Pharmaceutical Risk Sharing Agreements

C. Bernie Good MD MPH
Department of Veterans Affairs
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Objectives

- Describe concept of Risk-Share Agreements
- Describe types of agreements
- Identify specific risk-share agreements
- Consider pitfalls
- Identify desirable elements of risk share for VA
- Why this is of interest to VA
- Why this might be of interest to industry
Risk Share Concepts

• Risk Share Agreements: Payment is linked to “real world” effectiveness- sometimes referred to as “Pay for Performance”, “Performance-based Agreements”, or “Outcomes Guarantees”.

• Two general types of agreements:
  – Finance-Based
  – Outcomes Based

• Will give specific examples, but often the designations of agreement type be blurred
Risk Share Agreements
Broad Categories

Finance Based Agreements

- Per-patient Cost Capitation- Limit overall expenditures per pt
  - Example: UK limit payment for Lucentis treatments to 14 injections

- Overall Sales- Volume Capitation Deal- Estimate total costs, establish cap
  - Example: As part of price negotiations in France, annual sales cap agreed upon for several years.

- Conditional Treatment Continuation
  - Drug is provided (or at a deep discount) by manufacturer for set period of time, until a short-term treatment goal is met, or not met. Those that continue on treatment become responsibility of payer.
  - Example: Italy agreement for 3 months of Alz Dx drugs. Those tolerating and felt to benefit, continue on payers expense.

- Referenced Based Pricing- Price innovator drug similar to existing treatment (renal cell ca example), with non-inferiority in subsequent trial
Risk Share Agreements

Broad Categories

Outcomes Based Agreements

• Short-term Performance Guarantee:
  – Example- guarantee HBA1C lowering of x% by x months of therapy
  – Long term coverage reverts to payer

• Population-based performance deal
  – Reimbursement is based on long term outcomes of patient population, rather than individual patients
  – Concept works well with Coverage with Evidence-Development concept
  – Classic example of this was the UK multiple sclerosis risk share agreement. MS Drugs were provided, based on collection of data for population based outcomes (more on this agreement later)
  – Another example is bisphosphonate deal, where the costs of treatment of fractures in a population are covered, rather than replacing pharmaceutical expenditures
Outcomes Based Agreements (continued)

- Biomarker-linked- Payer makes reimbursement conditional on results of biomarkers
  - Example- PSA response to treatment
- Surrogate Endpoint based reimbursement
  - Example- Tumor response by x months- payment only those patients
- Patient Outcomes Warranty-Payment for long-term outcomes
  - Ex: prevention of fracture with bisphosphonates
Risk Share Concepts

• So far has proven difficult to implement, most examples outside of US (Neumann, Health Affairs 2011; 30: 2329-2337)
  – High transaction costs
  – Measurement issues
  – Patient population and disease state issues
  – Data infrastructure issues

• Despite challenges, great interest
Risk Share Examples: Canada

• Sandoz Canada: Reimbursement for treatment-resistant schizophrenia (discontinued clozapine within six months).
• Merck-Frost: Reimbursement for finasteride failures (one full year of treatment) for BPH requiring surgery.
• Sanofi-Aventis: Reimbursement for cost of docetaxel for non-response
Risk Share Examples: UK

• Beta interferon for multiple sclerosis (MS): 2002 NICE agreed to cover various beta-interferons to equate to a certain cost-effectiveness threshold
• Lucentis for macular degeneration: Capped number of injections to 14 (2 years)- Novartis covers cost beyond that
• Velcade (bortezomib) 2006 J&J Risk Share: Multiple myeloma
  – 4 cycles, reduction of paraprotein decreases at least 25%, or rebate those cycles
• Stelara (ustekinumab) for plaque psoriasis, limits costs for patients > 100 kg
• Votrient (pazopanib) for advanced renal cell- reference priced to sunitinib, with additional financial rebate if proved inferior in head to head trial with sunitinib
Risk Share Examples: France

• DPP4 Inhibitors for type 2 DM after metformin- priced all DPP4 at higher price, based on better glycemic control over long-term compared to sulfonylureas- if study shows no benefit, price reimbursements

• Risperidone CR- for schizophrenia- priced higher with guarantee that hospitalization rates would be lower than standard of care (based on better adherance)
Risk Share Ex: Australia

- Enbrel (etanercept)- Agreement with Wyeth that annual expenditures would not exceed A$100 million/year (apparently did not)
- Tracleer (bosentan)- Established a registry for all patients with pulm HTN on drug, with 6-month evaluations paid for by drug manufacturer, with guarantee to d/c non-responders, and document outcomes
Risk Share Italy*

• Risk Share Agreements
  – Cetuximab, panitumumab

• Payment by Results
  – Gefitinib, sorafenib, dasatinib, lapatinib, nilotinib, temsirolimus, everolimus, pagaptanib, ranibizumab

• Cost-sharing (initial rx is discounted)
  – Erlotinib, sunitinib, bevacizumab, bortezomib, lenalidomide

* Gallo, Dec 2010 presentation at Meeting of Competent Authorities
Risk Share Examples: US

- Merck: LDL lowering at 6 months with simvastatin
- Merck: valsartan and valsartan hydrochlorothiazide for BP target goals
- Merck: Same deal for finasteride and surgery for BPH
- Merck and Cigna: Januvia
  - Rebate increased for % patients reaching HBA1C goal
  - Rebate increased for % patients with appropriate adherence
- P&G, Sanofi-Aventis: Actonel treated patients with fractures - cover part of cost of treating
  - Requires evidence of treatment compliance in fracture patients
Risk Share Examples: US

• Florida Healthy State Program
  – 2001, agreement with Pfizer
  – State-wide disease management program with Medicaid
  – Asthma, diabetes, CHF, HTN- got support and education provided by Pfizer, to improve medication adherence, and to improve clinical outcomes (lower hospitalizations and ER visits)
  – Reportedly improved outcomes, saving Florida Medicaid $139M
  – Scheme discontinued
UK Multiple Sclerosis Risk Share Scheme

- National Institute of Clinical Excellence (NICE) 2002 recommended against use of interferon beta and glatiramer acetate for MS (? effectiveness, high cost)
- Risk share- agreed that drug price would be reduced to achieve a CER of $54,000 per QALY
  - Avonex, Betaseron, Rebif
- Prospectively followed patients treated, using a historical control population (Canadian cohort study of 25 years)
UK Multiple Sclerosis Risk Share Scheme (con’t)
• Disability assessed using Extended Disability Status Scale (EDSS)
• EDSS measured annually
• Duration of scheme- 10 years, with price setting reviews every 2 years
UK MS Risk-Share
What went wrong?

• Outcome measurement issue
  – EDSS not an ideal outcome
  – Prone to inter, and intra-rater variability issues
  – Other outcomes difficult (MRI lesions not clearly connected to disability)

• Disease issue- MS is a chronic disease, with slow disease progression over 20-40 years in many cases
UK MS Risk-Share Outcome

• Unexpectedly, EDSS scores for treated patients was *worse* than historical control cohort.
  – Although disability scores worsened, there was a decrease in the number of relapses, not an endpoint
• Thus, by strict agreement with scheme, entire cost of drugs should have been reimbursed
• Entire risk share has been center of controversy- ultimately the “Independent Scientific Advisory Group” recommended no price change
  – Cited concerns with EDSS, historical control, long-term questions
  – Controversy about the “independence” of the group
Risk-Share Benefits

• Will need to provide value for
  – VA
  – Industry
  – Our Patients
Risk-Share Benefits

Alignment of VA and Industry

• Focus on identifying patients most likely to benefit from treatment

• Avoid useless risk in patients who are non-responders

• Coverage with Evidence Development
  – Identify real-world data, VA centric data
Risk-Share Benefits - Industry

• Market Penetration
  – Formulary status - not up “for sale”
  – Risk share likely will increase market share
  – Allows us (VA) to relax some of our “Criteria for Use”
    • For example, with CED for uncertain areas

• Ideally, reflects confidence of industry that their product will perform as advertised
Elements of Risk Share

Clinically relevant outcomes
Outcomes measurable in reasonable time period
Easily measured, reliable measures
Administrative data, avoid chart review
Risk Share- Challenges

- Trust (industry) administrative data
- Sharing of observational data (VA) and clinical trial data (industry)
- What to do with Off-Label use? (administrative data does not allow to always determine indication)
Risk Share Agreements

Questions?