**Bibliography of Pull Incentive Reports**

**(reverse chrono)**

**V1: 30 Jun 2018 – Kevin Outterson**

**Op-Ed Summaries**

1. Outterson K. [Innovative ways to pay for new antibiotics will help fight superbugs. STAT News, Apr. 11, 2018](https://www.statnews.com/2018/04/11/innovation-new-antibiotics-fight-superbugs/) (calling for a pull incentive).
2. Daniel G, Schneider M, McClellan M. [Addressing antimicrobial resistance and stewardship: the priority antimicrobial value and entry (PAVE) award.](https://jamanetwork.com/journals/jama/fullarticle/2647073?resultClick=1) JAMA Sept. 26, 2017 (opinion length version of the PAVE report below).
3. Bagley N, Outterson K. [We will miss antibiotics when they are gone. NYTimes, Jan. 18, 2017](https://www.nytimes.com/2017/01/18/opinion/how-to-avoid-a-post-antibiotic-world.html) (calling for a pull incentive).

**Major Reports and Academic Publications**

1. Ardal C, Findlay D, Savic M, Carmeli Y, Gyssens I, Laxminarayan R, Outterson K, Rex J. [Revitalizing the antibiotic pipeline: stimulating innovation while driving sustainable use and global access (DRIVE-AB Final Report).](http://drive-ab.eu/wp-content/uploads/2018/01/CHHJ5467-Drive-AB-Main-Report-180319-WEB.pdf) March 2018 (3-year major IMI project; 4 major recommendations, including a market entry reward).
2. Daniel G, McClellan M, et al. Duke-Margolis Center. [Value-based strategies for encouraging new development of antimicrobial drugs](https://healthpolicy.duke.edu/sites/default/files/atoms/files/value-based_strategies_for_encouraging_new_development_of_antimicrobial_drugs.pdf) (2017) (adding reimbursement reforms to market entry rewards as pull incentives).
3. Boston Consulting Group. [Breaking through the wall: a call for concerted action on antibiotics research and development](https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/5_Publikationen/Gesundheit/Berichte/GUARD_Follow_Up_Report_Full_Report_final.pdf) (for the German Federal Ministry of Health, in support of the G20, Feb. 2017) (calling for a $1B “global launch reward” as a pull mechanism).
4. [Political declaration of the high-level meeting of the General Assembly on antimicrobial resistance.](http://www.who.int/antimicrobial-resistance/interagency-coordination-group/UNGA-AMR-RES-71-3-N1631065.pdf?ua=1) A/RES/71/3. 19 Oct 2016 (see especially par. 10(c) on delinked post-approval reward).
5. Outterson K, Gopinathan U, Clift C, So A, Morel C, Røttingen JA. [Delinking investments in antibiotic R&D from sales revenue: the challenges of transforming a promising idea into reality](http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002043). PLOS Medicine 2016; JUN 14;13(6).
6. O’Neill J for the AMR Review. [Tackling drug-resistant infections globally: final report and recommendations.](https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf) May 2016 (final report after a series of topical reports; calls for a delinked pull incentive, a “market entry reward”).
7. Deak D, Outterson K, Powers JH, Kesselheim AS. [Progress in the Fight Against Multidrug Resistant Bacteria?: A Review of FDA-Approved Antibiotics](https://www.ncbi.nlm.nih.gov/pubmed/27239977) 2010-2015. ANNALS OF INTERNAL MED. 2016 MAY 31.
8. Outterson K, McDonnell A. [Funding antibiotic innovation with vouchers: recommendations on how to strengthen a flawed incentive policy.](https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.1139) Health Affairs May 2016 (supporting a third generation of transferrable exclusivity for antibiotic innovation).
9. Rex J, Outterson K. [Antibiotic reimbursement in a model delinked from sales: a benchmark-based worldwide approach.](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2815%2900500-9/abstract) Lancet Infect Dis 2016;16(4):500-505 (differentiated rewards based on drug characteristics).
10. Jaczynska E, Outterson K, Mestre-Ferrandiz J. [Business model options for antibiotics: learning from other industries.](http://drive-ab.eu/wp-content/uploads/2014/09/Business-Model-Options-for-Antibiotics-learning-from-other-industries.pdf) Chatham House, Feb. 2015 (models from insurance, public utilities, infrastructure, defense).
11. Outterson K, Powers JH, Daniel G, McClellan M. [Repairing the broken market for antibiotic innovation](https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2014.1003). Health Affairs, Feb. 2015.
12. Clift C, Gopinathan U, Morel C, Outterson K, Rottingen JA, So A. [Towards a new global business model for antibiotics: delinking revenues from sales](https://www.chathamhouse.org/sites/default/files/field/field_document/20151009NewBusinessModelAntibioticsCliftGopinathanMorelOuttersonRottingenSo.pdf) (Chatham House, 2015) (first major report focused on antibiotic delinkage).
13. Sertkaya A, Eyraud J, Birkenbach A, Franz C, Ackerley N, Overton V, Outterson K. [Analytical framework for examining the value of antibacterial products (the ERG Report for ASPE/FDA)](https://aspe.hhs.gov/report/analytical-framework-examining-value-antibacterial-products) 2014 (calculates the private and social NPV of various antibiotic investments; finds low or negative private NPVs and very high social values).
14. Kesselheim AS, Outterson K. [Improving antibiotic markets for long term sustainability](http://digitalcommons.law.yale.edu/yjhple/vol11/iss1/6/). Yale J Health Policy, Law & Ethics 2011;11:101 et seq. (large antibiotic prize).
15. So A, et al. [Towards new business models for R&D for novel antibiotics.](https://www.ncbi.nlm.nih.gov/pubmed/21439891) Drug Resistance Updates 2011;14:88-94 (from Uppsala conference, call for delinking revenues from sales).
16. Kesselheim AS, Outterson K. [Fighting antibiotic resistance: marrying new financial incentives to meeting public health goals.](https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2009.0439) Health Affairs, Sept. 2010 (large antibiotic prize, with support for stewardship and access).
17. Morel C, Mossialos E. [Stoking the antibiotic pipeline](https://www.bmj.com/content/340/bmj.c2115). BMJ 2010;340:c2115 (18 May 2010) (includes pull incentives).
18. Outterson K. [The legal ecology of resistance: the role of antibiotic resistance in pharmaceutical innovation](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1492150). Cardozo L Rev 2010;31:613 et seq.
19. Spellberg B, Guidos R, Gilbert D, Bradley J, Boucher HW, Scheld WM, et al. [The epidemic of antibiotic resistant infections: a call to action for the medical community from the Infectious Diseases Society of America.](https://www.ncbi.nlm.nih.gov/pubmed/18171244) Clin Infect Dis 2008;46:155-64 (call to action from IDSA; early supporter of pull incentives).
20. Laxminarayan R, Malani A, Howard D, Smith DL. [Extending the cure: policy responses to the growing threat of antibiotic resistance](http://www.extendingthecure.org/sites/default/files/ETC_FULL_0.pdf). Resources for the Future, 2007 (noting that companies do not have an incentive to manage for resistance).
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