

GM CHC Final Report: Communications

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1) Overview of communications strategy

The overarching aim of the GM CHC communications working group is to disseminate and create visibility for the outputs from our clinical care pathways and pathfinder projects, develop collaborations with key influencer and stakeholders, and build trust with the citizens we serve.

1.2) Target stakeholders

Our communications are targeted towards a wide range of audiences including:

- Health care providers; local and national NHS organisations
- Internal UoM Research institutes (Faculty, Biomedical Research Centre, Data Science Institute)
- CHC partners across the North
- Special interest groups (Stroke Association, Public Health England)
- Grant funders and charities (UK Government, Department of Health, Northern Health Science Alliance)
- Industry; SMEs and multinational corporations
- Media (local & national)
- Social services
- General public

1.3) Key Performance Indicators and success factors

KPIs	KPI objective	Progress indicators
Create visibility for GM CHC's research outputs and build brand awareness	Utilise diverse channels such as digital marketing and involvement in external events to promote GM CHC to a wider audience	<ul style="list-style-type: none">- GM CHC's research outputs have been publicised to an international audience, through publications such as The Times, DigitalHealth.Net, Pulse Magazine and Policy@manchester- Forming positive relationships with external organisations such as the European Neuro Convention, resulting in a presentation slot for GM CHC's Stroke project team at the European Neuro Convention 2018 & 2019.- Exhibiting at a wide range of events such as the NHS Expo 2018, BlueDot Festival, North West Coast Ecosystem meetings, Translation@Manchester launch event and the King's Fund Managing Change in Digital Health event.
Increase traffic to	Publish engaging content,	<ul style="list-style-type: none">- For three consecutive years the GM CHC webpage has been ranked as the second most visited

GM CHC website	including videos, articles and images	<p>page on the Connected Health Cities website (ranked only after the Home/ landing page).</p> <ul style="list-style-type: none"> - The GM CHC section of the CHC website attracted 2,339 visitors between 31st December 2017- 31st December 2018 and 2,201 visitors between 31st December 2016 and 31st December 2017. - News articles promoting GM CHC's research outputs and containing links back to our website have been featured in many of our partner organisations newsletters and online news pages, driving traffic to our website from networks such as: CLARHC, HInM, Digital Futures, UoM FBMH, SRFT NHS Research and Development, Healthwatch Trafford, Healthwatch Manchester, Stroke Association.
Achieve effective public engagement to build connections with wide networks of stakeholders	<p>Develop a suite of educational material to complement GM CHC's public engagement activities.</p> <p>Design a range of activities to interact with a diverse audience.</p>	<ul style="list-style-type: none"> - 200 copies of the Stroke Project Aphasia- friendly leaflets were displayed across Hyper Acute Stroke Units in Salford, Stockport and Fairfield. Distributed to patients and delegates at Collaborative GM Stroke CPD Event. - Utilise the #DataSavesLives brand to start conversations with event attendees from across the country and to improve the public's perception of health data research. - Using external events such as Manchester Caribbean Carnival as an opportunity to engage with the public in different ways, e.g. designing and delivering interactive games and activities to stimulate discussion about health data research.

2) Communication channels

2.1) Internal communications

2.1.1) Aim

To ensure that all GM CHC staff members are updated on the latest news, events and developments of the programme.

2.1.2) Channels

Bi-monthly research meetings and newsletter. Supported by branded emails for time sensitive communications (i.e. events and funding opportunities).

2.2) External communications

2.2.1) Aims

- To develop relationships across industry, academia & health and social care services to drive collaboration and innovation in the region
- To build trust with the general public for how we use of patient data to ensure a social license runs through our research

- To influence stakeholder engagement by raising awareness of our activities, with a view to creating routes for future funding.

2.2.2) Channels

- **GM CHC website:** A dynamic representation of GM CHC's latest news, events, interviews with researchers and updates, including links to our range of marketing collateral such as videos and information booklets, as listed in section 3- Marketing and communications collateral.
- **Events:** Creating visibility for GM CHC's research projects by exhibiting at external events; engaging with a wide range of healthcare stakeholders, e.g. the NHS Expo 2018, BlueDot Festival, North West Coast Ecosystem meetings and the King's Fund Managing Change in Digital Health event (as outlined in the Events and Engagement table).
- **Social media:** Regular posts on the @CHCNorth Twitter account to engage with a broad online audience. By March 2019, the @CHCNorth Twitter account has gained more than 2,060 followers.
- **News coverage:** Coverage on news websites such as The Times, Pulse Magazine, DigitalHealth.Net, the Pharmaceutical Journal, Health Tech News, UK Authority.com, About Health Transparency, Digital Futures, Leading Healthcare and Policy@Manchester.
- **Partnerships with external organisations:** Newsletters and social media accounts of national organisations such as: Public Health England, Health Innovation Manchester, NIHR Clinical Research Network, Manchester Connected Health Ecosystem, North West Coast Innovation Agency, AIMES and The University of Manchester's Faculty of Biology, Medicine & Health.
- **E-marketing campaigns:** Targeted emails to a network of 1.3k subscribers from industry, academia, health and social care and charities.
- **Print:** A comprehensive suite of printed marketing collateral (i.e. leaflets, flyers and conference banners) circulated at conferences and workshops, and to stimulate discussion about GM CHC's projects.

2.2.3) Measures of impact

In order to achieve the aims outlined in 2.2.1, it has been necessary to utilise a broad range of communication channels to publicise GM CHC research outputs effectively. Estimated figures for the reach and visibility attained by each GM CHC communications campaign and associated outputs have been outlined in section 3 - Marketing and Communications collateral.

Impact of GM CHC communications has also been measured by the following:

- As of March 2019, more than 150 users from across the UK have signed up to access the National Antibiotic Prescribing Dashboard and 22 GP Practices have signed up to use the GP Antibiotic Prescribing Dashboard.
- The GM CHC ABC-ICH Stroke team's recent nomination in the Stroke & Cardiovascular category of the prestigious BMJ Awards 2019.
- Health Innovation Manchester's adoption of the #DataSavesLives communications campaign as an integral component in the delivery of their GM Digital marketing and social media strategy.
- Widespread media coverage of GM CHC's research projects in national publications such as The Times: FutureNorth, Pulse Magazine for GPs and DigitalHealth.Net.
- Positive reactions regarding the GM CHC Stroke project's outputs from key healthcare stakeholders such as Deb Lowe (National Clinical Lead for Stroke Medicine- GIRFT, NHS Improvement. Consultant Stroke Physician Wirral University Teaching Hospital. Stroke Lead- NW Coast SCN).

← Tweet

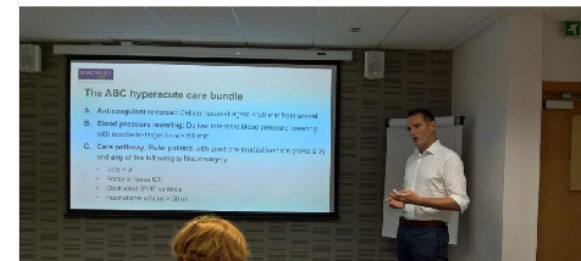


Deb Lowe
@Deborah71247971

ICH app is one of the best examples I have ever seen of using technology to drive rapid decision making along an evidence based pathway. National staged adoption is surely a no brainer

GM Stroke ODN @GMStrokeODN

@adrianpj1 shares work on improving outcomes in haemorrhagic #stroke with the acute care task and finish group for the new national #stroke plan @SalfordRoyalNHS @CHCNorth @SalfordGDE @Deborah71247971



2.2.4) Publications

Each GM CHC academic publication has been supported by a marketing & communications campaign to create visibility for research outputs, to credit the teams involved and to invite stakeholder feedback.

Title of publication	Authors	Title of publication/ journal	Link to article	Notes (e.g. submitted/pending etc.)
BRIT				
Antibiotic Prescribing in UK General Practice – a conditional logistic regression determining the key driver across different infectious conditions	Vicki Palin	TBC	N/A	To be submitted
Antibiotic Prescribing in General Medical Practices in England: Is it just due to individual practitioners or does area matter?	Anna Mölter	Health and Place	https://www.sciencedirect.com/science/article/pii/S1353829218301564	Published
Antibiotic Choice in UK General Practice – rates and drivers of potentially inappropriate antibiotic type.	Magda & Vicki Palin	TBC	N/A	To be submitted
Association between prescribing of antibiotics and other medicines in primary care: is overprescribing of antibiotics a generic challenge?	Yan Li, Anna Mölter, Andrew White, William Welfare, Victoria Palin, Miguel Belmonte, Darren M Ashcroft, Matthew Sperrin, Tjeerd Pieter van Staa	Br J General Practice In Press	https://bjgp.org/content/69/678/e42	Published
Infection related complications after common infection are influenced by antibiotic prescribing rate in primary care	B van Bodegraven, others, van Staa T	TBC	N/A	To be submitted
Drivers of antibiotics prescribing in primary care	M Belmonte, others, van Staa T	TBC	N/A	To be submitted

From clinical decisions to interpersonal communication: General practitioners' accounts of negotiating antibiotic prescribing decisions with patients in North England	Marieke M. van der Zande, Melanie Dembinsky & Tjeerd P. van Staa.	TBC	N/A	To be submitted
General practitioners' accounts of negotiating antibiotic prescribing decisions with patients: A qualitative study on drivers of antibiotic prescribing in low, medium and high prescribing practices	Marieke M. van der Zande*Melanie Dembinskya,*Giovanni Aresia,c Tjeerd P. van Staaa	???	???	

Stroke				
Hyperacute management of intracerebral haemorrhage	Kyriaki Paroutoglou, Adrian R Parry-Jones	Clinical Medicine	http://www.clinmed.rcpjournals.org/content/18/Suppl_2/s9.long	Review, published 1/4/18
ICH care bundle	Adrian Parry-Jones, Emily Birleson	JAMA Neurology	N/A	Manuscript in preparation
ICH Case Study for European-wide dissemination: Reducing death after intracerebral haemorrhage: The 'ABC' hyperacute care bundle	Adrian Parry-Jones	TBC	N/A	Under review
Information Governance and data discoverability				
Public sector privacy assessment transparency in Greater Manchester in the lead up to GDPR	Emily Griffiths	Government Information Quarterly	N/A	To be submitted
Discoverability of UK health data available for research: current status	Rebecca M Joseph, Emily Griffiths, Ben Green, Niels Peek	Journal of the Medical Informatics Association	N/A	To be submitted
Wound care				
Potential prognostic factors for delayed healing of common, non-traumatic skin ulcers: A scoping review	David A. Jenkins, Sundus Mohamed, Joanne K. Taylor, Niels Peek, Sabine N. van der	International Wound journal	https://onlinelibrary.wiley.com/doi/full/10.1111/iwj.13100	Published 28/2/2019

	Veer			
1) Comparative risk of respiratory depression in patients treated with opioids for non-malignant pain 2) Comparison of secondary care opioid utilisation for non-cancer pain in 2 tertiary centres in England and Canada	Meghna Jani and Will Dixon	Annals of Internal Medicine (for both)	N/A	Manuscript in preparation

2.2.5) Publicity & news articles

The GM CHC Communications coordinator has managed publicity campaigns to create visibility for each of the GM CHC's research projects, such as the following:

Title of article	Authors	Title of publication/ newspaper	Link to article	Published
New GM CHC research identifies disadvantaged northern regions as antibiotic prescription hotspots	Katie McCall	Connected Health Cities website	https://www.connectedhealthcities.org/2018/09/new-gm-chc-research-identifies-disadvantaged-northern-regions-as-antibiotic-prescription-hotspots/	September 2018
Saving two lives a month: How stroke project is making an impact	Katie McCall and Claire Mooney	NCA Research website	https://www.ncaresearch.org.uk/news/saving-two-lives-a-month-how-stroke-project-is-making-an-impact/	October 2018
Two lives per month: How a stroke project is making an impact in Greater Manchester	Katie McCall	Health Innovation Manchester website	https://healthinnovationmanchester.com/news/saving-two-lives-per-month-how-a-stroke-project-is-making-an-impact-in-greater-manchester/	October 2018
Nationwide prescribing data provides fresh insight into the UK's antibiotic crisis: Launch of the National Antibiotic Prescribing Dashboard	Katie McCall	Connected Health Cities website	https://www.connectedhealthcities.org/2018/11/nationwide-prescribing-data-provides-fresh-insight-into-the-uks-antibiotic-crisis-launch-of-the-	November 2018

			national-antibiotic-prescribing-dashboard/	
Greater Manchester Connected Health City launches antibiotics dashboard	Katie McCall	DigitalHealth.Net	https://www.digitalhealth.net/2018/11/greater-manchester-connected-health-city-antibiotics-dashboard/	November 2018
New dashboard show prescribing data from 20 million primary care consultations	Katie McCall	Leading healthcare	http://www.leadinghealthcare.co.uk/2018/11/27/new-dashboard-shows-data-from-20-million-primary-care-consultations/	November 2019
National Antibiotic Prescribing Dashboard launch	Katie McCall	Digital Futures	http://www.digitalfutures.manchester.ac.uk/news/announcements/national-antibiotic-prescribing-dashboard-launch/	November 2018
400 GP Practices consultation prescribing data made available in new dashboard	Katie McCall	Health tech newspaper	http://www.thehtn.co.uk/2018/11/27/400-gp-practices-consultation-data-made-available-in-new-dashboard/	November 2018
National Antibiotic Prescribing Dashboard released in UK	Katie McCall	About Health Transparency	https://abouthealthtransparency.org/2018/11/national-antibiotic-prescribing-dashboard-released-in-uk/	November 2018
Greater Manchester Connected Health Cities develop National Antibiotic Prescribing Dashboard	Katie McCall	Health Innovation Manchester	https://healthinnovationmanchester.com/news/greater-manchester-connected-health-cities-develop-national-antibiotic-prescribing-dashboard/	November 2018
Saving 2 lives per month: How GM CHC's Stroke project is making an impact on patients in our region	Katie McCall	Salford Healthwatch	https://healthwatchsalford.co.uk/news/saving-2-lives-per-month-how-gm-chcs-stroke-project-is-making-an-impact-on-patients-in-our-region/	December 2018
Saving 2 lives per month: How GM CHC's Stroke project is making an impact on patients in our region	Katie McCall	Trafford Healthwatch	https://healthwatchtrafford.co.uk/news/saving-2-lives-per-month-how-gm-chcs-stroke-project-is-making-an-impact-on-patients-in-our-region/	December 2018

			impact-on-patients-in-our-region/	
GM CHC research reveals strong link between prescribing rates of antibiotics and other medicines in General Practice	Katie McCall	Connected Health Cities website	https://www.connectedhealthcities.org/2018/12/gm-chc-research-reveals-strong-link-between-prescribing-rates-of-antibiotics-and-other-medicines-in-general-practice/	December 2018
Understanding antibiotic resistance: A national antibiotic prescribing dashboard for policymakers	Katie McCall	Policy@Manchester blog	http://blog.policy.manchester.ac.uk/posts/2019/01/understanding-antibiotic-resistance-a-national-antibiotic-prescribing-dashboard-for-policymakers/	January 2019
New data tool will allow GPs to compare antibiotic prescribing against national rates	Katie McCall	Pulse magazine for GPs	http://www.pulsetoday.co.uk/news/clinical-news/new-data-tool-will-allow-gps-to-compare-antibiotic-prescribing-against-national-rates/20038266.article	February 2019
GM CHC and Public Health England launch GP dashboard to help tackle antibiotic resistance	Katie McCall	Connected Health Cities website (online article)	https://www.connectedhealthcities.org/2019/02/gm-chc-launches-gp-dashboard-to-help-tackle-antibiotic-resistance/	February 2019
GM CHC and Public Health England launch GP Antibiotic Prescribing dashboard	Katie McCall	Health Innovation Manchester	https://healthinnovationmanchester.com/news/gm-chc-and-public-health-england-launch-gp-antibiotic-prescribing-dashboard/	February 2019
Tackling Antibiotic Resistance: Using the National Antibiotic Prescribing Dashboard to understand antibiotic prescribing in your region	Chirag Mistry and Katie McCall	Connected Health Cities (online article)	https://www.connectedhealthcities.org/2019/02/tackling-antibiotic-resistance-using-the-national-antibiotic-prescribing-dashboard/	February 2019
Greater Manchester: Building Rapid Interventions to reduce antimicrobial resistance and over-prescribing of antibiotics	Katie McCall	The Times: FutureNorth	https://bionow.co.uk/download/mlf5c7fdaa31d614	March 2019

2.2.6) Events & Speaking Engagements.

The GM CHC team regularly attend conferences and other events to engage with a wide range of stakeholders in Greater Manchester and beyond. Throughout the GM CHC programme, presentations and exhibition opportunities have provided excellent opportunities to showcase GM CHC's research outputs to an external audience. Examples listed below:

**Please note that the table below is not an exhaustive list.*

Project	Date	Staff involved	Name of event	Category	Audience
Stroke	August 2018	Adrian-Parry Jones	Stroke 2018: Bridging the Continuum	Presentation	International audience of healthcare professionals and researchers
Stroke	August 2018	Camilla Sammut-Powell	Connected Health Cities Research Meeting	Presentation	CHC researchers & PSS staff
All GM CHC projects	September 2018	Niels Peek	AI in Medicine Europe Conference	Presentation	International audience of researchers and healthcare professionals
BRIT project	September 2018	Edward Tempest	Connected Health Cities All Hands Meeting	Presentation	CHC researchers & PSS staff
All GM CHC projects	September 2018	All members of GM CHC research teams + Katie McCall and Zoher Kapacee	NHS Expo 2018	Presentation & Exhibition opportunities	NHS staff, researchers, policy makers, industry, healthcare charities, patient groups
BRIT project	September 2018	Miguel Belmonte and Chirag Mistry	Public Health Annual Conference 2018	Presentation	Healthcare professionals, policy makers and researchers

All GM CHC projects	October 2018	Zoher Kapacee	Greater Manchester research showcase	Presentation	GM digital health stakeholders, e.g. Health Innovation Manchester, NHTA, NIHR, MIDAS, Marketing Manchester, Manchester University NHS Foundation Trust
BRIT project	October 2018	Miguel Belmonte	WCISU Event	Presentation	Researchers and healthcare professionals
TRE	October 2018	Niels Peek, Emily Griffiths and Ben Green	Innovations in Responsible Research	Presentation & workshop	Researchers from The University of Manchester and Connected Health Cities
All GM CHC projects	November 2018	Katie McCall	Northern Power Futures	Networking	Healthcare professionals, industry, charities, policy makers.
Stroke	December 2018	Katie McCall	King's Fund event: Managing change in Digital Health	Exhibition + networking opportunity	General public, stroke survivors, carers, stroke professionals, researchers, Stroke Association staff
Stroke	December 2018	Lisa Brunton, Chris Ashton and Kyriaki Paroutoglou	UK Stroke Forum 2018	Presentation	Stroke clinicians, healthcare professionals, researchers
BRIT	December 2018	Vicky Palin, Tjeerd van Staa, Chirag Mistry	GP Federation Meeting	Presentation	GP Federation members
Stroke	December 2018	Katie McCall	North West Coast Ecosystem Meeting	Exhibition + networking opportunity	Clinical stroke professionals, researchers etc.

All GM CHC projects	February 2019	Katie McCall	Translation@Manchester	Exhibition & Networking opportunity	NHS Staff and researchers from the University of Manchester
Stroke	February 2019	Emily Birleson	Neurosciences Nurses Forum webinar	Presentation	Clinical stroke professionals, researchers etc.
All GM CHC projects	March 2019	Niels Peek	National GP ACF Conference	Keynote	Researchers
Stroke	March 2019	Adrian Parry-Jones and Camilla Sammut-Powell	European Neuro Convention	Presentation	Researchers, clinicians, charities and industry
All GM CHC projects	March 2019	Niels Peek	The Future of Surgical Research in the North West	Keynote	Healthcare professionals and researchers

3) Marketing and communications collateral

To accompany the GM CHC website, a comprehensive suite of marketing and communications collateral has been developed to showcase GM CHC research projects, activities and project milestones, including:

Item	Date Produced	Channels	Estimated online engagements/ clicks
BRIT project news item: <i>Latest update from the GM CHC BRIT care pathway</i>	July 2017	GM CHC website + @CHCNorth social media	94
Stroke project news item: <i>First Greater Manchester Stroke CPD event</i>	September 2017	GM CHC website + CHCNorth social media	57
Stroke project news item: <i>GM CHC uses World Stroke Day to tell patients about ground breaking new research to improve the diagnosis & treatment of stroke.</i>	October 2017	GM CHC website + CHCNorth social media	146 +
BRIT ACTION Research project leaflets	November 2017	GPs & healthcare professionals, King's Fund event, Northern Power Futures festival, NWC Ecosystem conference	346 + 2798 Twitter impressions
Opioid project news item: <i>Researchers at GM CHC highlight Opioid Epidemic as not just an 'American Problem'</i>	December 2017	GM CHC website + CHCNorth social media	47
Greater Manchester Connected Health Cities Introduction Video https://vimeo.com/253231716	January 2018	GM CHC Website & Social Media followers	211
TRE news item: <i>Greater Manchester Connected Health City secures highest data security certification</i>	March 2018	GM CHC website + CHCNorth social media	114
Stroke project news item: <i>Innovative patient partnership leads to greater</i>	March 2018	GM CHC website + CHCNorth social media	125

<i>transparency about use of patient data in stroke research</i>			
Stroke Project Leaflet	March 2018	Paramedics & patients at Collaborative GM Stroke CPD Event (August 2017)	400
Stroke Project Aphasia friendly Leaflet	March 2018	Displayed across Hyper Acute Stroke Units in Salford, Stockport and Fairfield. Distributed to patients and delegates at Collaborative GM Stroke CPD Event	200
#datasaveslives leaflets	March 2018	Delegates at NHS Expo, NWC CHC Meeting and GM Stroke CPD event.	500
BRIT Project GP recruitment leaflet	April 2018	GPs & healthcare professionals at GM Ecosystem conference and NHS Expo 2018	100
Stroke project news item: <i>Mobile app reduces decision making to 10 seconds for all suspected stroke patients in Greater Manchester</i>	April 2018	GM CHC website + social media	420
'Greater Manchester Connected Health Collaboration: Developing a Pre-Hospital Pathway Aid' Video https://vimeo.com/267198349	April 2018	GM CHC Website & social media	544 + 8,382 Twitter impressions
'The Acute Bundle of Care for Intracerebral Haemorrhage – App' Video https://vimeo.com/275981724	June 2018	GM CHC website & Social media followers. Shown to delegates at NHS Expo 2018, King's Fund Digital	2761 + 10,721 Twitter impressions

		Health event, NWC Ecosystem meeting, Translation@Manchester launch & European Neuro Convention 2018	
BRIT project news item: <i>GPs and pharmacists presented with new digital-dashboard as part of Greater Manchester's response to predicted 'post-antibiotic apocalypse'</i>	June 2018	GM CHC website + social media	184 + 4,932 Twitter impressions
BRIT project news item: <i>New GM CHC research identifies disadvantaged northern regions as antibiotic prescription hotspots</i>	September 2018	GM CHC website + social media	154 + 4,550 Twitter impressions
ICH Stroke Care bundle + app video https://vimeo.com/295550023	October 2018	@CHCNorth Social Media, Healthwatch Salford website, Healthwatch Trafford website, Health Innovation Manchester website, Digital Futures website, UoM FBMH newsletter, NIHR Clinical Research newsletter, Stroke Association social media	Approximately 3,738 views and 202k + Twitter impressions
Stroke project news item: <i>Saving 2 lives per month- How GM CHC's Stroke project is making an impact on patients in our region</i>	October 2018	GM CHC website + @CHCNorth social media	245 + 4,916 Twitter impressions
BRIT project news item: <i>Launch of the National Antibiotic Prescribing Dashboard</i>	November 2018	GM CHC website + @CHCNorth social media	786 + 13,707 Twitter impressions

BRIT project: Antibiotic Prescribing Dashboard video https://vimeo.com/300733375	November 2018	GM CHC website + @CHCNorth social media, displayed on screens across UoM campus during AAW 2018, shown to delegates at external events	Approximately 2,000 views
Stroke Project Leaflets	November 2018	King's Fund event, Northern Power Futures festival, NWC Ecosystem conference	100
BRIT Project GP Recruitment Leaflets	December 2018	GP Federation, GP Surgeries in Greater Manchester and healthcare professionals at external events	500
Opioid project news item: <i>Dr Meghna Jani's reflections on the ICES and Farr Research Fellowship</i>	December 2018	GM CHC website + @CHCNorth social media	382 + 3,635 Twitter impressions
BRIT project news item: <i>GM CHC research reveals strong link between prescribing rates of antibiotics and other medicines in General Practice</i>	December 2018	GM CHC website + @CHCNorth social media	116 + 7,865 Twitter impressions
BRIT project news item: Policy@Manchester blog post about National Antibiotic Prescribing Dashboard	January 2019	Policy@Manchester website, Policy@Manchester social media + @CHCNorth social media	Approximately 11,000
Stroke project news item: <i>GM CHC excited to announce partnership with</i>	January 2019	GM CHC website + @CHCNorth social media	160 + 3,833 Twitter impressions

<i>European Neuro Convention</i>			
Stroke project news item: <i>ABC-ICH Stroke Project shortlisted for prestigious BMJ Awards 2019</i>	February 2019	GM CHC website + @CHCNorth social media, Health Innovation Manchester website	159 + 3,218 Twitter impressions
BRIT project news item: <i>GM CHC and Public Health England launch GP dashboard to help tackle antibiotic resistance</i>	February 2019	GM CHC website + @CHCNorth social media	94 + 6797 Twitter impressions

4) Influencing system-wide change within the NHS

All GM CHC communications collateral has been developed in collaboration with key NHS stakeholders, for example:

- Dr Joanna Bircher – Clinical Director of GM GP Excellence Programme, GP Partner at Lockside Medical Centre and QI Clinical Lead (Tameside and Glossop CCG) who featured in the video for the BRIT Antibiotic Prescribing Dashboard.
- Dr Jung Tsang from the Robert Darbishire Practice in Rusholme has played a key role in the development of the BRIT Antibiotic Prescribing Dashboard, and supported the dashboard by appearing in the BRIT video.
- Dr Tom Foley (NHS Digital Clinical Lead for Data) has supported GM CHC's public engagement and communications activities, saying that '#datasaveslives has done more with one hashtag than 100 reports or papers.

4.1) Case Study A- BRIT Antibiotic Resistance Project

Brief overview of project

The BRIT project team have worked with anonymised healthcare records to understand the key drivers which impact antibiotic prescribing rates across the UK. Alongside publishing a number of research papers, the research team have developed two dashboards: the National level dashboard which provides and overview of antibiotic prescribing trends across the UK and the GP Antibiotic Prescribing Dashboard which provides healthcare professionals with insight into their own practice's prescribing habits, supporting them to optimise their own prescribing behaviours.

Communications highlights

The BRIT project has received especially widespread national coverage, using GM CHC's communication channels and the networks of external organisations and the national press.

- 1) **News articles:** The launch of the National Antibiotic Prescribing Dashboard coincided with Antibiotics Awareness Week in November 2018, with news articles featured in The Times: FutureNorth supplement, DigitalHealth.Net, Health Innovation Manchester, Policy@Manchester, Pharmaceutical-Journal.com, UK Authority, Digital Futures, About Health Transparency.org Leadinghealthcare.co.uk and Digital Futures.

The subsequent launch of the GP Antibiotic Prescribing Dashboard has been publicised via a news article in Pulse Magazine for GPs, the Health Innovation Manchester website, Public Health England North West news bulletin.

- 2) **Newsletters:** The news item promoting the dashboard launch also featured in the newsletters of organisations such as Public Health England, Connected Health Cities, The University of Manchester Faculty of Biology Medicine and Health, NHS NIHR Clinical Research Network, Health Innovation Manchester, Manchester Connected Health Ecosystem, NWC Innovation agency, Health watch Trafford and Digital Futures.
- 3) **Video:** Two videos have been produced to promote the GM CHC Antibiotic Prescribing dashboard and shared on the @CHCNorth Twitter account and LinkedIn.
 - [Antibiotic Prescribing Dashboard video](#)
 - [Antibiotic Prescribing Dashboard video \(1 minute version\)](#)

During Antibiotics Awareness Week, the video was displayed on large TV screens around the University campus over the course of 4 days. The video has also been displayed on screens at GM CHC's exhibition stand at events such as the King's Fund Managing change in digital health event,

Translation@Manchester launch event and the NWC Ecosystem meeting.

Social media: Twitter and LinkedIn have proved to be useful tools in promoting GM CHC's research to a diverse and broad audience. The launch of the National Antibiotic Prescribing dashboard was featured on the Twitter accounts of Public Health England, Public Health England North West, Dr Will Welfare, Policy@Manchester, AIMES, CLARHC, NWC Innovation Agency, NHS NIHR Clinical Research Network, UK A Health & care, NHSA, FBMH UoM, About Health Transparency. Since July 2018, tweets from the @CHCNorth account about the BRIT project have achieved more than 36,829 impressions and more than 1,581 engagements as of March 31,2019.

4.2) Case Study B- Stroke Intracerebral Haemorrhage Work stream -ABC App

Brief overview of project

The GM CHC Stroke project aims to improve healthcare services and outcomes for Stroke patients in Greater Manchester, focusing on improving the recognition of stroke, improving care for intracerebral haemorrhage (ICH) patients and reducing secondary stroke.

Communications highlights

- 1) **Events and engagement activities:** The GM CHC team have participated in a wide range of international events to showcase the GM CHC Stroke project, exhibiting and giving presentations at high profile events such as NHS Expo 2018, UK Stroke Forum 2018, European Neuro Convention 2018 and 2019, North West Coast Ecosystem meeting, King's Fund Managing Change in Digital Health event, Northern Power Futures and Stroke 2018: Managing the continuum.
- 2) **Video:** A number of videos have been produced to illustrate the impact of the GM CHC Stroke project such as:
 - [Improving the diagnosis and treatment of stroke for patients across GM](#)
 - [Greater Manchester Connected Health Collaboration: Developing a Pre-Hospital Pathway Aid](#)
 - [Acute Bundle of Care for Intracerebral Haemorrhage App](#)
- 3) **Social media and newsletters:** News items featuring the GM CHC Stroke project have featured on the social media accounts and/ or websites of a huge range of healthcare organisations and individuals such as: Digital Futures, D2 Digital, Deb Lowe (National Clinical Lead for Stroke Medicine, NHS), European Neuro Convention, Greater Manchester Stroke Operational Delivery Network, Greater Manchester CLARHC, GM Health & Care, Faculty of Biology Medicine and Health UoM, Health eResearch Centre, Healthwatch Salford, Healthwatch Trafford, Health Innovation Manchester, Manchester Connected Health Ecosystem, NHTA, North West Ambulance, NHTA Research & Development, NHTC Innovation Agency, Northern Care Alliance, Stroke Association North West, Salford Royal GDE, Salford Royal Foundation Trust, Stockport NHS, UK Stroke Forum, UoM Stroke Research group - as of March 31,2019.

4.3) Case Study C- Assessing the comparative safety of opioid medications for non-cancer pain

Brief overview of project

The Opioid project team analyse the data collected by the clinical teams during routine care and as recorded in the electronic care records used when patients are admitted to hospital. They analyse the data estimating, for example, the number of patients who develop the safety event per 1000 person years on each opioid.

Communications highlights

An interview with Dr Meghna Jani was published on the GM CHC website titled “Dr Meghna Jani from GM CHC research team: Reflections on the ICES and Farr Research Fellowship,” which highlighted the synergies and collaborative work between ICES and GM CHC that came about as a result of Dr Jani’s 3 month research fellowship in Canada.

Please see below attachment for full news item.

The tweet from the @CHCNorth Twitter account publicising the interview received 312 Twitter engagements and attracted 3, 727 impressions. The interview was also shared on the official social media account of ICES as of August 1, 2018.

Dr Meghna Jani from GM CHC research team: Reflections on the ICES and Farr Research Fellowship

GREATER MANCHESTER

Posted on the 11th December 2018



Dr Meghna Jani, an NIHR academic clinical lecturer and [Greater Manchester Connected Health City](#) researcher, was the successful recipient of the [ICES](#) and Farr Institute Research Fellowship.

We asked Dr Jani about her experience in Canada.

Tell us a bit about your role

I'm a rheumatologist and NIHR Clinical Lecturer at Arthritis Research UK Centre for Epidemiology, The University of Manchester, where I also work as part of the Greater Manchester Connected Health City research team. I lead the GM CHC pathfinder project on comparative safety of opioids for non-cancer pain with Prof Will Dixon. This project has provided the opportunity to analyse de-identified health data from Electronic Patient Records from secondary care records in Salford for drug safety research, for the first time. The overall aim of this research being to improve the understanding of how a number of factors such as opioid type, dosage, treatment duration and interactions with other medication can impact patient safety outcomes.

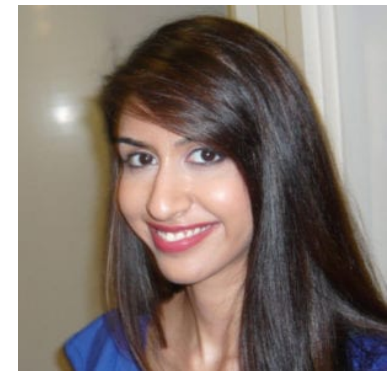
How did you hear about the ICES-Farr Institute research fellowship?

I heard about the ICES-Farr research fellowship Exchange programme from an advert through the Farr Institute (now HDR UK). In 2016, ICES and The Farr Institute signed a Memorandum of Understanding, with the aim of fostering international collaboration and working together to

further advancement in health data science. As part of this collaboration, the ICES-Farr Institute Exchange was set up to share learning and to build upon health data science projects taking place in both Canada and the UK.

Please will you tell us about your experience with the Research Fellowship Exchange Programme and what the key benefits were?

This was the first Research Fellowship programme to be run by ICES and Farr and it seemed a fantastic opportunity to work with an internationally renowned team, learning new scientific skills, whilst gaining insight into the impact of opioid use in Canada, specifically across Ontario. It allowed me to learn more about the healthcare system, patient journey in that region as well as observing their lessons learnt. I wanted to participate in the programme to further develop my skills in Prediction Modelling, apply techniques such as Machine Learning, whilst replicating some of our analyses from the GM CHC Opioid project, using linked data from The Ottawa Hospital and ICES to develop prediction models. The aim was to estimate the likelihood of life-threatening respiratory depression in new opioid users, and to assess future outcomes of patients who develop respiratory depression whilst in hospital. However, the project has now extended to assess outcomes beyond this, with planned continued access to the data whilst working with the ICES team, as an ongoing collaboration.



I worked over in Toronto and Ottawa from 1st July to 30th September of this year. As part of the fellowship I had the opportunity to attend the International Population Data Linkage (IPDLN) conference in Banff, which was co-hosted by ICES, and learn more about the impressive work within this research community.

I'd say that one of the highlights was being able to gain insight into a completely different healthcare system, overcoming the challenges of using routinely collected hospital data for research and working out new ways in which our research could help to improve patient outcomes. Another huge benefit for me was collaborating with such a fantastic multidisciplinary team of colleagues at ICES such as Profs Alan Forster, Carl van Walraven, Dr Tara Gomes and their teams, who lead work in patient safety, health services research and opioids pharmacoepidemiology respectively. Having now returned to Manchester, I look forward to developing our relationship with ICES further and am excited to see the future impact of our opioid research from both ICES and GM CHC.

To find out more about the Greater Manchester Connected Health City Opioid project, please visit [the Opioid project page](#).

Further information about [ICES](#) can be found on the [ICES website](#).

5) Summary/ next steps

The effort to raise awareness for the work in GM CHC has made a significant difference to the general understanding of the reuse of data for research purposes. A breadth of activity described above is testament to the interest in data driven system wide change in health care. Continuous improvements in our communications collateral following feedback from various stakeholders has led to an integral positive shift on the benefits of using data to improve lives. We aim to leverage the gains to inform future data driven programmes and function as a stepping-stone to secure dividends for all stakeholders concerned.