan,
Sepehr Shakib, Adrian Esterman, Robyn McDermott and Libby Roughead

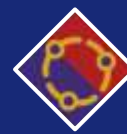


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Diabetes

- Diabetes is one of the major challenges for health care systems worldwide
- 4th leading cause of death and disease burden
- It is a complex disorder that requires constant attention to diet, exercise, glucose monitoring and medication to achieve good glycaemic control

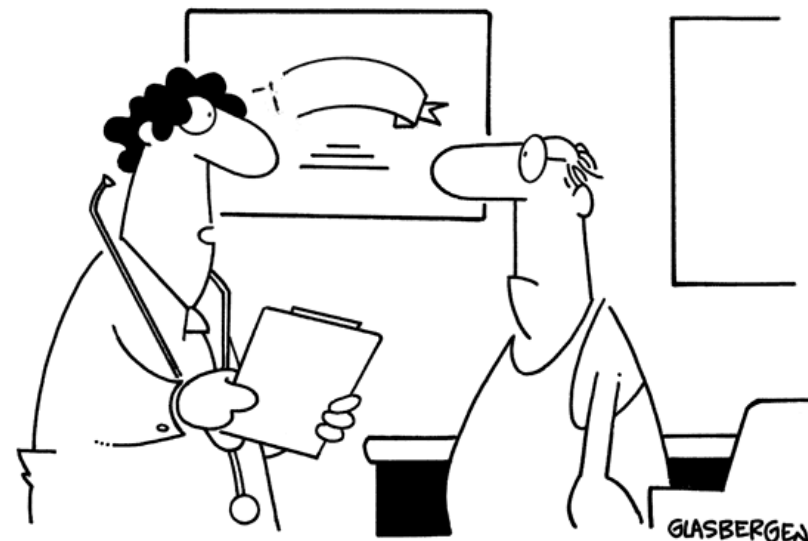




Diabetes

- ➔ The prevalence of diabetes is predicted to increase from 171 million in 2000 to 366 million in 2030
- ➔ With the biggest increase in prevalence in those aged 65 years and older

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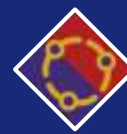


“At your age, good health is pretty much a thing of the past. My advice is, find an illness you enjoy.”



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Multiple Chronic Conditions

- Multiple chronic conditions is common in the elderly
 - ➔ 65-80% reporting two or more chronic conditions
 - ➔ 50% four or more

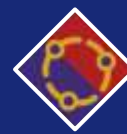
Diabetes

Arthritis

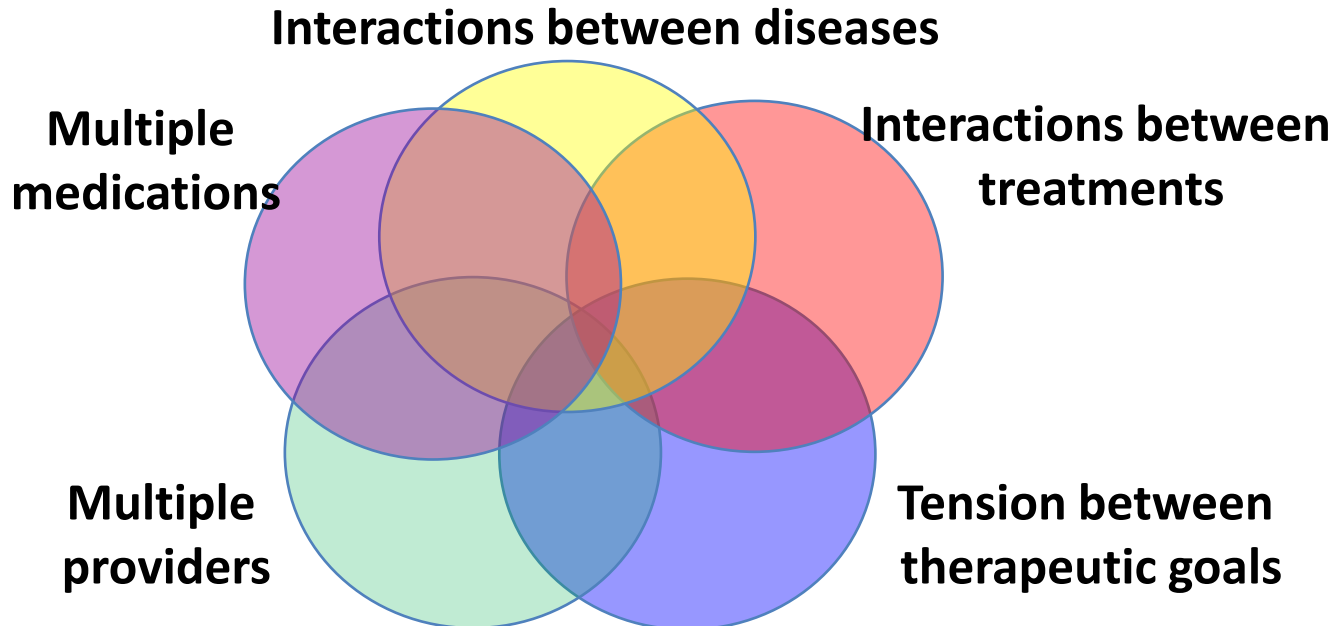
Depression

CVD





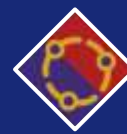
Challenges of Multiple Chronic Conditions





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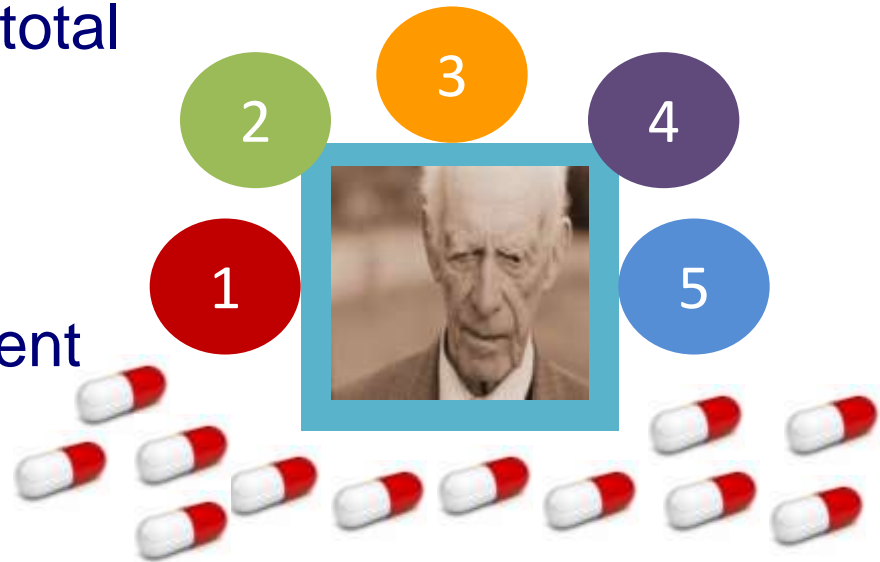


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Diabetes and Comorbidity

- ➔ 6 chronic conditions in total
- ➔ 12 different medicines
- ➔ 65% will have a treatment conflict and 22% on an inappropriate medicine





Diabetes and Comorbidity = COMPLEX





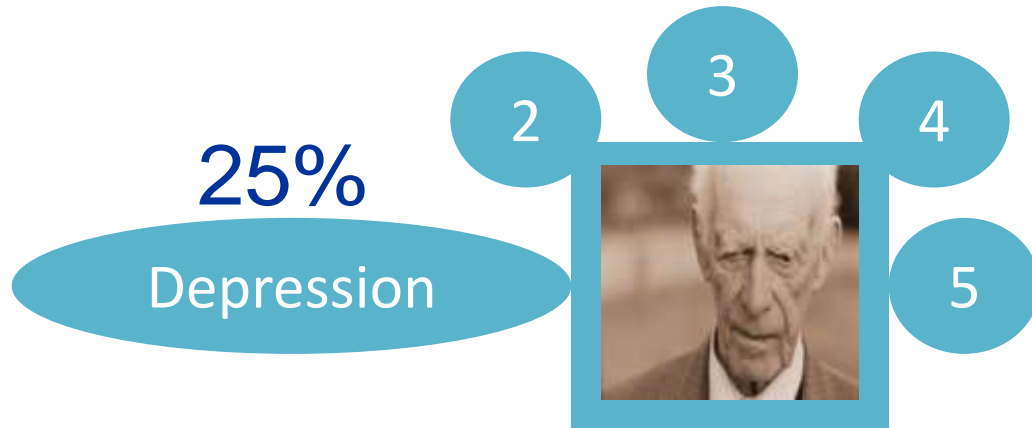
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Diabetes and Depression



Depression is often undiagnosed and inadequately treated

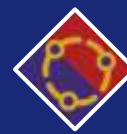


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Diabetes and Depression

- Depression is associated with
 - poorer health outcomes
 - ↑ mortality
 - ↑ diabetes-related complications
 - poorer self-care behaviours
 - exercise, diet and adherence to medications
- Depression may also place competing demands that divert focus from achieving disease control

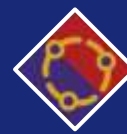


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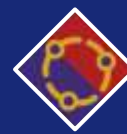
Diabetes and Medication

- The benefits of anti-diabetic therapy is clear
- Inadequate disease control results in adverse
 - ➔ micro and macro-vascular events
 - ➔ quality of life
 - ➔ functional impairment
 - ➔ increased hospitalisations
 - ➔ increased mortality



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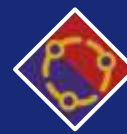
Diabetes, Depression and Medication Adherence

- Patients with depression are 3 times more likely to be non-adherent with prescribed medications
 ➡ (missed or skipped doses)
- After 12 months from initial prescription of diabetes medicines, depression was associated with a 20% increased risk of discontinuation of therapy



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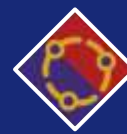
Diabetes, Depression and Medication Adherence

- Compliance with medication regimens (both in terms of persistence and adherence) has been advocated by the USA Diabetes Association as the most important variable in achieving therapeutic success



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Study Aims

- To examine the effect of anti-depressant use on duration of newly initiated oral hypoglycaemic diabetes medicines

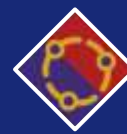


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Methods

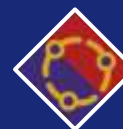
- Department of Veterans' Affairs administrative claims database that contains;
 - 310,000 veterans (median age 80 yrs)
 - Prescription records
 - Medicare and allied health records
 - Hospital admission records public and private
 - Client details (gender, DOB, DOD and address)

- 1st January 2000 – 30th June 2008



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Methods

New user of oral hypoglycaemic diabetes medicine (metformin or sulfonylurea) (time =0)

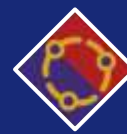


Anti-depressant use determined in 6 months prior 1st dispensing of diab med



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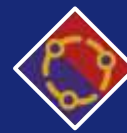
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Results

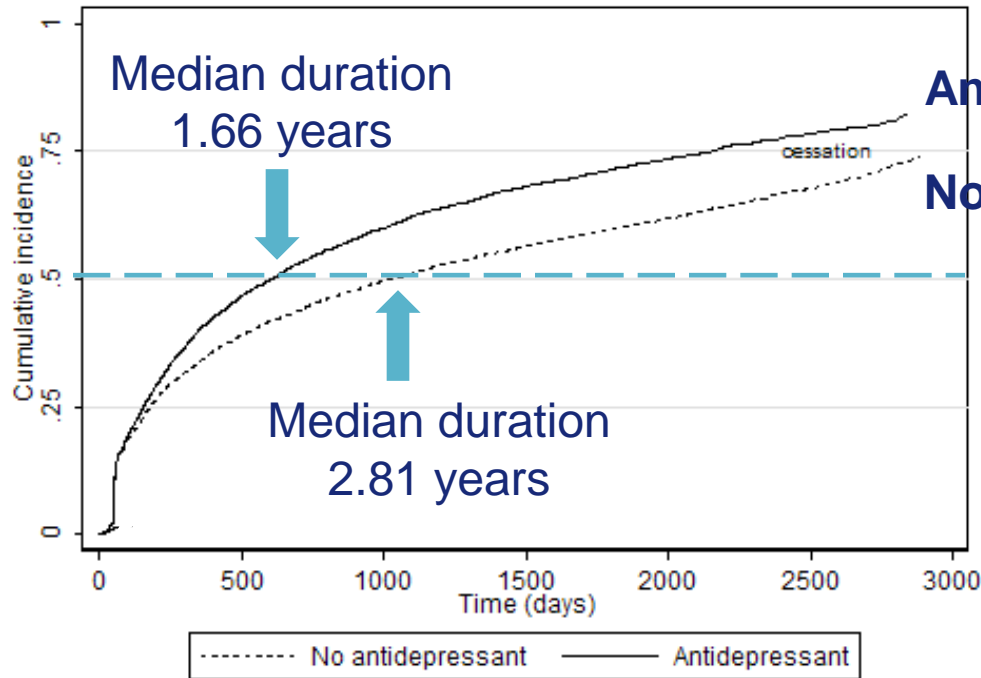
- 23,960 new users
- 23.9% dispensed an anti-depressant
- Those who received an anti-depressant were more likely to be
 - ➔ younger
 - ➔ in residential aged care
 - ➔ greater number of comorbid conditions
 - ➔ increased number of hospitalisations
 - ➔ more likely to visit an Endocrinologist

($p < 0.0001$, by comparison to those not dispensed an anti-depressant in 6 months prior)

Mental Health and Medication Safety, March 2011



Results



Anti-depressant

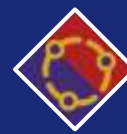
No anti-depressant

43% increased likelihood
of discontinuation of diabetes
medicine in those who received
an anti-depressant
(SHR 1.43 95%CI 1.36-1.49 $p < 0.0001$)



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Conclusion

- In patients with diabetes, comorbid depression may be contributing to non-compliance with diabetic medication regimens
- Given long-term persistence is required to achieve optimal health outcomes for patients with diabetes, the results of this study highlight the importance of identifying depression in the primary care setting

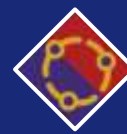


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Conclusion

- Increased awareness, screening and appropriate treatment of depression, may enhance not only overall disease management of diabetes but also improve depressive outcomes and quality of life
- Models of care need to integrate collaborative depression management with the treatment of all chronic disease, to provide a holistic approach to care



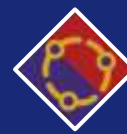


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