

Supplemental Material 2: Theming Tables.

Associated Article: What does the Covid-19 leadership experience teach us about healthcare leadership development?

Authors: Behget, E. Modi, C.

Final Coding Tables and Thematic Map (following updated search strategy)

Publisher - author	Link	Code	Sub theme	Theme
NHS Confederation – Dickson	https://www.nhsconfed.org/articles/how-do-nhs-leaders-feel-amid-crisis	Well-being	Challenges	Creating systems for support
BMJ Leader – Allwood et al	https://bmjleader.bmj.com/content/4/2/80	Care	Challenges	Creating systems for support
BMJ Leader – Geiger et al	https://bmjleader.bmj.com/content/4/3/113	Exhaustion	Challenges	Creating systems for support
BMJ Leader – Symons	https://blogs.bmj.com/bmjleader/2020/05/06/decisions-decisions-decisions-is-the-concept-of-decision-fatigue-an-issue-in-covid-19-times-by-rita-symons/	Decision Fatigue	Challenges	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Fatigue	Challenges	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Recognise compassion fatigue	Challenges	Creating systems for support

BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Recognise exhaustion	Challenges	Creating systems for support
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Care	Challenges	Creating systems for support
BMJ Leader – Pandit and Berendt	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Difficulty coping with loss	Challenges	Creating systems for support
BMJ Leader – Stoddart and Berendt	https://bmjleader.bmj.com/content/4/2/92	Resilience and balance	Care and self-care	Creating systems for support
BMJ Leader – Marx	https://blogs.bmj.com/bmjleader/2020/04/15/compassionate-leadership-is-not-a-nice-to-have-for-clinicians-confronting-covid-19-it-is-a-powerful-weapon/	Compassion	Care and self-care	Creating systems for support
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Self-care	Care and Self-care	Creating systems for support
NHS Confederation – Kumar	https://www.nhsconfed.org/articles/leadership-crisis-importance-courage-and-caring	Self-care	Care and Self-care	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Care for the carers	Care and Self-care	Creating systems for support
Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-prerana-issar	Leaders need self-care	Care and Self-care	Creating systems for support

Kings fund - Maggs	https://www.kingsfund.org.uk/publications/resources-supporting-mental-health-covid19	Resources supporting mental health and well-being	Care and Self-care	Creating systems for support
Kings fund - Benson	https://www.kingsfund.org.uk/publications/managing-anxiety-breathing	Managing breathing for self-care	Care and Self-care	Creating systems for support
Kings fund - Maybin	https://www.kingsfund.org.uk/publications/managing-anxiety-about-loss-covid-19	Managing anxiety	Care and Self-care	Creating systems for support
Kings fund - Newitt	https://www.kingsfund.org.uk/publications/managing-your-energy-covid19	Managing energy	Care and Self-care	Creating systems for support
Kings fund - Berwick	https://www.kingsfund.org.uk/audio-video/don-berwick-responding-covid-19-crisis	Self-care	Care and Self-care	Creating systems for support
BMJ leader – Mountford and Berendt	https://bmjleader.bmj.com/content/early/2020/05/04/leader-2020-000272	Compassion looking out for each other	Care and Self-care	Creating systems for support
BMJ leader – Mountford and Berendt	https://bmjleader.bmj.com/content/early/2020/05/04/leader-2020-000272	Compassion/System culture	Care and Self-care	Creating systems for support
NHS Confederation – Clinical Directors	https://www.nhsconfed.org/articles/leading-ocns-through-pandemic	Leaders are human too	Care and Self-care	Creating systems for support
NHS Confederation – Clinical Directors	https://www.nhsconfed.org/articles/leading-ocns-through-pandemic	Allow others to take the lead	Care and Self-care	Creating systems for support

NHS Confederation – Clinical Directors	https://www.nhsconfed.org/articles/leading-pcns-through-pandemic	Self-care	Care and Self-care	Creating systems for support
Kings Fund - Covid Trauma Response working group	https://www.kingsfund.org.uk/audio-video/stress-hospital-staff-covid-19	Supporting well-being	Leader behaviour	Creating systems for support
BMJ Leader – Vogus and McClennan	https://bmjleader.bmj.com/content/4/2/48	Compassion tips (culture of compassion included)	Leader behaviour	Creating systems for support
BMJ Leader – Reckless and Berendt	https://bmjleader.bmj.com/content/4/2/90	Be mindful of all staff groups	Leader behaviour	Creating systems for support
BMJ Leader – Hardacre and Margetts	https://blogs.bmj.com/bmjleader/2020/04/15/psychological-ppe-survival-kit-for-creating-a-safer-culture-in-the-covid-19-context/	Tips for Care and safer culture	Leader Behaviour	Creating systems for support
BMJ Leader – Steward	https://blogs.bmj.com/bmjleader/2020/05/13/maintaining-humanity-in-the-covid-19-crisis-by-dr-katy-steward/	Techniques to support well-being	Leader Behaviour	Creating systems for support
BMJ Leader – Ojo	https://blogs.bmj.com/bmjleader/2020/05/20/mental-health-awareness-for-a-week-then-what-by-dr-tim-ojo/	Supporting kindness	Leader Behaviour	Creating systems for support
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Look out for each other	Leader behaviour	Creating systems for support
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Care	Leader behaviour	Creating systems for support

NHS Confederation - Kumar	https://www.nhsconfed.org/articles/leadership-crisis-importance-courage-and-caring	Care	Leader behaviour	Creating systems for support
BMJ Leader - Pandit	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Support	Leader behaviour	Creating systems for support
Kings fund - Evans	https://www.kingsfund.org.uk/audio-video/nurturing-leadership-navina-evans	Supportive	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Providing care to care for self	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Support	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Compassion	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Allow rest	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Buddying	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Access to protected spaces	Leader behaviour	Creating systems for support

BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Deliver formal psychological care	Leader behaviour	Creating systems for support
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Compassion	Leader behaviour	Creating systems for support
BMJ Leader – Lees and Berendt	https://bmjleader.bmj.com/content/4/3/149	Kindness	Leader behaviour	Creating systems for support
BMJ Leader - Pandit	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Empathy	Leader behaviour	Creating systems for support
BMJ Leader - Pandit	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Kindness	Leader behaviour	Creating systems for support
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Need compassion	Leader behaviour	Creating systems for support

Publisher - author	Link	Code	Sub-theme	Theme
BMJ Leader – Dalton	https://bmjleader.bmj.com/content/early/2020/05/18/leader-2020-000270	Top down decision	Top down misunderstanding	The possibilities and dangers of working with urgency
BMJ Leader – Dalton	https://bmjleader.bmj.com/content/early/2020/05/18/leader-2020-000270	Difficulty with top down	Top down misunderstanding	The possibilities and dangers of

				working with urgency
BMJ Leader – Dalton	https://bmjleader.bmj.com/content/early/2020/05/18/leader-2020-000270	Power issue	Top down misunderstanding	The possibilities and dangers of working with urgency
Kings Fund – Trimble	https://www.kingsfund.org.uk/blog/2020/05/im-pact-covid-19-working-relationships	Command and control	Top down misunderstanding	The possibilities and dangers of working with urgency
Kings Fund – Trimble	https://www.kingsfund.org.uk/blog/2020/05/im-pact-covid-19-working-relationships	Lasting impact of command and control	Top down misunderstanding	The possibilities and dangers of working with urgency
BMJ leader – Lees and Berendt	https://bmjleader.bmj.com/content/early/2020/04/30/leader-2020-000265	Need inclusive problem solving styles	Top down misunderstanding	The possibilities and dangers of working with urgency
BMJ Leader – Dalton	https://bmjleader.bmj.com/content/early/2020/05/18/leader-2020-000270	Top down misunderstanding	Top down misunderstanding	The possibilities and dangers of working with urgency
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Top down misunderstanding	Top down misunderstanding	The possibilities and dangers of working with urgency

Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-prerana-issar	Top down misunderstanding	Top down misunderstanding	The possibilities and dangers of working with urgency
NHS Confederation – Clinical Directors	https://www.nhsconfed.org/articles/leading-ocns-through-pandemic	Top down misunderstanding	Top down misunderstanding	The possibilities and dangers of working with urgency
Kings Fund – Collins	https://www.kingsfund.org.uk/publications/discipline-and-agility-crisis	Working with urgency (and need for agility)	How to do it better	The possibilities and dangers of working with urgency
BMJ Leader – Stoller	https://bmjleader.bmj.com/content/4/2/77	Act quick and create psychological safety	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Appreciating others	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Autonomy	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Control	How to do it better	The possibilities and dangers of working

				with urgency
BPS – Highfield et al	https://www.bps.org.uk/sites/www.bps.org.uk/files/News/News%20-%20Files/Psychological%20needs%20of%20healthcare%20staff.pdf	Decision making	How to do it better	The possibilities and dangers of working with urgency
Kings Fund – Harchowal	https://www.kingsfund.org.uk/audio-video/common-purpose-culture-jatinder-harchowal	Recognising other needs	How to do it better	The possibilities and dangers of working with urgency
Kings Fund – Harchowal	https://www.kingsfund.org.uk/audio-video/common-purpose-culture-jatinder-harchowal	Embracing input from others	How to do it better	The possibilities and dangers of working with urgency
Kings Fund – Bullock	https://www.kingsfund.org.uk/audio-video/finding-solutions-complex-situations	Putting values at the heart of decisions	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-19-erana-issar	Need psychological safety	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-19-erana-issar	Need inclusive leadership	How to do it better	The possibilities and dangers of working with urgency

Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-19-issar	Distributed leaders	How to do it better	The possibilities and dangers of working with urgency
Kings fund – Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-19-issar	Recognise unheard voices	How to do it better	The possibilities and dangers of working with urgency
BMJ leader – Lees and Berendt	https://bmjleader.bmj.com/content/early/2020/04/30/leader-2020-000265	Different type of leadership needed	How to do it better	The possibilities and dangers of working with urgency
BMJ Leader – Dalton	https://bmjleader.bmj.com/content/early/2020/05/18/leader-2020-000270	Compassion at the same time as top down	How to do it better	The possibilities and dangers of working with urgency
BMJ Leader – Mountford and Berendt	https://bmjleader.bmj.com/content/early/2020/05/04/leader-2020-000272	Compassion at the same time as top down	How to do it better	The possibilities and dangers of working with urgency
NHS Confederation – Allen et al	https://www.nhsconfed.org/articles/equality-diversity-and-inclusion-time-crisis-and-beyond	Compassion at the same time as top down	How to do it better	The possibilities and dangers of working with urgency
NHS Confederation – Allen et al	https://www.nhsconfed.org/articles/equality-diversity-and-inclusion-time-crisis-and-beyond	Decision making	How to do it better	The possibilities and dangers of working

				with urgency
NHS Confederation – Allen et al	https://www.nhsconfed.org/articles/equality-diversity-and-inclusion-time-crisis-and-beyond	Diversity in decision making	How to do it better	The possibilities and dangers of working with urgency
NHS Confederation – Allen et al	https://www.nhsconfed.org/articles/equality-diversity-and-inclusion-time-crisis-and-beyond	Diversity in command structures	How to do it better	The possibilities and dangers of working with urgency
NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Clinicians	How to do it better	The possibilities and dangers of working with urgency
BMJ Leader – Wallace and Berendt	https://bmjleader.bmj.com/content/early/2020/05/06/leader-2020-000271	Need to balance	Impact on others	The possibilities and dangers of working with urgency
Kings Fund – Trimble	https://www.kingsfund.org.uk/blog/2020/05/impact-covid-19-working-relationships	Lack of Value	Impact on others	The possibilities and dangers of working with urgency
Kings Fund – Trimble	https://www.kingsfund.org.uk/blog/2020/05/impact-covid-19-working-relationships	voicelessness	Impact on others	The possibilities and dangers of working with urgency

Publisher – author	Link	Code	Sub theme	theme
Kings Fund – Gilbert	https://www.kingsfund.org.uk/blog/2020/04/volunteering-covid-19-crisis	Systems	Systems description	Integrating and Mobilizing multi-agency systems
Kings Fund – Gordon and Goodman	https://www.kingsfund.org.uk/blog/2020/04/tackling-covid-19-outbreak-care-homes	Systems	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Kriby	https://www.nhsconfed.org/articles/nhs-reset-reflections-and-learning-covid-19	Innovations (as a product of systems working)	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation - Tester	https://www.nhsconfed.org/articles/nhs-reset-time-partnerships-we-always-needed	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Pett	https://www.nhsconfed.org/articles/nhs-reset-will-covid-19-be-remembered-catalyst-system-working	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Dickson	https://www.nhsconfed.org/articles/nhs-reset-time-fix-plane-even-if-we-are-35000-feet	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Dickson	https://www.nhsconfed.org/articles/how-do-nhs-leaders-feel-amid-crisis	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation	https://www.nhsconfed.org/articles/nhs-reset-working-together-reset-health-and-care	Systems working	Systems description	Integrating and Mobilizing

ion – Redmond				ng multi-agency systems
BMJ Leader – Geiger et al	https://bmjleader.bmj.com/content/4/3/113	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
BMJ Leader – Ciottone and Hertelend	https://bmjleader.bmj.com/content/4/3/154	Systems working across countries	Systems description	Integrating and Mobilizing multi-agency systems
BMJ Leader - Geerts	https://blogs.bmj.com/bmjleader/2020/04/30/leadership-lessons-and-hope-for-a-post-crisis-world-by-jaason-geerts/	Systems working	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Jain	https://www.nhsconfed.org/articles/nhs-reset-benefits-integration-during-covid-19	Lever for systems	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation – Jain	https://www.nhsconfed.org/articles/nhs-reset-benefits-integration-during-covid-19	Diversity mattered for systems	Systems description	Integrating and Mobilizing multi-agency systems
NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Rethinking systems	Systems description	Integrating and Mobilizing multi-agency systems
BMJ Leader – Pandit and Berendt	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Partnership working helpful	Systems description	Integrating and Mobilizing multi-agency systems

NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-reset-not-just-recovery	Systems	Systems description	Integrating and Mobilizing multi-agency systems
BMJ Leader – Pandit and Berendt	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Common understanding	Underlying factors	Integrating and Mobilizing multi-agency systems
BMJ Leader – Wallace and Berendt	https://bmjleader.bmj.com/content/early/2020/05/06/leader-2020-000273	Networked working	Underlying factors	Integrating and Mobilizing multi-agency systems
BMJ Leader – Wallace and Berendt	https://bmjleader.bmj.com/content/early/2020/05/06/leader-2020-000273	Collaboration	Underlying factors	Integrating and Mobilizing multi-agency systems
Kings Fund - Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Providing clarity	Underlying factors	Integrating and Mobilizing multi-agency systems
Kings Fund - Harchowal	https://www.kingsfund.org.uk/audio-video/common-purpose-culture-jatinder-harchowal	Shared purpose	Underlying factors	Integrating and Mobilizing multi-agency systems
Kings Fund - Oliver	https://www.kingsfund.org.uk/blog/2020/04/covid-19-outbreak-tales-from-frontline	Common purpose	Underlying factors	Integrating and Mobilizing multi-agency systems
NHS confederation – Jain	https://www.nhsconfed.org/articles/nhs-reset-benefits-integration-during-covid-19	Shared understanding	Underlying factors	Integrating and Mobilizing multi-agency

				systems
BMJ Leader - Stoller	https://bmjleader.bmj.com/content/4/2/77	Systems (clarify governance, communicate actively)	Enabler	Integrating and Mobilizing multi-agency systems
BMJ Leader - Mayo	https://bmjleader.bmj.com/content/4/2/53	Systems (enabler)	Enabler	Integrating and Mobilizing multi-agency systems
BMJ Leader – Fung & Berendt	https://bmjleader.bmj.com/content/4/2/87	Systems (communication)	Enabler	Integrating and Mobilizing multi-agency systems
BMJ Leader – Saint and Berendt	https://bmjleader.bmj.com/content/4/3/144	Systems (Communication)	Enabler	Integrating and Mobilizing multi-agency systems
Kings Fund - Humphries	https://www.kingsfund.org.uk/blog/2020/04/health-social-care-covid-19-coronavirus	Enabler systems leadership	Enablers	Integrating and Mobilizing multi-agency systems
NHS confederation – Jain	https://www.nhsconfed.org/articles/nhs-reset-benefits-integration-during-covid-19	Sharing information	Enablers	Integrating and Mobilizing multi-agency systems
NHS Confederation – Health and social care select committee	https://www.nhsconfed.org/publications/delivering-core-nhs-and-care-services-during-pandemic-and-beyond	Technology use	Enablers	Integrating and Mobilizing multi-agency systems
NHS Confederation	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Business rules	Enablers	Integrating and Mobilizing

ion - Dickson				ng multi- agency systems
NHS Confederat ion – clinical directors	https://www.nhsconfed.org/articles/leading-ocns-through-pandemic	Embracing technology	Enablers	Integrati ng and Mobilizi ng multi- agency systems
NHS Confederat ion - Dickson	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Joint planning	Enablers	Integrati ng and Mobilizi ng multi- agency systems
BMJ leader – Pandit and Berendt	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Consistent messaging	Enablers	Integrati ng and Mobilizi ng multi- agency systems

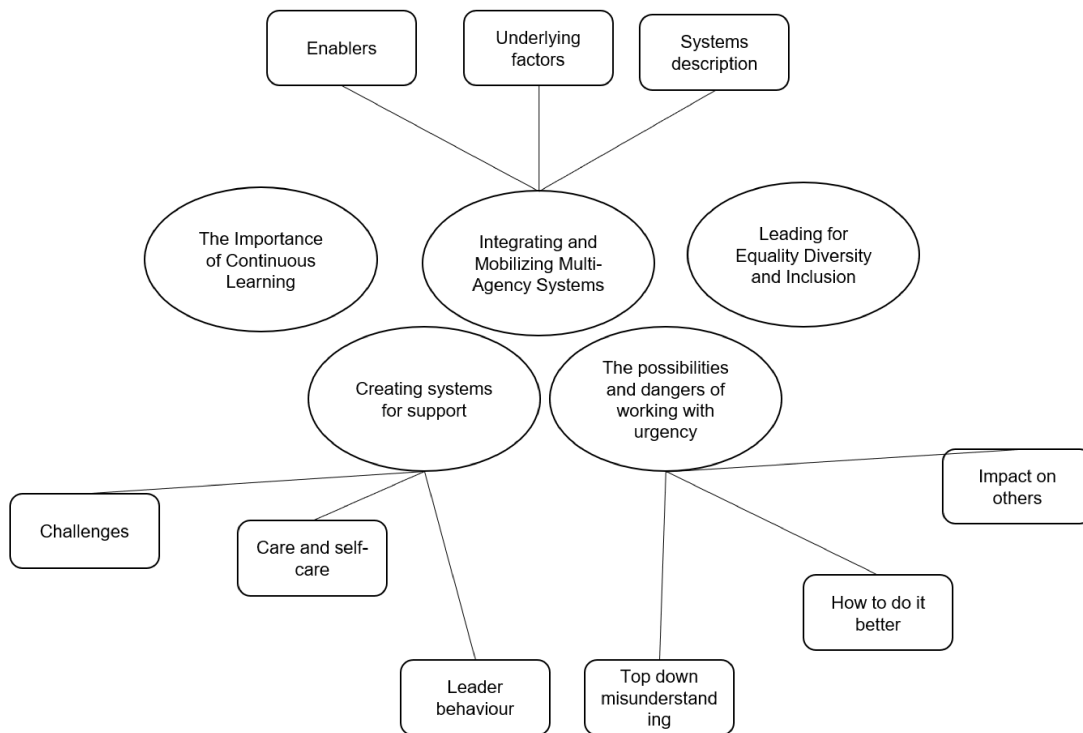
Publisher - author	Link	Code	Sub- theme	Theme
NHS Confederation – Kirby	https://www.nhsconfed.org/articles/nhs-reset-reflections-and-learning-covid-19	Inequality		Leading for equality diversity and inclusion
NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-daddy-and-mummy-what-did-you-do-great-corona-war	More work needed to address Inequality		Leading for equality diversity and inclusion
NHS Confederation – Allen et al	https://www.nhsconfed.org/articles/equality-diversity-and-inclusion-time-crisis-and-beyond	More work needed to address Inequality		Leading for equality diversity and inclusion
Kings Fund - Bailey and West	https://www.kingsfund.org.uk/blog/2020/04/ethnic-minority-deaths-covid-19	Symptom s of deep issues		Leading for equality diversity

				and inclusion
NHS Confederation	https://www.nhsconfed.org/publications/impact-covid-19-bme-communities-and-health-and-care-staff	Inequality		Leading for equality diversity and inclusion

Publisher – author	Link	Code	Sub theme	theme
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Flexibility		The importance of continuous learning
Kings fund – Bailey and West	https://www.kingsfund.org.uk/blog/2020/03/covid-19-crisis-compassionate-leadership	Learning		The importance of continuous learning
Kings Fund – Fenney and Wenzel	https://www.kingsfund.org.uk/blog/2020/05/responding-covid-19	Adapting		The importance of continuous learning
Kings fund - Evans	https://www.kingsfund.org.uk/audio-video/nurturing-leadership-navina-evans	Learning environment		The importance of continuous learning
Kings Fund - Issar	https://www.kingsfund.org.uk/audio-video/why-leadership-important-covid-prerana-issar	Learning and improvement culture		The importance of continuous learning
BMJ leader – Lees and Berendt	https://bmjleader.bmj.com/content/early/2020/04/30/leader-2020-000265	Need to learn		The importance of continuous learning
BMJ leader – Pandit and Berendt	https://bmjleader.bmj.com/content/early/2020/05/25/leader-2020-000291	Need constantly adapting style		The importance of continuous learning
BMJ leader – Wallace and Berendt	https://bmjleader.bmj.com/content/early/2020/05/06/leader-2020-000267	Every situation is different		The importance of

				continuous learning
BMJ leader – Wallace and Berendt	https://bmjleader.bmj.com/content/early/2020/05/06/leader-2020-000267	Capture learning		The importance of continuous learning
NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Review plans		The importance of continuous learning
NHS Confederation - Dickson	https://www.nhsconfed.org/articles/nhs-reset-rethinking-future	Embrace learning		The importance of continuous learning
Kings Fund - Berwick	https://www.kingsfund.org.uk/audio-video/don-berwick-adapting-changing-circumstances	Adapting		The importance of continuous learning

Thematic map iteration 3:



Reference list for studies not used for the final article:

Allwood D, Berendt T, Delgado P, Frinch J, Klaber B, Molloy A et al. This is different. *BMJ Leader* 2020;**4**:80-81.

Benson S. Managing anxiety: Breathing. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/publications/managing-anxiety-breathing> (accessed 19 March 2021).

Berwick D. Responding to the COVID-19 crisis: Professor Don Berwick. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/audio-video/don-berwick-responding-covid-19-crisis> (accessed 19 March 2021).

Berwick D. Adapting to changing circumstances: Professor Don Berwick. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/audio-video/don-berwick-adapting-changing-circumstances> (accessed 19 March 2021).

Bullock I. Finding solutions in complex situations: Ian Bullock, Chief executive, Royal College of Physicians. *The Kings Fund* 2020. <https://www.kingsfund.org.uk/audio-video/finding-solutions-complex-situations> (accessed 19 March 2021).

Ciottone GR, Hertelendy A. Ten minutes with Dr Gregory R Ciottone, MD, FACEP, FFSEM, President of the World Association for Disaster and Emergency Medicine. *BMJ Leader* 2020 ;**4**:154-156.

Collins B. Discipline and agility in a crisis. *Kings Fund* 2020 <https://www.kingsfund.org.uk/publications/discipline-and-agility-crisis> (accessed 20 August 2021).

COVID Trauma Response Working Group. Responding to stress experienced by hospital staff working with COVID-19. *Kings Fund* 2020 <https://www.kingsfund.org.uk/audio-video/stress-hospital-staff-covid-19> (accessed 20 August 2021).

Dickson N. How do NHS leaders feel amid the crisis? *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/how-do-nhs-leaders-feel-amid-crisis> (accessed 20 August 2021).

Dickson N. NHS Reset: Daddy (and Mummy), what did you do in the great Corona war? *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-daddy-and-mummy-what-did-you-do-great-corona-war> (accessed 20 August 2021).

Dickson N. NHS Reset: Reset, not just recovery: Niall Dickson. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-reset-not-just-recovery> (accessed 21 August 2021).

Dickson N. NHS Reset: 'Time to fix the plane, even if we are at 35,000 feet'. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-time-fix-plane-even-if-we-are-35000-feet> (accessed 20 August 2021).

Evans N. The nurturing role of leaders: Dr Navina Evans. *The Kings fund* 2020 <https://www.kingsfund.org.uk/audio-video/nurturing-leadership-navina-evans> (accessed 19 March 2021).

Fenney D, Wenzel L. Responding to Covid-19: What challenges are health and care leaders facing? *The Kings Fund* 2020 <https://www.kingsfund.org.uk/blog/2020/05/responding-covid-19> (accessed 19 March 2021).

Fung H, Berendt A. Ten minutes with Dr Hong Fung, CEO, Chinese University of Hong Kong Medical Centre. *BMJ Leader* 2020;**4**:87-89.

Geerts J. Leadership lessons and hope for a post-crisis world by Jaason Geerts. *BMJ Leader* 2020 <https://blogs.bmj.com/bmjleader/2020/04/30/leadership-lessons-and-hope-for-a-post-crisis-world-by-jaason-geerts/> (accessed 20 August 2020).

Geiger D, Harborth L, Mugyisha A. Managing enduring public health emergencies such as COVID-19: lessons from Uganda Red Cross Society's Ebola virus disease response operation. *BMJ Leader* 2020;**4**:113-116.

Gilbert H. Capitalising on the offer of help – volunteering in the COVID-19 crisis. *Kings Fund* 2020 <https://www.kingsfund.org.uk/blog/2020/04/volunteering-covid-19-crisis> (accessed 20 August 2021).

Gordon A, Goodman C. Tackling the COVID-19 outbreak in care homes: messages from a geriatrician and a health service researcher about how the NHS can help. *Kings Fund* 2020 <https://www.kingsfund.org.uk/blog/2020/04/tackling-covid-19-outbreak-care-homes> (accessed 20 August 2021).

Hardacre J, Margetts A. Psychological PPE: Survival kit for creating a safer culture in the COVID-19 context by Dr Jeanne Hardacre & Dr Alexander Margetts. *BMJ Leader* 2020 <https://blogs.bmj.com/bmjleader/2020/04/15/psychological-ppe-survival-kit-for-creating-a-safer-culture-in-the-covid-19-context/> (accessed 20 August 2021).

Kirby N. NHS Reset: Reflections and learning from COVID-19. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-reflections-and-learning-covid-19> (accessed 20 August 2021).

Kumar J. Leadership in a crisis: The importance of courage and caring: Juliette Kumar. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/leadership-crisis-importance-courage-and-caring> (accessed 21 August 2021).

Lees P, Berendt AR. Ten minutes with Mr Peter Lees, CEO, Faculty of Medical Leadership and Management (FMLM). *BMJ Leader* 2020;**4**:149-150.

Maggs D. Resources supporting our mental health and wellbeing. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/publications/resources-supporting-mental-health-covid19> (accessed 19 March 2021).

Marx C. Compassionate leadership is not a 'nice to have' – for clinicians confronting COVID-19, it is a powerful weapon by Dame Clare Marx. *BMJ Leader* 2020 <https://blogs.bmj.com/bmjleader/2020/04/15/compassionate-leadership-is-not-a-nice-to-have-for-clinicians-confronting-covid-19-it-is-a-powerful-weapon/> (accessed 20 August 2021).

Maybin J. Managing anxiety about loss. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/publications/managing-anxiety-about-loss-covid-19> (accessed 19 March 2021).

Mayo AT. Teamwork in a pandemic: insights from management research. *BMJ Leader* 2020 ;4:53-56.

Newitt S. Managing your energy. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/publications/managing-your-energy-covid19> (accessed 19 March 2021).

NHS Confederation. Delivering core NHS and care services during the pandemic and beyond. *NHS Confederation* 2020 <https://www.nhsconfed.org/publications/delivering-core-nhs-and-care-services-during-pandemic-and-beyond> (accessed 21 August 2021).

NHS Confederation BME Leadership Network. The impact of Covid-19 on BME communities and health and care staff. *NHS Confederation* 2020 <https://www.nhsconfed.org/publications/impact-covid-19-bme-communities-and-health-and-care-staff> (accessed 21 August 2021).

Ojo T. Mental Health Awareness for a week, then what? By Dr Tim Ojo. *BMJ Leader* 2020 <https://blogs.bmj.com/bmingleader/2020/05/20/mental-health-awareness-for-a-week-then-what-by-dr-tim-ojo/> (accessed 20 August 2021).

Oliver D. Tackling the Covid-19 outbreak: Tales from the frontline. *The Kings Fund* 2020 <https://www.kingsfund.org.uk/blog/2020/04/covid-19-outbreak-tales-from-frontline> (accessed 19 March).

PCN Clinical Directors. Leading PCNs through the pandemic: PCN network board members. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/leading-pcns-through-pandemic> (accessed 21 August 2021).

Pett W. NHS Reset: Will COVID-19 be remembered as the catalyst for system-working? *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-will-covid-19-be-remembered-catalyst-system-working> (Accessed 20 August 2021).

Reckless I, Berendt A. Ten minutes with Dr Ian Reckless, Medical Director, Milton Keynes University Hospital NHS Foundation Trust. *BMJ Leader* 2020;4:90-91.

Remond, I. NHS Reset: Working together to reset health and care. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-working-together-reset-health-and-care> (accessed 20 August 2021).

Saint S, Berendt AR. 10 minutes with Sanjay Saint, Chief of Medicine, Veterans Administration Ann Arbor Healthcare System, Michigan, USA. *BMJ Leader* 2020;4:144-146.

Steward K. Maintaining humanity in the COVID-19 Crisis by Dr Katy Steward. *BMJ Leader* 2020 <https://blogs.bmj.com/bmingleader/2020/05/13/maintaining-humanity-in-the-covid-19-crisis-by-dr-katy-steward/> (accessed 20 August 2021).

Stoddart C, Berendt A. Ten minutes with Professor Catherine Stoddart, Chief Executive Officer, Northern Territory Health, Australia. *BMJ Leader* 2020;4:92-93.

Symons R. Decisions, decisions, decisions – Is the concept of decision fatigue an issue in COVID-19 Times? By Rita Symons. *BMJ Leader* 2020 <https://blogs.bmj.com/bmingleader/2020/05/06/decisions-decisions-decisions-is-the-concept-of-decision-fatigue-an-issue-in-covid-19-times-by-rita-symons/> (accessed 20 August 2021).

Tester N. NHS Reset: Time for the partnerships we always needed. *NHS Confederation* 2020 <https://www.nhsconfed.org/articles/nhs-reset-time-partnerships-we-always-needed> (accessed 20 August 2021).

Vogus TJ, McClelland LE. Actions, style and practices: how leaders ensure compassionate care delivery. *BMJ Leader* 2020;4:48-52.