Multimorbidity, polypharmacy and the Quality and Outcomes **Framework**

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Outline

- Potentially inappropriate prescribing in the context of multimorbidity and polypharmacy
- How should health services response respond?
 - Focus on high-risk prescribing
 - Focus on high-risk patients
 - Focus on high-risk practices or prescribers
 - The example of the UK Quality and Outcomes Framework (disclaimer)



High-risk prescribing

- Prescribing is a high benefit, high risk, high cost activity
- 6.5% of hospital admissions are related to ADEs
 - ADE directly leading to admission in 80%, half preventable
- Mostly due to 'appropriate' drugs that guidelines tell us to prescribe more of
 - Warfarin, aspirin, (non-steroidal anti-inflammatory drugs),
 ACEI/ARB and other renal toxic drugs, hypoglycaemic drugs,
 blood pressure lowering drugs
- High-risk or potentially inappropriate prescribing is not a never event, but needs regular review
 - The correct level is NOT zero

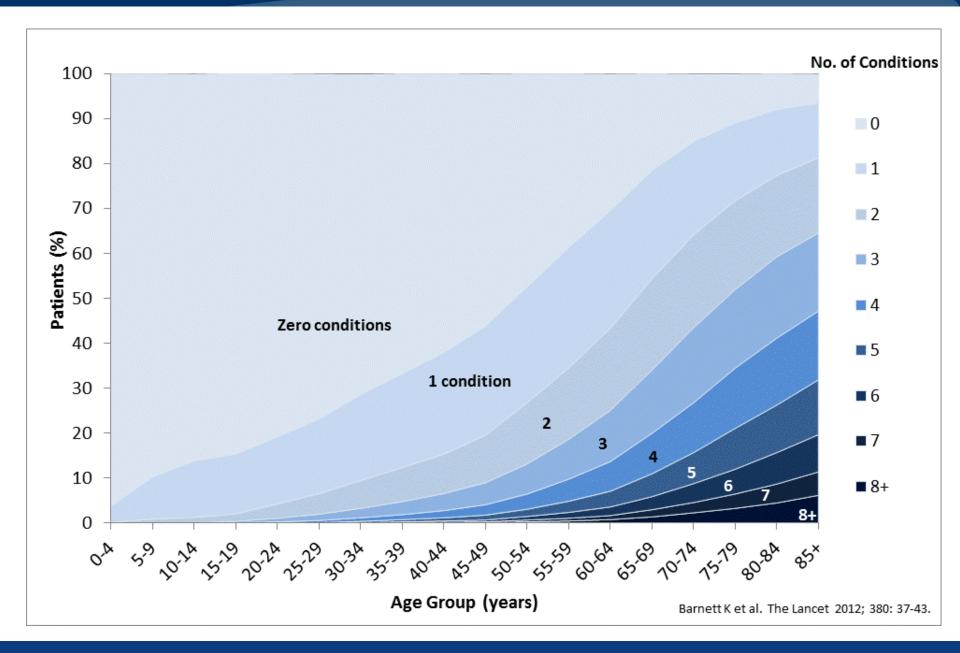
Response 1: focus on PIP

- PIP is common, so an obvious response is to aim to reduce it
- Interventions to reduce specific prescribing
- PINCER, DQIP, EFIPPS all take this approach
- Rational, sensible, potentially productive
 - Only covers a limited range of (important) measures
 - Prescribing is more complex than this



The context of multimorbidity and polypharmacy





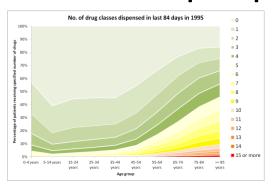
High risk prescribing and polypharmacy

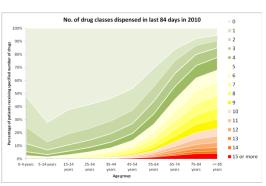
No. of chronic drugs	% getting a high risk prescription	Adjusted OR
0 drugs	4.3	1
1-2 drugs	11.0	2.7
3-4 drugs	12.7	3.2
5-6 drugs	14.5	3.8
7-8 drugs	18.3	5.0
9-10 drugs	21.5	6.1
11+ drugs	26.6	7.9



Safer but more people at risk...

- People on warfarin prescribed NSAIDs, antiplatelets, high-risk antibiotics, oral azole antifungals
 - 16.0% in 1995 (258/1611)
- 10.7% in 2010 (538/5006)
- 'Safer' but more people are at risk...



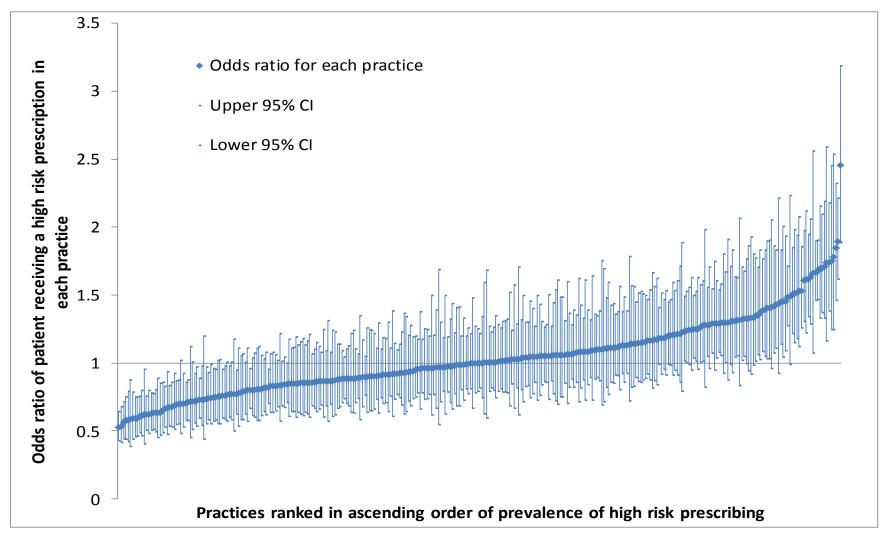


Response 2: focus on high-risk patients

- Multimorbid, frail people with polypharmacy are at much higher risk of harm
- Interventions to improve prescribing in those at highest risk
 - PIP is an element of this, but other elements important
- Various pharmacist led interventions, increasing amounts of UK NHS activity
 - Eg NHS Scotland polypharmacy guidance
 http://www.central.knowledge.scot.nhs.uk/upload/Polypharmacy%20full%20guidance%20v2.pdf



High-risk practices?



Response 3: focus on high risk practices

- Some practices are much riskier than others, so a governance issue
 - Don't know what a 'safe' level is
 - Don't know if this is a 'bad apple' or a 'spoiled barrel' problem
- Inevitable that more routinely measuring prescribing safety will create situations where goverance or regulatory action is needed
 - Be ready for it

The example of QOF

- Disclaimer...
- QOF is quality focused but various indicators impact on prescribing in three ways
- AF04: % of patients with AF and CHADS2 score >1 £22/pt currently treated with anti-coagulation therapy
- DM07: % of patients with diabetes with last £22/pt HBA1c ≤59 mmol/l
 - MM03: A medication review in preceding 12 months for all patients being prescribed 4 or more £1/pt repeat med

Can QOF do prescribing safety?

- We don't know what the right level of PIP is, so we can't pay for zero PIP
- Reluctance to pay for "review only" indicators, but sometimes need professional judgement
- Old medicines review indicator unfocused
 - Focus on 10 or more drugs? On the NICE agenda...
 - NHS Scotland introduced anticipatory care domain and SPSP-PC has workstreams on warfarin & DMARDS
- Can't replace local, facilitative activity



Summary

- Several possible responses to PIP
 - Focus on high-risk indicators
 - Focus on high-risk patients
 - Focus on high-risk practices or prescribers
- Best response probably multiple interventions, but what best to do first will vary by context
 - High-risk indicators easiest
 - High-risk patients attractive but difficult
 - High-risk practices or prescribers has to be planned for

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