Medicines Use Review in patients with type 2 Diabetes Mellitus

Hunter T* and Henman M†

- Primary Care, HSE West.
- †The School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin..











- Four Regional Health Authorities on the border between Republic of Ireland and Northern Ireland
- Republic of Ireland
 - HSE- Dublin North East
 - HSE- West
- Northern Ireland
 - SHSSB
 - WHSSB
- Previously completed Health Promotion projects to raise awareness of diabetes

Brief Intervention for Medicines Use Review

Optimise Patient Medication

- Do their medicines appear to agree with evidence based guidelines?
- Do they have any related side effects?
- Have they any compliance issues?
- Do they know their clinical values?
- Do they know of the association of their medicines with their clinical values?

Intervention

- Recruit Patients
- Patient Consent Form
- Patient Assessment
- Action Plan
- GP Referral
- 3 Month Follow Up Form

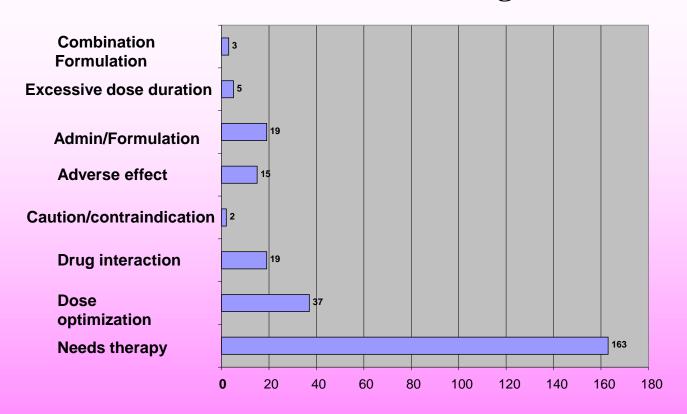
Medication Use Reviews

- 32 Pharmacies
- 258 Patients consented to Medication Use Review
 - Reviews; Mean 8 : Range 1-33
 - Patients; 78.4% estimated over 50y; 59.7% male
 - Medicines 6-7 per patient

Pharmacist's Actions

- 263 Recommendations
 - 75% Need for therapy or dose optimisation
 - 7% Drug interaction
 - 7 % Administration/Formulation
 - 6 % Adverse effects

Overall Patient Medication Recommendations for Diabetes Related Drug Classes



No. of Patients

Lipid Lowering medication Recommendations follow up action

Lipid Lowering Recommendations * Lipid Lowering medication follow up action Crosstabulation

| | Lipid Lowering r | | | |
|-----------------------------------|------------------|--------|----------------------|-------|
| Lipid Lowering Recommendations | No change | Change | Medication commenced | Total |
| None | 110 | 6 | 4 | 120 |
| Needs therapy | 36 | 0 | 15 | 51 |
| Drug interaction | 1 | 0 | 0 | 1 |
| Administration formulation | 1 | 0 | 0 | 1 |
| Dose optimization | 7 | 1 | 0 | 8 |
| Total | 155 | 7 | 19 | 181 |

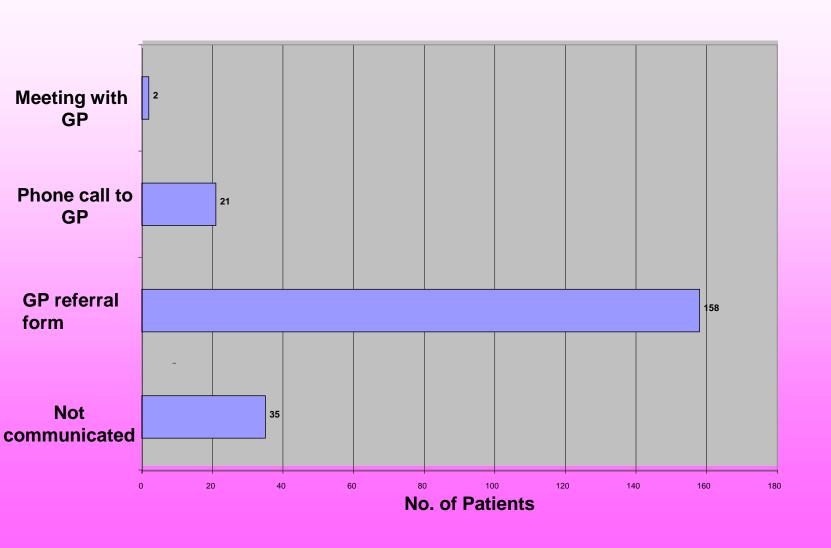
Antiplatelet medication Recommendations and follow up action

| | Antiplatelet follow up action | | | |
|------------------------------|-------------------------------|--------|-----------------------------|-------|
| Antiplatelet Recommendations | No cha nge | Change | Medication comme nced | Total |
| None | 109 | 0 | 1 | 110 |
| Needs therapy | 41 | 0 | 21 | 62 |
| Adverse effect | 2 | 1 | 2 | 5 |
| Dose optimization | 1 | 0 | 0 | 1 |
| Drug interaction | 1 | 0 | 0 | 1 |
| Admin formulation | 1 | 0 | 0 | 1 |
| Excessive dose / duration | 2 | 2 | 0 | 4 |
| Total | 157 | 3 | 24 | 182 |

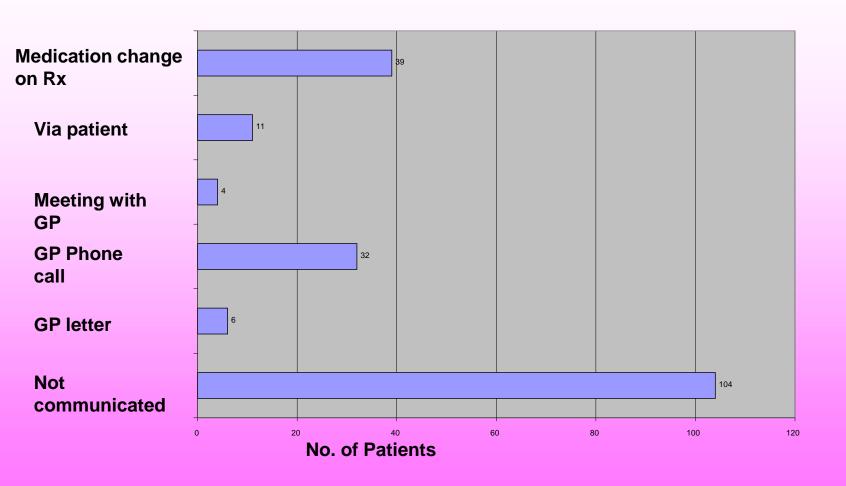
Recommendations by class

- 61 recommendations for 54 patients concerning hypoglycaemics (3.8% diet alone)
- 49 recommendations in 47 patients concerning antihypertensives (23% not receiving therapy)
- 67 recommendations on Lipid lowering drugs in 67 patients (29% not receiving therapy)
- 84 recommendations for 80 patients concerning their antiplatelet drugs (31% not receiving therapy)

Method of communication with General Practitioner of recommendations from Review



Communication Feedback from GP regarding Reviews



Policy & Evidence Context in Ireland

Policy: Building Healthier Hearts

"the structures in general practice should facilitate the prescription and monitoring of drug treatments known to be effective for those patients who would benefit"

- Secondary prevention in diabetic patients
- Evidence: Usher et al (2006)_Prescribing for patients with diabetes in the community. Ir Med J. Low usage of evidence-based drugs for prevention in Ireland lowest in North West Ireland

Conclusions

- Review process was acceptable to patients and pharmacists
- Pharmacists medication recommendations increased prescribing of evidence based medication
- Medication changes were also made where pharmacists had not made recommendations
- Just under half of GPs replied to pharmacist's recommendations
- Two GPs refused to participate

Carbon Footprint

 To reduce our carbon footprint I have not provided paper copies of all of the slides in this presentation today

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mhenman@tcd.ie