Impact case study (REF3)

Institution: London School of Economics and Political Science

Unit of Assessment: 17 – Business and Management Studies

Title of case study: Analysing and learning from healthcare complaints

Period when the underpinning research was undertaken: 2014-2020

Details of staff conducting the underpinning research from the submitting unit:

Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Tom Reader Alex Gillespie	Associate Professor in Organisational Psychology Associate Professor	2010 to present 2011 to present

Period when the claimed impact occurred: 2017-2020

Is this case study continued from a case study submitted in 2014? No

1. Summary of the impact (indicative maximum 100 words)

LSE researchers have developed a tool for theorising, analysing, and generating insights from healthcare complaints submitted by patients and families to hospitals. The Healthcare Complaints Analysis Tool (HCAT) is the world's first empirically tested coding system for systematically analysing and aggregating written data provided by patients through complaints on poor quality and unsafe healthcare experiences. The work has generated global impacts through the use of HCAT by policymakers and healthcare organisations to analyse, monitor, and learn from complaints. HCAT has been adopted, as a matter of policy, at a state level for analysing and learning from complaints and patient feedback in healthcare. It has also begun to be adapted for analysing complaints in non-healthcare government departments (e.g. Ministry of Justice).

2. Underpinning research (indicative maximum 500 words)

A healthcare complaint is a formal communication from patients (or someone speaking on their behalf) about a failure in service provision. Complaints might, for example, be about medical errors or poor-quality care. Complaints seek an institutional response to a failure, often in the form of an explanation, investigation, apology, or change of procedure **[1]**.

Healthcare organisations receive large numbers of complaints; NHS Trusts receive more than 130,000 each year. Around one in ten patients experience unintended harm in hospital, and 14% of such incidences lead to permanent disability or death **[2]**. It has been suggested that the information reported in complaints could contribute to reducing the number of these adverse events. However, assessment of complaints has been rudimentary and haphazard, focusing on complaint volume rather than learning from the substantive issues. As a result, patients' complaints about healthcare have had minimal impact on improving services **[2]**.

LSE research underpinning the impacts described here began with a systematic review that identified the poor state of tools for analysing patient complaints. It then proceeded through a systematic programme of research to create a tool and a method of analysis to identify robust and valid insights for quality improvement.

i. **A systematic review of the literature on healthcare complaints**, published in 2014, drew on data from 59 studies and 88,069 patient complaints to outline the first taxonomy for analysing information in healthcare complaints **[2]**. Complaints were theorised as an alternative (and patient-centric) form of data for monitoring and improving hospital safety. The paper built on previous research analysing the types of healthcare problems that are difficult to capture through hospital monitoring systems **[3]**.

ii. **Establishing the first reliable tool for systematically analysing and benchmarking the problems and severity of complaints received by hospitals:** the Healthcare Complaints Analysis Tool (HCAT) **[4]** was developed by Reader and Gillespie at LSE in 2015. It is freely available for use in analysing the types of problems reported in healthcare complaints, their severity, their consequent harm, and where they occur in the healthcare service. Key innovations include the development of a method for quantifying the highly qualitative and unstandardised information reported within complaints, and for distinguishing the severity of

problems reported in complaints (e.g. expensive parking compared to life-changing medication errors).

iii. **Conceptualising the value of information reported through healthcare complaints for organisational learning:** in 2017, Reader and Gillespie analysed 1,100 complaints made to the NHS. They used this to report on the application of HCAT to a national sample of healthcare complaints. Their findings, reported in a 2018 paper **[1]**, suggested two forms of critical insight which might provide an analytical frame for monitoring and improving healthcare services. The first of these was that complaints reveal "hot spots" of problematic care, showing patterns and causes of adverse events and near misses in a hospital or healthcare system. The second was that complaints also reveal "blind spots" in service provision. This refers to aspects of healthcare delivery that are difficult for hospitals to monitor. These can include problems in access to a hospital, systemic problems such as poor communication between units, and omissions in care, as when patients are not fed.

iv. **Identifying associations between healthcare complaints and hospital-level mortality rates:** analysis of healthcare complaints (n = 2,017; 59 hospitals) conducted in 2018 showed, for the first time, strong associations between scale of the harm (e.g. death) and severity of clinical problems (e.g. cancer misdiagnoses) reported in complaints and hospital-level mortality rates. This association was shown to be stronger for healthcare complaints than for employee surveys, incident reports, and patient satisfaction surveys. On this basis, Reader and Gillespie theorised complaints to healthcare services as attempts by the public to intervene and improve hospital care, and proposed that the information they provide is valid and supplementary for investigating and supporting decision-making on hospital safety **[5]**.

Related research: in work with colleagues at Imperial College London, the research team has also argued that complaint handling should be conceptualised in terms of two separate pathways: complaint redress (which has been the focus for organisations) and complaint analysis and learning (which has been neglected) **[6]**.

3. References to the research (indicative maximum of six references)

[1] Gillespie, A. and Reader, T. (2018). Patient-centred insights: Using healthcare complaints to reveal "hotspots" and "blind spots" in service provision and monitoring. *The Milbank Quarterly,* 96(3), pp. 530-567. DOI: 10.1111/1468-0009.12338. This is a leading journal in healthcare policy; 6/87, Health Policy and Services.

[2] Reader, T., Gillespie, A., and Roberts, J. (2014). Patient complaints in healthcare systems: A systematic review and coding taxonomy. *BMJ: Quality and Safety,* 23(8), pp. 678-689. DOI: 10.1136/bmjqs-2013-002437. This is a leading journal on improving the quality of healthcare. Impact Factor: 6.084. 100,000+ downloads, 230+ citations.

[3] Reader, T. and Gillespie, A. (2013). Patient neglect in healthcare institutions: a systematic review and conceptual model. *BMC: Health Services Research,* 13(156). DOI: 10.1186/1472-6963-13-156. Impact Factor: 1.932. 43,000+ downloads, 100+ citations.

[4] Gillespie, A. and Reader, T. (2016). The Healthcare Complaints Analysis Tool: A method for system monitoring and learning. *BMJ: Quality and Safety,* 25(12), pp. 937-946. DOI: 10.1136/bmjqs2015-004596. Impact Factor: 6.084. 20,000+ downloads, 40+ citations.

[5] Reader, T. and Gillespie, A. (2020). Stakeholders in safety: Patient reports on unsafe clinical behaviors distinguish hospital mortality rates. *Journal of Applied Psychology.* DOI: 10.1037/apl0000507. CABS 4* distinguished journal.

[6] Van Dael, J., Reader, T., Gillespie, A., Neves, A. L., Darzi, A., and Mayer, E. K. (2020). Learning from complaints in healthcare: a realist review of academic literature, policy evidence and front-line insights. *BMJ Quality & Safety*, 29(8), pp. 684-695. DOI: 10.1136/bmjqs-2019-009704.

4. Details of the impact (indicative maximum 750 words)

The healthcare complaints research described here has synthesised and developed a field within healthcare. HCAT has led to a new body of research on the use of complaints to investigate and analyse safety in healthcare, as evidenced by the growing number of papers

using it to investigate hospital safety **[A]**. The work is also widely used by practitioners in healthcare and beyond: the systematic review published in 2014 **[2]** has been downloaded more than 100,000 times. A free online portal of HCAT resources - including the HCAT tool itself, along with an online training package, data visualisation tool, and benchmark dataset - has been created in partnership with the National Institute for Health Research Patient Safety Translational Research Centre (PSTRC) at Imperial College (see https://www.feedbackfirst.co.uk/hcat). The PSTRC, which is itself a partnership between Imperial College London and the Imperial College Healthcare Trust (ICHT), is one of three centres in England dedicated to developing the scientific evidence base for safer care. HCAT is being used to analyse complaints received at the Trust, which is driving the application of HCAT for improving patient safety in other UK hospitals.

Changing UK Government understanding of the utility of healthcare complaints: in 2016/17, after reading the research published in **[2]** and **[4]**, the UK Cabinet Office (CO) launched an investigation into the feasibility and benefits of applying HCAT to analyse and learn from healthcare complaints sent to hospitals **[B]**. The CO commissioned the Behavioural Insights Team (BIT) to explore the utility of HCAT to NHS Trusts, with a view to better understanding whether it could be used more within the NHS, as well as the wider public sector. To pilot its use in this way, BIT used HCAT to analyse complaints in four UK healthcare trusts, and to evaluate stakeholder (e.g. complaints managers, boards) perspectives on the value of the tool and its outputs. The BIT published its final report for the CO in May 2017. This concluded that, on the basis of its evaluation, HCAT "*is a significant advance on the current national reporting of healthcare complaints, which focuses on volumes alone*" and "*adds value beyond the current complaints reporting system in Trusts, for example by providing learning and improvement opportunities*" **[B**, pp. 4 and 36**]**. It therefore recommended that HCAT be adopted more widely across the healthcare service, eventually replacing the existing national complaints coding system (KO41). The report included explicit recommendations both that health policymakers consider using HCAT and that further work should be carried out to explore the potential to expand the use of HCAT beyond the health sector **[B**, pp. 4-5**]**. A report on "The Inquiry into Hyponatraemia-Related Deaths", published in January 2018 by the Northern Irish government, also acknowledged the potentially valuable insights that complaints contain about patient safety problems. It noted that trials of HCAT had already begun in Northern Ireland with a view to generating "*more meaningful analysis and comparison of data from complaints within and across Trusts*", which it suggested "*could prove of considerable benefit for both individual Trusts and regional learning*" **[C**, p. 72**]**.

Impacts of HCAT on UK healthcare: the main impact of HCAT has been to change how healthcare organisations analyse and learn from complaints. Its dissemination through the academic publications, new HCAT website, and CO report **[B]** has supported the use of HCAT in a range of healthcare institutions.

Much of the new use of HCAT has been driven by partners at ICHT, a leading NHS Trust treating over one and a half million patients per year, which has itself used HCAT in various capacities since 2018 **[D]**. The Trust receives approximately 1,000 complaints annually and uses HCAT to analyse and learn from these. Quarterly reports on these analyses are submitted to the Trust's board and used to identify areas for improvement. ICHT has linked HCAT data to staff-reported safety incidents to improve understanding of any adverse events that occur in the Trust.

Further to recommendations submitted by the BIT to the CO, Imperial College London has also established a new stream of research (funded through an NIHR grant awarded to the Imperial PSTRC) to test the effectiveness of HCAT as a potential alternative to the current UK complaints coding system. In particular, the focus has been on establishing HCAT as a means to identify concrete and addressable safety problems reported within complaints **[D]**.

Further to the recommendations in both the 2017 CO report **[B]** and the 2018 Northern Irish government report **[C]**, HCAT has also been applied in the Southern Health and Social Care Trust (Northern Ireland), which was a participant in the BIT evaluation of HCAT. The Trust, which provides health and social care services to a population of over 380,000 people, now regularly uses HCAT to analyse complaints it receives. Feedback and analysis are shared

with its board. Here, HCAT is used as a "smoke alarm" to identify emerging issues in safety and to support continual improvement in care **[E]**. Elsewhere, the Scottish government recommended, on the basis of a trial by Dumfries and Galloway NHS Trust, that NHS hospitals use HCAT to analyse and learn from complaints **[F]**. Other UK Trusts, for instance Great Ormond Street Hospital, are also in the process of applying HCAT **[G]**. Finally, on the basis of HCAT research, Department of Health and Social Care Minister Nadine Dorries is drawing upon LSE expertise to develop policy for better managing complaints in NHS hospitals **[H]**.

Impacts on international healthcare: the Health Services Executive (HSE), which is responsible for delivering healthcare in the **Republic of Ireland**, has tailored HCAT for use in the Irish context and in community services to improve the classification system used for analysing complaints. HCAT has reshaped how the HSE considers complaints, which are now seen as key to identifying organisational risks. A key impact on the HSE has been a change in its focus on complaints, from "*management of an individual complaint to an understanding of the value of aggregate information*" **[I]**. The preliminary application of HCAT in Irish hospitals revealed a range of previously unrecognised issues (e.g. around accessing care) and HCAT is now being adopted in various hospitals (e.g. University Hospital Limerick) **[I]**. The HSE has also used HCAT to interpret poor experiences reported in the in-patient and maternity experience surveys **[J]**. HCAT has also been adapted for use in Ireland by the Patient Advocacy Service. This Department of Health-funded body supports healthcare users who have poor experiences; it is to analyse and address the issues reported to it **[K]**.

HCAT has also been applied in **Australia**. Since 2017, Safer Care Victoria (the federal government office for healthcare and safety improvement) has used HCAT to categorise complaints raised with the Ministry for Health **[L]**. Here, HCAT has had profound impacts through its use to code 1,300+ complaints sent to the Ministry of Health, to triage complaints, and to direct them to appropriate government agencies for learning (e.g. clinical units and organisational directorates). Information and analysis generated from this process has subsequently been used to provide senior decision-makers with an overview of complaint patterns. HCAT is integrated into the computer systems at Victoria and has been adapted for use there, most recently to code complaints around COVID-19. The codes underlying HCAT have been used to inform and change the methodology for coding clinical incidents reported in hospitals. Consequently, HCAT is now used to categorise healthcare feedback at a state-wide level and all health services in Victoria will be required to use the HCAT sub-categories to classify and report consumer feedback from 2021.

In **Canada**, a trial of HCAT has been carried out at the Provincial Health Services Authority for British Columbia. The software used to collect information on patient incidents (DATIX) has been configured to facilitate the use of HCAT so that it can feed through to information dashboards on healthcare performance across the province **[M]**.

In 2019, the **Saudi Arabian** government used HCAT as the basis for developing its own "healthcare complaint taxonomy", which is now being used to link healthcare complaints with risk management **[N]**.

The research team has also had informal discussions about using HCAT in Denmark, Japan, Jordan, New Zealand, and with the Joint Commission in the USA.

Impacts beyond healthcare: in line with recommendations to the CO in **[B]**, HCAT has begun to be used and deliver impacts beyond healthcare. In the UK Ministry of Justice, it has been adapted (in commissioned work by LSE) to analyse complaints from the public to Her Majesty's Courts and Tribunal Service (HMCTS). HMCTS, which is responsible for the administration of all criminal, civil, and family courts and tribunals in England and Wales, receives approximately 20,000-24,000 complaints each year. Their version of HCAT - known as the Courts and Tribunals Complaints Analysis Tool (CTCAT) - has been integrated into the HMCTS electronic complaints handling system, meaning that every complaint submitted to HMCTS is now analysed using the CTCAT codification taxonomy. To date, it has been used to analyse some 30,000 complaints from the public. Data analysed using CTCAT is used to monitor and identify local and national-level problems in HMCTS services and to gauge the impact of these on service providers. This provides a basis for the supply of summary insights

on complaints at directorate level, and to reveal a range of areas for service improvement (e.g. delays in probate cases, procedural errors in criminal enforcement, etc.) **[O]**.

Finally, HCAT has delivered **commercial impacts** via a long-term collaboration between LSE and Resolver - Europe's largest handler of commercial complaints. The coding and theoretical underpinnings of HCAT have shaped Resolver's business, in particular by helping to recognise and develop the potential business opportunity of aggregated analyses of complaints in order to support organisational learning. Resolver's Executive Chairman has attested to the benefits of LSE's research: "*Our discussions with Dr Reader and Dr Gillespie have been an excellent platform that has challenged and shaped not just our view of the market we were in. More importantly, through influencing how we conceptualise and analyse complaints, their research has radically altered our view of ourselves and what we could offer potential customers*" **[P]**.

5. Sources to corroborate the impact (indicative maximum of 10 references)

[A] Nine examples of new academic papers using HCAT to investigate quality and safety in healthcare.

[B] Healthcare Complaints Analysis Tool: evaluation report, The Behavioural Insights Team, 12 May 2017.

[C] [The Inquiry into Hyponatraemia-related Deaths Report](), Northern Ireland government, January 2018. See page 72 for recommendation on HCAT.

[D] Supporting statement from Theme Lead and Director, NIHR Imperial Patient Safety Translational Research Centre.

[E] Supporting statement from Medical Director, Southern and Social Care Trust, 24 August 2020.

[F] The New Model NHS Complaints Handling Procedure – Review of First Year, Scottish Government, March 2019. See Section 2.3.2, recommending use of HCAT to analyse NHS complaints.

[G] Impact report from Great Ormond Street Hospital on use of HCAT, 15 September 2020.

[H] Department of Health and Social Care invitation to participate in discussion with Minister on developing policy on managing healthcare complaints in the NHS, 13 November 2020.

[I] Supporting statement from Assistant National Director, Quality Assurance and Verification Division, Republic of Ireland Health Service Executive.

[J] Impact report from Acute Hospitals Division, Health Services Executive, Republic of Ireland, 7 September 2020.

[K] Impact report from Service Manager Republic of Ireland Patient Advocacy Service, 16 September 2020.

[L] Impact report from Australia Safer Care Victoria, 18 September 2020.

[M] Impact report from Provincial Health Services Authority for British Columbia, 16 September 2020.

[N] Saudi Healthcare Complaint Taxonomy, Saudi Arabia Ministry of Health. For the adaption of HCAT, see p. 14 for reference to the adoption and adaptation here of "an innovative classification" from researchers at LSE (i.e. HCAT).

[O] Supporting statement from Deputy Director User Change, Innovation and Investigations, HM Courts and Tribunals Service, 29 September 2020.

[P] Supporting statement from Executive Chairman, Resolver Group, 30 October 2019.