Is there an Open Access advantage in policy citations?

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In this presentation

- OACA – much debated
- FWIW I agree with: It Exists (Probably), It’s Modest (Usually), and the Rich Get Richer (of Course)*
- Might the same apply to citations to research articles in policy documents?

** Ottaviani (2016) in PLoS One https://dx.doi.org/10.1371/journal.pone.0159614*

What do we mean by a policy document?

- Overton has a broad definition:

"Documents written by or for policymakers"

- White papers, draft bills, reports and guidance from government
- Legislative transcripts from committees or parliaments
- Think tank policy briefs
- Working papers from central banks
- Research reports from NGOs
- Clinical guidelines from health agencies

Educated guess

- Probably not (that we can easily detect)

In general…

- There are lots of different kinds of policy, some more evidence driven than others
- Policy doesn’t cite research for the same reasons scholarly articles do
- Policymakers don’t necessarily discover (or consume) research in the same way researchers do e.g. through search
- Being in the right place at the right time and who you know as a researcher may count for more

Policy citations aren’t scholarly citations

	Papers in 2015	*% cited by policy, 2015 - 2020*
nature chemistry	233	2%
PLOS ONE	29k	7%
THE LANCET	2k	23%
Journal of Gambling Studies	116	30%
Review of Faith & International Affairs	48	37%
HealthAffairs	374	45%

Source: Overton.io and Pubmed, October 2020

Straightforward citations do happen

Essay

Learning from failure: the need for independent safety investigation in healthcare

Carl Macrae[1] **and Charles Vincent**[2]
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Tragedies are powerful motivators for learning and improvement. The only honourable response to the victims is to try to ensure that similar tragedies are not repeated in the future. In the NHS the report that led to the National Reporting and Learning System was entitled 'An Organisation with a Memory' precisely because of the ambition to capture the learning inherent in tragic incidents.[1] The recent Berwick review into patient safety in the NHS similarly speaks of 'A Promise to Learn' but also, tellingly, of a 'Commitment to Act'.[2] We clearly need a capacity for intelligent, thoughtful reflection on the causes of tragic events and, still more, a capacity for using this hard won knowledge to build a safer healthcare system. In this paper we suggest that this would be most effectively achieved by the creation of a small, permanent independent agency charged with coordinating major inquiries and safety investigations in the NHS. Such a model, if successful, could be applied in other healthcare systems.

Safety investigation in the NHS

The NHS currently has no consistent approach to investigating and learning from safety issues. There is a smorgasbord of approaches to investigate and address systemic safety issues at various levels of the healthcare system with little apparent consistency, logic or strategy underlying their design or execution. These span locally managed independent investigations, commissioning and regulatory investigations, rapid reviews, service reviews and independent and public inquiries (see online supplemental file for details and examples).

Individual NHS trusts conduct large numbers of

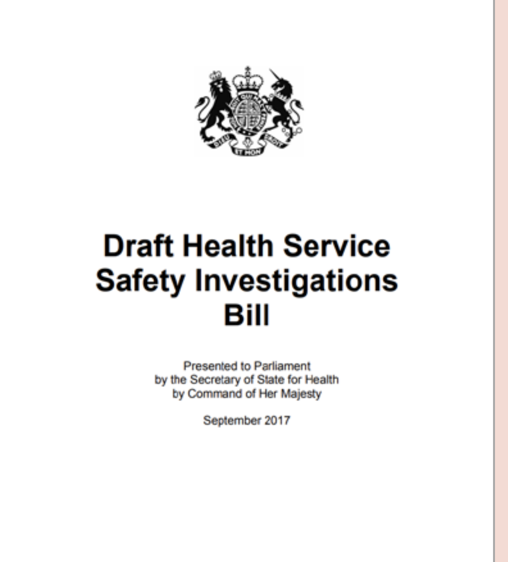
occasional exceptions,[3] local investigations rarely encompass the wider systemic factors that can contribute to serious failures of care, such as ambiguous regulatory requirements or inappropriate commissioning.

Regulators, commissioners, and other NHS and professional bodies all conduct their own different forms of safety investigation. These provide important insights into patient safety from the perspective of the agency involved.[4] However, these investigations are necessarily conducted by organisations that may themselves inadvertently contribute to the emergence of system-wide safety issues and recommendations from these inquiries tend to focus on punitive sanctions, regulatory enforcement and performance management.

At a national level efforts to learn from major tragedies take a variety of forms. The most high-profile approaches are independent or public inquiries, such as those into the failures of care at Mid Staffordshire NHS Foundation Trust.[5,6] Inquiries can have considerable impact and provide much-needed public explanation after terrible events.[7] However, each one starts afresh and determines its own unique approach rather than building on systematic and established methods of safety investigation.[8,9] Inquiry teams are short-lived and are dissolved once the report is complete; they therefore have no capacity to independently review progress against recommendations. And the legal orientation of independent and public inquiries is not well suited to developing strategies for improving safety. In practice the question of building a safer system may only be given serious consideration late in the process. Public inquiries appear to spend 90% of the time examining what happened and 10% of the time considering the future; arguably this allocation of time

for using this hard won knowledge to build a safer healthcare system. In this paper we suggest that this would be most effectively achieved by the creation of a small, permanent independent agency charged with coordinating major inquiries and safety investigations in the NHS. Such a model, if successful, could be applied in other healthcare systems.

is cited by



Draft Health Service Safety Investigations Bill

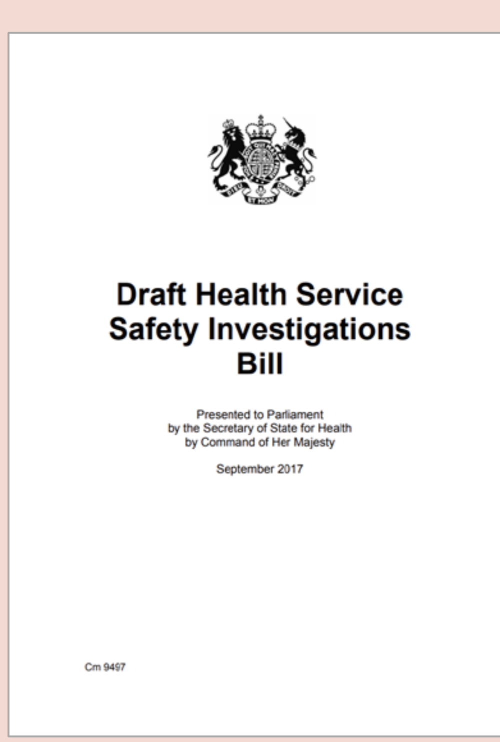
Presented to Parliament
by the Secretary of State for Health
by Command of Her Majesty

September 2017

The Government has stated the main objectives of the Health Service Safety Investigations Bill [HL] 2019-20 are to:

- establish the Health Service Safety Investigations Body (HSSIB) as a new independent arm's-length body with powers to conduct investigations into patient safety incidents that occur during the provision of NHS-funded services;

But this is common



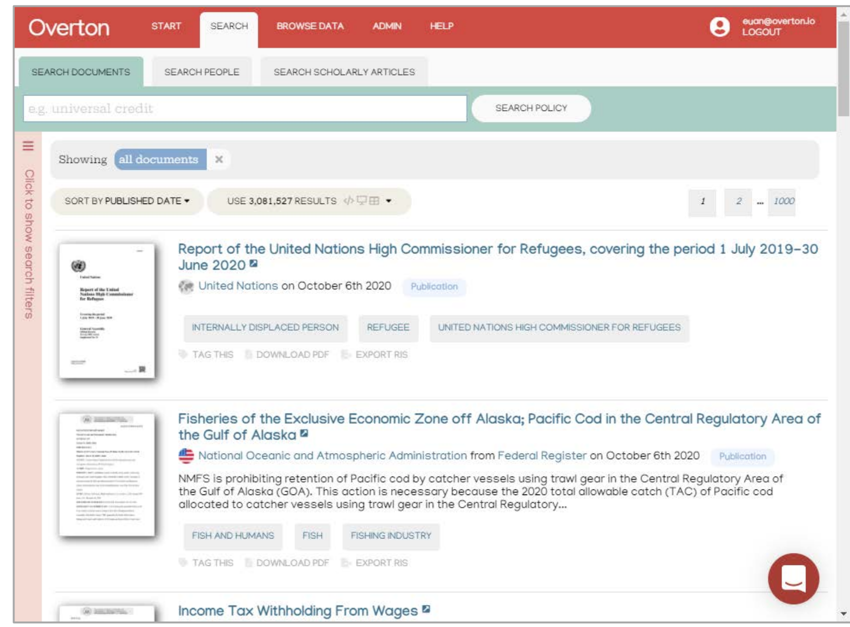
cites

cites

"translation" steps – typically involving people closer to the research

What policy data is available?

Overton.io is a database of 3.5M policy documents and their citations, linked to the scholarly literature, people and institutions.



Nat Comms was hybrid before 1st Jan 2016, can we use this fact to help account (partly) for differences in discoverability, impact factor etc.?

Assumptions

- We care about being cited in policy at all, not how often we’re cited
- Relevance to policymakers probably wasn’t a big factor for authors deciding whether or not to pay for OA
- Nature Communications wasn’t pitching any content to policymakers before 2016

Papers in Nature Communications, 2014 & 2015

Type	Count	Has policy citation	As %
Open access	2,195	96	4.3%
Closed	2,491	81	3.2%
Total	**4,686**	**217**	**3.7%**

- At first glance OA papers *might* be picked up a little more often (P=.04)
- But maybe they're from earlier in the time period, allowing more time for citations

2,195 “same month & year of publication” pairs

Outcome	Count	% of pairs
OA paper cited more	94	4.2%
Closed paper cited more	50	2.2%
Papers cited equally often	2	0.1%
Neither paper cited	2,049	93.3%
Total	**2,195**	

- For each OA paper randomly select a closed paper published in the same month and year to form a pair
- Compare policy citations within each pair

New educated guess

- Maybe, more work required

But…

- How significant is the effect? Are there policy specific confounders?
- Nature Comms content is not very representative of what policymakers tend to cite (social sciences, economics & public health)
- Is this just a side effect of OACA? Or something policy specific?
- May need to pick a specific type of policy: clinical guidelines aren’t the same as government white papers

Next steps

- Keen to figure out a better study design! Please get in touch if you've got ideas
- Overton.io data is freely available for academic research purposes, feel free to email at euan@overton.io

Thanks for tuning in!