What can statistics tell us about the state of the NHS upon the outbreak of the SARS-CoV-2 pandemic?

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Overview

- Funding of NHS
- Workforce
- Beds
- Consequences of capacity constraints
- Estate
- Health Systems Support Framework
- Primary care and NHS111
- Public health
- Social care

NHS Funding – 'Decade of Austerity'

(see Roberts, 2012)

Average **annual real terms increases** in UK health budget:

- 1949-2010 around 4%
- Cost pressures of 4%
- 2009/10-2018/19 1.4%
- £14bn debts across NHS by March 2020
- NHS Providers 2018 5% is needed

Decade with lowest level of funding relative to need since creation of NHS

Constraints on NHS capacity -Workforce

NHS Workforce Statistics, FTE

(Hospital and community health services)

Staff Group	Feb 2010	Feb 2020	Change 2010-20
Prof qualified staff	534,349	602,501	+12.75%
Support to clinical staff	287,859	347,682	+20.8%
NHS Infrastructure support	188,082	182,357	-3%
Other /unknown	3,789	2,283	-40%
All	1,014,079	1,134,824	+11.9%
Nurses and health visitors	281,444	299,431	+6.4%
HCHS Doctors (exclg GPs)	95,646	117,842	+23.2%
Support to doctors, nurses & midwives	224,725	262,540	+16.8%

Workforce shortages - "the biggest threat facing the NHS" (Beech et al, 2019)

- 100,000 FTE workforce shortage outside primary care in 2018 (Health Foundation et al, 2018)
- 41,000 vacancies in nursing in 2018 (Beech et al, 2019)
- Turnover (nursing 11.9%; mental health clinical staff 13.4% in 2019)
- But care for the workforce is not prioritised
- Abolition of nursing / allied health bursaries from 2017; cut in education/training budget

Reasons for leaving

- NHS Workforce Stats work-life balance is largest single cited reason (26% in 2018/19)
- Nursing and Midwifery Council (2017) survey: 44% working conditions, including workload and staffing levels; 27% poor quality care; 16% poor pay and benefits
- Systematic review of systematic reviews: multiple determinants of turnover in adult nursing (nurse stress and dissatisfaction / managerial style and supervisory support factors (Halter et al, 2017)
- Staff pay capped or frozen from 2010/11 up until 2017/18 (real terms reduction of 10% in nurse starter salary) (Beech et al, 2019)

Capacity constraints – hospital beds

NHS hospital beds (NHS Beds Database; King's Fund, 2020)

England	1987/88	2009/10	2019/20	Change
			(Jan-	1987/88 –
			Mar2020)	2019/20
Total	299,000	158,400	141,000	-53%
General and	181,000	121,756	101,000	-44%
acute				
Geriatric	53,000	21,000		
Mental	67,122	25,503	18,182 (Mar	-73%
illness			2020)	
Learning	33,421	2,809	662	-97%
disability			(Mar2020)	
Maternity	15,932	8,392	7,663	-52%
Day only	2,000		12,812	+640%
All critical		5,400	5,900	
care		(2011/12)		
Population	47,300,000		56,000,000	+18%

OECD Health Care Resources

https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_REAC

- OECD average 4.5 beds per 1,000 people (2018)
- UK 2.5 beds per 1,000 people (2018)
- Germany 8 beds per 1,000 people (2017)

Intensive care beds – March 2020

	Adult critical (intensive) care beds March 2020	
England	4,122	
Scotland	190	
Wales	150	
N Ireland	100	
UK Total	4,382	
Germany	28,000	

Consequences of capacity constraints

Impact on patient care arising from capacity constraints

- Not enough capacity!
- Jan 2020 17.1% patients waited >2 weeks for GP appt (BMA, 2020)
- Feb 2010 90.3% patients treated within 18 weeks (referral to treatment); 2.34m on wait list
- Feb 2020 83.2% patients treated within 18 weeks; 4.43m on waiting list (RTT Overview Timeseries)
- Measures to reduce demand

Outsourcing to private sector

- 2012 Health & Social Care Act prohibits 'preference' for NHS provider
- 'Any qualified provider' policy mainstreams non NHS providers
- Lengthy waiting lists for NHS providers incentivise choice of non NHS providers
- 'Emergency admission first' policy delays NHS elective care & encourages CCGs to commission care from private providers
- NHS providers outsource work under pressure of waiting time targets

Interdependence of sectors

Private acute hospital medical/surgery and clinic sector increasingly reliant on revenue from NHS:

- 2007 5% of revenues from NHS
- 2018 32% of revenues from NHS (Barrett Evans et al 2018)

But also entrenching NHS dependence on the private sector

NHS Expenditure on private providers

(Rowland, 2019)

Expenditure on non-NHS bodies	2013/14	2018/19	Change 2013/14 to 2018/19
Purchasing of hospital community health care outside primary care from non-NHS providers by NHS England Group	£9,373m	£13,734m	47%
Purchasing of (mainly elective) health care from non-NHS providers by NHS providers	£683m	£1,328m	106%
Total expenditure on independent sector	£24,173m	£29,827m	23%

Capacity constraints – service reconfiguration and sale of estate

Reducing NHS estate

- 1948 3,000 UK hospitals nationalised
- 2019 approx 1,060 UK NHS hospitals

Two broad reconfiguration processes to reduce (expensive) hospital care:

- Transfer services from hospital into community
- Centralise hospital services onto fewer sites

Pre-dates but is reinforced by 'new models of care' and policy of restricted funding

2010/11 -2017/18 capital budget declined by 7%

Naylor Review 2017

No. sites owned by NHS Trusts	1,200
Value of these sites	£9 - £11bn
No. properties managed by NHS Property Services	3,500
Amount of capital investment needed by NHS	10bn
Value of land that could be sold to raise money for capital investment	£2.7bn+
Maintenance backlog by Jan 2020	£6.5bn

Hospitals, England & Wales, 1914

(Currie, 2013 & Wikipedia)

Institution	Average size (beds)	Number in England and Wales
Fever hospital	41	755
Poor Law Infirmary	134	700
General hospital	53	594
Smallpox hospital	22	363
Specialist hospital	62	222

Reorganising the NHS to a Population Health Management approach

Health Systems Support Infrastructure

- To assist local health systems to move towards new models of care and Population Health Management (via Integrated Care Systems)
- Jan 2020 80+ suppliers of support and advice, mostly commercial, around 6 are NHS
- <u>https://www.england.nhs.uk/hssf/supplier-lists/</u>

Primary care and NHS 111

Primary care under pressure

- 312m GP appointments 2019, rising BUT
- FTE GP numbers declining since 2015, despite increased training places (BMA, 2020)
- GPs choosing sessional/locum work; 45% GPs working less than full time Dec 2019 (Triggle, 2019)
- Jan 2020 45% of 'GP appointments' were with non GP health care workers (BMA, 2020)
- Public advised to use NHS111 for Covid-19 related advice – but there were insufficient health care professionals to staff the Covid-19 Clinical Assessment Service

NHS111 – response to calls

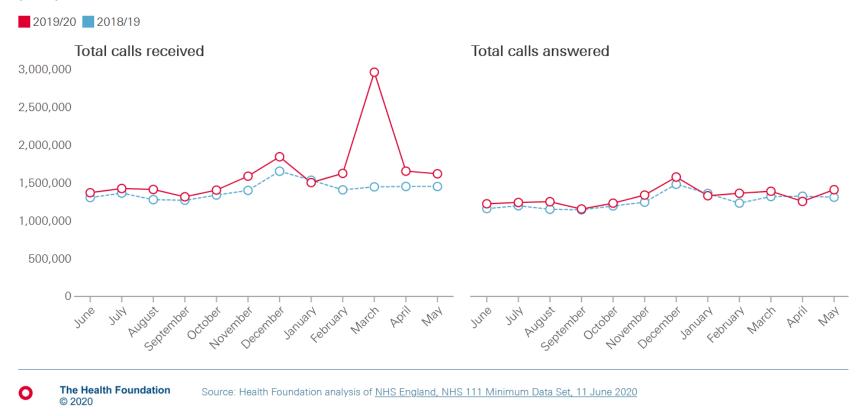
(Health Foundation, June 2020)

	January 20	February 20	March 20	April 20
No. calls	1,503,318	1,625,240	2,962,751	1,655,146
Change in no. call on previous year	-31,771	+217,407	+1,515,625	+202,702
Calls	1,329,760	1,362,402	1,388,916	1,254,667
answered	88.5%	83.8%	46.9%	75.8%
Change calls answered on previous year	-29,913	+130,392	+69,665	-68,860

NHS111 – response to calls

(Health Foundation, June 2020)

NHS 111 received a record number of calls in March 2020, but a large proportion went unanswered



Public health

Public health budget

Three way split of public health in 2012 Health and Social Care Act, reducing coherence

- 2014/15 2019/20 £700m real terms reduction in public health funding; 25% p.c. cut
- 2018/19 £3.3bn
- 2019/20 £3.1bn

Not all lessons from Exercise Cygnus had been acted upon

Social Care

Social Care – Funding

- 2009/10 2017/18: overall spending by local authorities on adult social care fell by 5% (IFS, 2019)
- Early 2020: funding in social care in England still £300 million *below* level of funding in 2010 in real terms (Bottery 2020)
- 2019/20 funding gap in adult social care estimated at £2.5bn by the King's Fund, Health Foundation and Nuffield Trust (House of Commons, 2018)
- Estimated 1.5m people have unmet care needs (AgeUK, 2019); tightening of eligibility criteria

Social care – Local Authority provision

(Fotaki et al, 2013)

Provided by	1979	1993	2012
local			
authorities			
Residential/nur	64%		6%
sing home beds			
Domiciliary		95%	11%
care			

Social care provision - figures for 2018

(Skills for Care Report, 2019)

- 18,500 organisations providing adult social care with around
- > 50% had fewer than 10 employees
- 1.5 million people working in adult social care outside the NHS (82% female; 17% non British national TUC, 2020)
- Around 45% of employees worked in the largest 2% of organisations which had 250 or more employees
- 145,000 work for direct payment recipients

Social care provision – distribution of workforce by sector in 2018 (Skills for Care, 2019)

Private	Third	Local	Direct	NHS
sector	sector	Authority	payment employers	
59%	19%	7%	9%	6%

Social care workforce

- Overall, 25% of workforce and 35% of care workers on zero hours contracts
- 20% of care workers on minimum wage; mean wage is 50p higher
- Over 50% unregulated care workforce had no care qualifications
- 30.8% turnover of direct employed staff (440,000 staff) (sfc, 2019); 40% among care workers (CQC, 2019)
- 7.8% vacancy rate (122,000) (SfC, 2019)
- Staff shortages especially in specialist workers > use of agency staff, imperfect skill mix, production line approach
- Trade union density =?

Impact on pandemic response

- Fragmentation challenged coordinated response
- Shortage of care provision with limited options for discharged patients, esp rural areas
- Reliance on agency staff among some employers affected spread of infection
- Lack of cultural and political salience plus unorganised character of workforce delayed recognition of sector's needs in a pandemic

References

- Age UK (2019) The number of older people with some unmet need for care now stands at 1.5 million, Age UK, November 9
- G Atkins (2020) Local government in England, Institute for Government, March 10
- D Barrett Evans et al (2018) UK Healthcare Market Review 30th edition, Laing and Buisson, June
- CQC (2019) The state of health care and adult social care in England 2018/19
- CQC (2020) The state of health care and adult social care in England 2019/20
- S Bottery (2020) Social care services: Funding cuts are biting hard, King's Fund
- M Currie (2013) Fever Hospitals and Fever Nurses, Routledge
- J Beech et al (2019) Closing the Gap, Health Foundation, King's Fund, Nuffield Trust
- BMA (2020) Pressures in General Practice, September 8
- L Ewbank et al (2020) NHS bed numbers: past, present, future, King's Fund
- M Fotaki et al (2013) The future of the NHS? Lessons from the market in social care in England, Centre for Health and the Public Interest
- Health Foundation et al (2018) The health care workforce in England: Briefing, Health Foundation, King's Fund, Nuffield Trust
- House of Commons Select Committee for Communities and Local Government (2018) Social Care Funding: Time to end a national scandal
- Institute for Fiscal Studies, English council funding: What's happened and what's next?, May 2019

- NHS Providers (2016) Delivering care in every setting: Results of a survey of NHS Trusts and Foundation Trusts, NHS Providers
- A Roberts et al (2012) A Decade of Austerity, Nuffield Trust
- D Rowland (2019) Flawed data? Why NHS spending on the independent sector may actually be more than 7%, LSE Blogs, Oct 1
- Skills for Care (2019) The state of the adult social care sector and workforce in England, Skills for Care
- N Triggle (2019) GPs 'shun full-time work as pressures take toll', BBC News, Dec 18
- TUC (2020) Fixing social care, TUC September 7
- E Vestesson and T Gardner (2020) How has NHS 111 shaped public demand for the NHS in England during the pandemic? COVID-19 chart series, Health Foundation, June 19
- Wikipedia Fever Hospital (accessed 25 Feb 2021)
- NHS Beds Database
- NHS RTT Overview Timeseries
- NHS Workforce Statistics
- OECD Health Care Resources