Institution: University of Kent

Unit of Assessment: 2 :Public Health, Health Services and Primary Care

Title of case study: Providing a Widely Used Research-Based Health and Social Care Data Resource that Impacts Directly on the Development of Legislation, Clinical Guidelines, Government Policy, and Service Provision

Period when the underpinning research was undertaken: 2001-2018

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:
Prof. Jennifer Lesley Curtis	Deputy Director of PSSRU	2002-present
Dr Jennifer Beecham	Research Assistant	2007-2020

Period when the claimed impact occurred: 2013-2020

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

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

Researchers in Kent's Personal Social Services Research Unit (PSSRU) have developed a highly valued health and social care unit cost data resource – Unit Costs for Health and Social Care (UCH&SC) – that is used extensively by the UK Government. Its impacts are evident in the development of legislation, the National Institute for Health and Care Excellence (NICE) clinical guidelines and approval of new medical treatments, Department of Health and Social Care (DHSC) policies, and service commissioning. Reports and testimonials from the NHS, the National Audit Office, NICE, and the DHSC demonstrate that it makes a significant contribution to the evidence base for policy and practice that affects millions of people using health and social care services across England. It has also had international impact, particularly in Canada, where it is used as a model for the development of mental health unit costs.

2. Underpinning research (indicative maximum 500 words)

A good understanding of the way money flows through organisations and feeds into services is crucial if an organisation wishes to ensure a high quality of service provision. Researchers at the University of Kent developed the Unit Cost of Health and Social Care resource, which estimates the cost of the resources used in service provision and produces a unique volume of health and social care data. Every year the research programme makes further progress in improving and extending knowledge about the cost of services and improving the underlying routine information, enabling policy-makers across the full range of health and social care services to make better decisions. Researchers in the Personal Social Services Research Unit (PSSRU) at Kent collate, analyse, and integrate existing research findings in order to estimate the unit costs that are disseminated widely in the Unit's annual volumes. This unique research programme includes the following categories:

The development and application of robust cost estimation approaches based in economic theory **[R1-R3].** Research by Curtis and Beecham builds on PSSRU's standardised, theory-driven approach to develop a unique set of new unit costs that include all relevant items (salaries, on-costs, other service-related revenue and capital costs, training and qualification costs, and organisational overheads). Long-run marginal opportunity cost are calculated. The marginal cost is the cost of supporting one extra client or providing one additional unit of output and it is long-run in recognition of the financial implications of necessary expansion. Throughout, the economic concept of opportunity cost is used, this taking into account the fact that the use of resources in one way prevents their use in other ways. The transparency of the methods and resulting robust unit costs make a major contribution to improving the quality of central and local policy decision-

making, and economic research.

Secondary data analysis based on routinely collected data **[R1, R2, R5]**. The researchers' analysis of the NHS Consolidated Accounts has improved cost estimates for NHS Trust overheads. Few individual research studies collect these costs, although an accurate reflection of overheads is paramount, as they account for about half of the full cost of providing services **[R1]**. The PSSRU research-based approach uses the Labour Force Survey data to estimate the expected working life of professionals **[R2, R5]**. This data informs understanding of the likely length of working lives and informs the costs that is determined for qualifying professionals.

Undertaking or working with provider organisations to collect primary data on services and analysing such data to arrive at a nationally applicable cost. In-house activities have included an online survey of how professionals spend their working time (UCH&SC, 2016), and work to estimate land values and other building-related costs (with the Valuation Office Agency and the Building Cost Information Service). Curtis and Beecham have also worked with organisations to establish the unit costs of specific services; for example, work with Foundations **[R6]** and the Autistic Alliance (UCH&SC, 2015 and 2017).

Focused and wide-ranging literature searches. The UCH&SC volumes aim to draw together research-based information that contributes to unit costs. The collation of this information in the volume enables researchers and local government bodies to access a uniquely calculated unit cost saving them time and money. Some searches provide unit costs for a single service, e.g. telephone triage (UCH&SC 2017) and others provide multiple sources, such as our unit costs for various adoption services (e.g. UCH&SC 2016). Other searches provide 'extra' data for example on the receipt of external services such as nursing and therapy in residential and nursing homes (UCH&SC 2018). We interrogate any published papers for quality, provide any references in the schema and keep in contact with authors when using their data.

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

The results of the Kent team's research, including the methods and data sources, are made available online each year at www.pssru.ac.uk/project-information.php?id=354. For a short history of the programme, see: http://www.pssru40.org.uk/unit-costs

[R1] Curtis, Lesley A., and Burns, Amanda (**2020**). *Unit Costs of Health and Social Care 2020.* PSSRU, University of Kent, 185pp. ISBN 978-1-911353-12-6. https://kar.kent.ac.uk/84818/

[R2] Curtis, L., Moriarty, J., and Netten A. (**2010**). 'The expected working life of a social worker'. *British Journal of Social* Work 40(5): 1682-1643. doi: http://dx.doi.org/10.1093/bjsw/bcp039

[R3] Beecham, J. (**2001**). *Unit Costs: Not Exactly Child's Play*. Joint publication by the Department of Health and Social Care, PSSRU, and Dartington Social Care Research Unit. https://kar.kent.ac.uk/64627/

[R4] Beecham, J., and Sinclair, I. (**2007**). *Costs and Outcomes in Children's Social Care: Messages from Research.* London: Jessica Kingsley Publishing. ISBN 1-84320-496-2. https://kar.kent.ac.uk/2770/

[R5] Curtis, L., and Netten, A. (**2007**). 'The costs of training a nurse practitioner', *Journal of Nursing Management* 15(4): 449-457. doi: http://dx.doi.org/10.1111/j.1365-2834.2007.00668.x

[R6] Curtis, L., and Beecham, J. (**2018**). 'A survey of local authorities and Home Improvement Agencies: Identifying the hidden costs of providing a home adaptations service'. *British Journal of Occupational Therapy*. doi: https://dx.doi.org/10.1177/0308022618771534

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

Informing Government policy and practice

As the UK Government stated in 2014, PSSRU UCH&SC 'provides [them with] the most up-to-date unit costs for a wide range of health and social care services in England' **[a]**. Working directly with the DHSC, Department of Education (DfE), NICE, and a range of other key stakeholders, the UCH&SC team annually develops, improves, and publishes unit costs that are central to service provision across the country **[R1]**. These costs are then utilised by Government, and their departments/bodies, in four ways:

1. Legislation impact assessments

Each piece of legislation put forward by Government requires a supporting 'Impact Assessment', covering crucial questions such as 'Why is Government intervention necessary?' and 'What are the policy objectives and the intended effects? (UK Government 2020). The UCH&SC provides the proposer the vital data to detail their case in financial terms regarding legislation related to health and social care. Practical examples include, in **2014**, the UCH&SC being used in an impact assessment of the Revised Code of Practice: Mental Health Act 1983 legislation aimed at promoting 'recovery and positive health outcomes' for those subject to the Mental Health Act **[b]**. The UCH&SC was specifically used to make the case for 'extra investment in creating additional capacity' by detailing 'the average cost of an inpatient bed day in mental health wards' **[b]**. The legislation was successfully passed and formally published in 2015, and affects the lives and liberties of over 53,000 people annually detained under the Mental Health Act 1983 **[c]**. It is also one of the key pieces of legislation brought forward to address failures highlighted by the Winterbourne View Hospital scandal 2011 **[b]**.

In **2019**, the UCH&SC was used extensively to support the Mental Capacity (Amendment) Bill, designed to 'improve care and treatment for people lacking capacity and to provide a system of authorisation and robust safeguards in a cost-effective manner' **[c]**. The amended bill, given Royal Assent in 2019, simplifies the legal framework so that it is accessible and clear to all affected parties. It also reduces costs, as well as anxiety for affected families, by moving the process away from costly and time-consuming court processes and widening the scope for decisions to be taken by health and social care professionals. The impact assessment states: '[PSSRU] Unit Costs of Health and Social Care 2018 provides the best evidence in relation to unit labour input costs which feeds into the overall training costs calculations where relevant' **[c]**. The UCH&SC was used specifically to estimate health and social care professionals' time (doctors, social workers, new Mental Capacity Professionals) to facilitate the application of the new legislation. The legislation impacts on the lives of some 217,235 people affected by mental capacity applications in England annually **[c]**.

The UCH&SC is also used in the scrutinising of legislation before it is passed. Examples include the Secretary of State for Health directly referencing the UCH&SC to answer questions from MPs on the costs of walk-in emergency visits in 2014, and on the costs of training GPs in 2017 **[d].**

2. Developing clinical guidelines and assessing new medical interventions

UCH&SC is recommended for use in the NICE guidelines 2014 **[e]**. These overarching guidelines govern the development of specific guidelines affecting 'clinical, public health and social care' practice across England **[e]**. As NICE states: 'without [the UCH&SC] NICE would not be able to make informed decisions on the cost-effectiveness of many health interventions' **[f]**. Contextualised examples of this wide-ranging impact include the UCH&SC being used by NICE in six Medtech innovation briefings (MIBs) regarding new health interventions **[g]**. The briefings inform the decision-making of NHS and social care commissioners and staff who are considering using new medical devices and other medical or diagnostic technologies. The UCH&SC is used to determine application costs such as the time of medical professionals to administer the new treatments. As NICE puts it, the UCH&SC provides 'vital inputs to […] the potential resource impact of implementing NICE guidance' **[f]**. Thus, UCH&SC informs critical clinical decision-making in the context of overall service provision affecting commissioners, health and social care

professionals, and millions of patients across the country.

3. Health and social care policy development

UCH&SC is used to develop UK health and social care policy. The DHSC has confirmed that it uses UCH&SE extensively, detailing a range of practical policy development applications. These include, in mental health policy, 'modelling cost estimates for providing mental health services for people referred from Liaison and Diversion Services into MH services. This fed into the health economic estimates for the Final Business (FBC) to Liaison & Diversion, which asked Treasury for funding to roll out this service from 53% coverage of the England population to all the England population. The analytical work contributed significantly to the FBC's approval by DH Finance and consequent ministerial approval' **[h]**. In pharmacy policy, UCH&SE is used 'when sending out submissions for the prescription charge uplift. E.g. the income gained from increasing prescription charges by £xm would pay for y nurses salaries, z doctors salaries' **[h]**. In social care policy, UCH&SC is used to demonstrate for Ministers and the Treasury 'what additional funding might buy – e.g. beds in a residential care home for 100 older people', and is currently being used to develop the Government's Continuing Health Care policy, providing 'estimates of costs and savings from making changes to a range of different elements of policy' **[h]**. The DHSC also states that UCH&SE is used in the development of learning disability policy, to provide the briefs for Prime Minister's Questions, and is used 'frequently' with regard to public health policy by the Joint Committee on Vaccination and Immunisation **[h]**. Beyond direct use by the DHSC, UCH&SC has also been cited by both the 2016 Prime Minister's Challenge Fund **[i]** and the 2017 National Audit Office assessment **[i]** of the policy to extend access to GP services, affecting '42,000 doctors employed in some 7,600 general practices in England' and a total general practice spend of £9.5 billion **[i]**.

4. Commissioning of services

UCH&SC is also utilised by Clinical Commissioning Groups (CCGs) to determine which services to commission and the extent of funding required. In 2015, it was used extensively in the Access and Waiting Time Standard for Children and Young People with an Eating Disorder Commissioning Guide to assess the staff costs and overheads required for services commissioned 'to ensure that by 2020/21, 95 per cent of children and young people in need begin treatment within 1 week for urgent cases and 4 weeks for non-urgent cases' **[j]**. Also in 2015, UCH&SE was used in the Models of Dementia Assessment and Diagnosis to support the detailed review of 'three models of dementia assessment and diagnosis currently being used in dementia care in the NHS in England', providing data on the 'indicative costs for each model' **[k]**. It is used by CCGs to review their local dementia care services with the 'aim to making improvements' in care **[k]**. As the review sets out, such detailed analysis of dementia service provision is vital, owing to 'the enormous impact [dementia has] on our society today. Recent figures from the Alzheimer's Society putting the number of people with dementia at 700,000+ in England, 835,000 in the UK in total at a cost of £26 billion' **[k]**. UCH&SC has also been used in the ongoing development and application of Social Impact Bonds (SIBs), an innovative way to fund public sector services whereby private investment is used, and only paid back by commissioners based on outcomes. UCH&SC enables local partnerships to estimate the fiscal, economic, and public benefits that may arise from SIB proposals and is cited on the Government SIBS website (see 'Guidance on developing a Social Impact Bond' [**l**] and report on 'Supporting public service transformation' **[l]**). 'There now exist over 30 SIBs across the UK, supporting tens of thousands of beneficiaries in areas like youth unemployment, mental health and homelessness' **[l]**.

PSSRU's UCH&SC achieves impacts at many levels, from Secretary of State to CCG, and across a wide range of service contexts. The evidence presented in this case study can give only a selective indication of these impacts. In addition to the evidence presented above, the UCH&SC is used extensively by the Department of Education as a central source for cost information in children's social care, by organisations representing service providers, such as the Autism Alliance, to negotiate appropriate funding levels with Government, and think tanks such as the Institute for Government and the Social Care Institute for Excellence in their economic assessments of services that also feed into policy development. The UCH&SC has also been used

internationally, including in supporting the Mental Health Commission of Canada to develop an economic data book and construct a more comprehensive measure of nursing home costs using UCH&SC 'as a model' **[m]**.

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

[a] 2014: UK Government statement on the use of PSSRU's UCH&SC, evidencing that the Government uses UCH&SC for most up-to-date unit costs.

[b] 2014: Legislation impact assessment: Revised Code of Practice: Mental Health Act 1983 (pp. 1, 9), evidencing that UCH&SC has been used for impact assessment.

[c] 2019: Legislation impact assessment: Mental Capacity (Amendment) Bill (pp. 5, 20, 24), evidencing that UCH&SC has been used for the Amendment Bill.

[d] 2014-19: Questions in Parliament utilising PSSRU's UCH&SC.

[e] 2014: National Institute for Health and Care Excellence (NICE) guidelines (pp. 152-3), recommending UCH&SC.

[f] 2020: NICE testimonial (3 March 2020), testifying to the importance of PSSRU's UCH&SC for guideline development.

[g] 2016-18: NICE Medtech innovation briefings: Aptiva (p. 5), FLEXISEQ (pp. 4-5), Mollii suit (pp. 4-5), Noctura 400 Sleep Mask (p. 5), home faecal calprotectin tests (p. 6), and Urethrotech UCD (p. 4).

[h] 2017: DHSC testimonial (16 March 2017), evidencing the use of cost estimates modelling in the mental health service and that this contributed significantly to the FBC's approval by DH Finance.

[i] 2015: Prime Minister's Challenge Fund: Improving Access to General Practice; 2017 National Audit Office Report: Improving Patient Access to General Practice – citing PSSRU's UCH&SC.

[j] 2015: NHS England: Access and Waiting Time Standard for Children and Young People with an Eating Disorder Website (setting out the Standard) and Commissioning Guide (pp. 49, 67, 87, 88, 89), evidencing that PSSRU's UCH&SC is utilised by Clinical Commissioning Groups (CCGs).

[k] 2015: NHS England: Models of Dementia Assessment and Diagnosis: Indicative Cost Review (pp. 5-6, 14, 24, 31), evidencing that PSSRU's UCH&SC is being utilised by Clinical Commissioning Groups (CCGs).

[l] UK Government: Guide to Social Impact Bonds, including 2017 Knowledge Box Guidance on developing a SIB (p. 28); and 2014 Supporting Public Service Transformation: Cost Benefit Analysis Guidance for Local Partnerships (p. 60).
https://www.gov.uk/guidance/social-impact-bonds

[m] 2017: Canadian Institute of Health Economics testimonial (7 April 2017), evidencing that PSSRU's UCH&SC has been used internationally.