Knowing how to stop: Prescription medicines and the culture of giving

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CEASING PRESCRIBING

• Should be as important as commencing prescribing!

• An example of how/why we became interested in the problem – clopidogrel

• Systematic review of interventions to improve prescribing

• Systematic review of how medication is ceased

• Knowing how to stop – what does it take to cease medication prescribing
Exploration of geographical location .... cardiac stenting rates ... on clopidogrel use

• Ostini, Hegney, Mackson, Williamson, Tett. Pharmacoepidemiol Drug Safety 2008; 17: 1077-1090

• Clopidogrel supply data obtained from PBS (covers all Australian residents) and RPBS (Veterans) for 4 geographic regions (major city, very remote); stenting admissions for same regions (also age and gender)

• Clopidogrel was not approved for subsidy for use after stenting (except after 2002 for Veterans)
Clopidogrel dispensing ....

Concessions

RPBS Combined

Year

2000 2001 2002 2003 2004 2005 2006
“Take home” messages

• Clopidogrel supply increased more than seven-fold over eight years (1.2 to 9.0 DDD/1000 population per day) - one of the fastest growing prescription medicines used in the community

• Supply rates of clopidogrel were associated with cardiac stenting rates across the four different geographic areas studied (r=0.8-0.9 Spearman’s rho, p<0.01)

• Cumulative long-term use of clopidogrel (?outside the limited public subsidy indications) could account for a significant proportion of use (modeling indicated 30% (if use limited to one year) - 75% (if continuous use)).
• Clopidogrel was used after angioplasty despite it not being a PBS approved indication, and this unrecognised use may account for up to 75% of total

• Use commenced in hospital and just continued *ad infinitum* in community. GPs have no basis to discontinue prescribing as the true indication can not be revealed

• Need to give GPs ‘tools’ to stop prescribing, wherever this is indicated. Clopidogrel is NOT the only example!

Clopidogrel

Also known as Plavix®

You have been prescribed clopidogrel to prevent problems developing in your coronary arteries especially following placement of a stent. This medicine helps to prevent your blood clotting too easily. Most people need a dose of 75mg (one tablet) per day and clopidogrel is usually taken in combination with 75mg aspirin daily.

Name: ..........................................................

Hosp no: ..........................................................

Address: ..........................................................

Tel: ............................................................

Consultant: ....................................................

Hospital: ..........................................................

Clopidogrel dose in mg ...................................... daily

Started on ..........................................................

Planned duration of clopidogrel treatment:

☐ 1 month  ☐ 6 months  ☐ 1 year
☐ 3 months  ☐ 9 months  ☐ Lifelong

Other ............................................................

Reason for starting clopidogrel:

☐ Stent, drug eluting
☐ Stent, bare metal
☐ Other ..........................................................

It is important to read the following:

1. You should not stop taking clopidogrel without first discussing it with a doctor, unless you think it is causing severe bleeding and you cannot contact an emergency doctor promptly.

2. If you experience any of the following side effects speak to a doctor immediately, before stopping clopidogrel:
   • Blood in your urine or black tarry stools (bowel movement)
   • Any other prolonged unexplained bleeding
   • A rash.

3. You will usually be asked to continue taking aspirin even after you have finished your course of clopidogrel.
Updating systematic reviews of interventions to improve prescribing


- Educational outreach as well as audit and feedback continued to dominate research into prescribing interventions, and most consistently show positive results.

- ?any research into stopping prescribing? Little effort to systematically test why interventions do or do not work to cease prescribing (mostly reporting population data and changes) ....
How is medication prescribing ceased?

- Ostini, Jackson, Hegney, Tett. Medical Care 2011; 49: 24-36.

- To identify effective strategies for stopping pre-existing prescribing in situations where continued prescribing may no longer be clinically warranted.

- 1306 articles identified by comprehensive literature reviews; 12 were assessed to be of high quality, relevant original research
Variety of effective interventions ....

- Patient-mediated interventions, manual reminders to prescribers, educational materials to patients, face-to-face intervention with prescribers, regulatory intervention

- Partially effective – audit and feedback, electronic reminders, educational materials alone sent to prescribers, distance communication with educational materials to prescribers

- However, aggregated data usually reported and any reduction attributed to cessation (not linked data, not truly cause and effect). Is it truly stopping pre-existing prescribing?
De-prescribing

• Suggested by Woodward (JPharmPracRes 2003; 33: 323-328)

• Deprescribing principles
  – Review all current medications (accurate medication list, indications for use, assessment of compliance, identify adverse drug reactions)
  – Identify medications to be targeted for cessation
  – Plan a deprescribing regimen (prioritise)
  – Plan in partnership with patient and carers
  – Frequent review and support
How would this work?

• Considerations
  – In general/family practice
  – Fee for service payment model ......
  – Perverse incentive – more patients seen, more funding
  – Lack of information transfer between specialists/GPs
  – ‘do no harm’ in prescribing is often seen as ‘if it ain’t broke, don’t change it’

• However
  – Physiology changes
  – Medications often added (?interactions ?risk of ADRs)
  – Homeostasis affected
  – Evidence for many medications in the old-old is lacking
Any research to help end prescribing?

• Barriers to discontinuing prescribing identified in literature include
  – Patient barriers – discontinuation may be perceived as ‘sub-standard’ care or capitulation (to the condition)
  – Professional barriers – eg. prescription commenced by specialist with unclear duration of therapy; general unwillingness to stop prescriptions that have been started by another clinician (‘habit persistence’); see discontinuation as a ‘threat’ to the relationship (clinician/patient)
  – System barriers – eg. initiation of prescribing relies on RCTs, whereas evidence for discontinuation is from observational, retrospective data; no incentive to cease prescribing in fact there is a cost in terms of time spent for accurate review; pharmaceutical company pressures to maintain/increase prescribing
Influences on Prescribing and QUM

FEEDBACK CAPTURED BY VARIOUS MECHANISMS RELATED TO EACH GROUP.
Need to systematize how to stop prescribing

• Explicit instructions to consumers, GPs and pharmacists from hospitals about what medication prescribed in hospital is used for and for how long (structured part of medication reconciliation conducted at discharge by hospital pharmacists)

• Consumer empowerment to ask each time about if/when a prescription can be ceased (taking medication is not a benign activity)

• In Australia, regulatory intervention – approvals for prior authorisation for PBS medications need to have more diligent time-related questions

• Face-to-face intervention/assistance with prescribers, to address perceived barriers and clinical questions about ceasing medication (human factors important)
Where to now??

• Multi-faceted intervention – consumer and prescriber need to conclude that NOT writing a prescription is the preferable option

• Clinical/health outcomes measured. Build in on-going cost/risk-benefit analysis each time a prescription is continued. (adverse effect including all unintended, negative effects and considerations around patient safety)

• Require sign-up from multiple organisations – acute hospitals, general practice, hospital and community pharmacy, consumers and consumer organisations, regulatory bodies, advisory/educational bodies

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Just at the beginning of ending

• Complicated, human behaviour and perceptions

• Need to test interventions, link data, system changes

Thank You