Introduction/Objectives

- The major 5 European markets all operate socialised healthcare systems. In each there are different structures and organisations in place to assess the value of medical interventions, and a number of different decision makers who act on the basis of these assessments to ensure efficient use of healthcare resources. Collectively these decision makers are commonly referred to as payers.
- One of the key objectives of the payer is to influence prescribing behaviour, to ensure effective use of healthcare resources in order to contain healthcare costs while simultaneously allowing an acceptable minimum quality of care. To achieve this they use a number of administrative approaches. These vary according to the care setting.
- Less clear is the extent to which these administrative controls are effective tools to influence prescribing behaviour; the extent to which prescribers feel that these are implemented appropriately or how this varies between countries or therapy areas.
- Oncology is an interesting setting in which to explore this topic for two key reasons:
  - There is a mix of locally active payers (located within the organisations where care is given), national decision makers and in some cases regional or quasi regional payers who are further removed from the prescriber.
  - It is a highly emotive therapy area, in which innovative drugs are often costly – providing the possibility for tension between the payers’ incentive to attempt to contain use of new medications, and the prescribers’ desires to use new treatments to improve outcomes in terminal conditions.
- The objective of the analysis was to assess the extent to which prescribing decisions are influenced by payer implemented controls.

Methodology

- Data were drawn from the Adelphi Multiple Myeloma Disease Specific Programme, a real world, cross sectional survey of physicians and their consulting patients conducted in Q1 2015.
- 50 Haematologists/Haematological-Oncologists in each of France, Germany, Italy, Spain and the UK, actively managing Multiple Myeloma patients, were asked to complete patient record forms prospectively for the next 8 consulting Multiple Myeloma patients. The detailed methodology is described by Anderson P et al. CRMQ 2008; 12 (12): 3063-72.
- In addition to clinical considerations, prescribers recorded the impact of administrative controls on their prescribing decisions as well as attitudinal and perceptual information on the influence of payer recommendations.
- To capture the impact of administrative controls on prescribing, descriptions of the range of available types of administrative controls were developed, with the terminology for each tailored to the specific healthcare system.
- For analysis the responses were grouped into standardized sets to allow for international comparisons. Three categories were devised for this analysis:
  - Respondent did not consider payer based administrative controls to have played a part in the specified prescribing decision.
  - Respondent made the prescribing decision based on the available formulary.
  - Respondent was unable to prescribe their preferred product for the specified prescribing decision as a result of a payer based administrative control.

Statistical Method

- A Fishers exact test was used to test the null hypothesis that differences between markets were due to chance, with Bonferroni adjustment to account for multiple testing.

Results

- As each physician completed a patient record form for multiple patients we were able to record information on 4,736 individual prescribing decisions across 5 EU markets. Table 1 shows the distribution of prescribing decisions.

Table 1: Number of Prescribing Decisions Recorded

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PRESCRIBING DECISIONS RECORDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>1,052</td>
</tr>
<tr>
<td>Germany</td>
<td>806</td>
</tr>
<tr>
<td>Italy</td>
<td>869</td>
</tr>
<tr>
<td>Spain</td>
<td>1,005</td>
</tr>
<tr>
<td>UK</td>
<td>1,004</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,736</td>
</tr>
</tbody>
</table>

We observed national variation in the influence of payers on prescribing decisions. Administrative controls were cited as influencing more than two thirds of prescribing decisions in all but Germany (45%). The highest influence was seen in the UK where payer/formulary controls were a factor in 85% of prescribing decisions (Figure 1).

- We undertook a series of pairwise comparisons between each individual market to assess whether the difference in payer controls were statistically significant. We found that the percentage of prescribing decisions influenced was greater in the UK and less in Germany compared with every other market. No differences were observed between France, Spain or Italy; other than controls were statistically more prevalent in Spain compared with Italy.
- Across the sample, prescribers reported that they would have selected an alternative treatment in around 1 in 20 patients, had administrative controls not been in place, with slight variations between markets. The highest influence appeared to be in the UK (1 in 14) and the lowest in Italy (1 in 35) and this was the only pairwise test to show a significant difference (p 0.0001).

Conclusions

- This research demonstrates that prescribers’ behaviour in all markets studied is strongly influenced by administrative controls to which payers contribute, with differences between markets, with the greatest impact felt by prescribers in the UK, and the least in Germany.
- We have observed that in most markets prescribers report high levels of prescribing according to formulary requirements, with around 1 in 20 prescribing decisions considered to be suboptimal across the markets observed (in that an alternative drug would have been prescribed). This suggests that prescribers are both aware of and accept formulary controls in the majority of cases.
- Even allowing for good alignment between payers and prescribers, we have demonstrated that the influence of payer based administrative controls is high, with the potential to encourage prescribing the treatments that might be considered suboptimal by prescribers, possibly more so in the UK, and less so in Italy.
- Further research will help to establish whether differences between markets reflect actual differences in the nature and impact of controls, in the availability of products, or simply differing levels of alignment between prescribers’ and payers’ objectives or opinions. In either case, further insights into this issue have the potential to inform discussions between prescribers and payers about rational use of medicines and patients’ access to medicines.

Implications

- It has been shown that payer-based controls drive selection of treatments in the majority of patients; as a result these controls should be designed and implemented with great care and due clinical consideration.
- There is room for greater alignment between prescribers and payers to ensure that either:
  - Prescribers understand why formulary decisions represent the best clinical practice for their patients, OR
  - Formularies reflect best practice for all patients, or at least allow flexibility for cases where the formulary is suboptimal for individual cases.
- Enhanced and refined insight tools to capture these influences on prescribing behaviour will help to illuminate this dynamic further and inform future decisions.